230 235 Pro Val Val Gly Arg Asp Glu Glu Ile Arg Gln Met Val Asp Ile Leu 245 250 Met Arg Arg Arg Gln Asn Asn Pro Leu Leu Thr Gly Glu Ala Gly Val 265 260 Gly Lys Thr Ala Val Val Glu Gly Leu Ala Leu Arg Ile Ala Asp Gly 280 Asp Val Pro Glu Pro Leu Gln Asn Val Gln Leu Trp Leu Leu Asp Ile 295 300 Gly Met Leu Gln Ala Gly Ala Gly Met Lys Gly Glu Phe Glu Ala Arg 310 315 Leu Gln Ala Leu Ile Asn Glu Val Gln Ser Ser Ala Thr Pro Ile Ile 325 330 Leu Phe Ile Asp Glu Ile His Thr Leu Ile Gly Ala Gly Gly Gln Gln 340 345 350 Gly Thr Gly Asp Ala Ala Asn Leu Leu Lys Pro Ala Leu Ala Arg Gly 355 360 365 Gln Leu Arg Thr Ile Gly Ala Thr Thr Trp Ala Glu Tyr Lys Lys Tyr 370 375 380 Ile Glu Lys Asp Pro Ala Leu Thr Arg Arg Phe Gln Thr Val Gln Val 385 390 395 400 His Glu Pro Asp Glu Ala Lys Ala Val Leu Met Leu Arg Ser Thr Val 405 410 415 Ser Pro Leu Glu Thr His His Gln Val Leu Leu Leu Asp Glu Ala Val 420 425 430 Ser Ala Ala Val Lys Leu Ser His Arg Tyr Ile Pro Ala Arg Gln Leu 435 440 445 Pro Asp Lys Ala Val Ala Leu Leu Asp Thr Ala Cys Ala Arg Val Ala 450 455 460 Val Ser Gln Ser Ala Pro Pro Ala Gln Leu Glu Asp Cys Leu Arg His 465 470 475 Leu Ala Ala Leu Asp Val Glu Leu Glu Ile Ala Glu Arg Glu Ala Arg 485 490 495 Val Gly Ala Gly Asp Pro Ala Arg Val Ala Thr Leu Thr Ala Glu Arg 500 505 510 Asp Ala Phe Glu Thr Gln Arg Glu Ala Leu Ala Arg Arg Trp Glu Glu 515 520 525 Glu Arg Thr Arg Val Gln Glu Ile Ile Arg Leu Arg Ala Ala Leu Phe 530 535 540 Ala Ala Gly Asp Glu Asp Thr Ala Glu Leu Arg Gly Gln Leu Ala Glu 545 550 555 560 Gln Gln Gln Ala Leu Lys Ile Leu Gln Gly Asp Glu Pro Leu Leu Phe 565 570 575 Ala Ala Val Asp Glu Asn Val Val Ala Ala Val Val Ser Asp Trp Thr 580 585 590 Gly Ile Pro Leu Gly Arg Met Val Lys Asn Glu Ile Asp Ala Val Leu 595 600 605 Asn Leu Ala Asp Thr Leu Asn Gln Arg Val Ile Gly Gln Arg His Gly 610 615 620 Leu Asp Leu Ile Ala Arg Arg Val Lys Thr Ser Arg Ala Lys Leu Asp 625 630 635 Asp Pro Asn Lys Pro Val Gly Val Phe Met Leu Cys Gly Pro Ser Gly 645 650 Val Gly Lys Thr Glu Thr Ala Leu Ala Leu Ala Glu Ser Leu Tyr Gly 660 665 Gly Glu Gln Asn Val Ile Thr Ile Asn Met Ser Glu Phe Gln Glu Ala 675 680 685 His Thr Val Ser Thr Leu Lys Gly Ala Pro Pro Gly Tyr Val Gly Tyr 695 700 Gly Glu Gly Gly Val Leu Thr Glu Ala Val Arg Arg Pro Tyr Ser 710 715

```
Val Val Leu Leu Asp Glu Ile Glu Lys Ala His Pro Asp Val His Glu
           725
                          730
Ile Phe Phe Gln Val Phe Asp Lys Gly Trp Met Glu Asp Gly Glu Gly
            745
        740
Arg His Ile Asp Phe Arg Asn Thr Ile Ile Ile Leu Thr Ser Asn Val
     755
            760
                                    765
Gly Thr Glu Leu Ile Ser Ala Met Cys Ala Asp Pro Asp Leu Met Pro
                 775
                                 780
Glu Pro Glu Ala Leu Ser Gly Ala Leu Arg Gln Pro Leu Leu Glu Val
                             795
              790
Phe Pro Pro Ala Leu Leu Gly Arg Leu Leu Val Val Pro Tyr Tyr Pro
      805
                          810
                                          815
Leu Ser Asp Glu Met Leu Gly Gln Ile Val Arg Leu Gln Leu Arg Arg
       820 825 830
Ile Gln Arg Arg Leu Glu Glu Asn His Asn Ile Ile Ser Glu Phe Asp
     835 840 845
Asp Ser Val Val Glu Gln Ile Val Gln Arg Cys Thr Glu Val Glu Ser
 850 855 860
Gly Gly Arg Met Val Asp Ala Ile Leu Thr Asn Thr Leu Leu Pro Gln
865 870 875
Met Ser Gln Ile Leu Leu Thr Ala Ser Arg Ser Asp Gln Gln Tyr Arg
  885 890 895
Arg Leu His Val Thr Cys Glu Gln Gly Glu Phe His Cys Gln Phe Ala
                905
        900
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<210> 7677 <211> 479 <212> PRT

<213> Enterobacter cloacae

<400> 7677 Lys Met Thr Asp Asn Asp Asn Asn Arg Thr Val Pro Asn Ala Leu Pro 10 Val Gly Tyr Arg Phe Asn Glu Phe Glu Ile Lys Glu Val Ile Gly Gly 25 Gly Gly Phe Gly Ile Val Tyr Arg Ala Trp Asp His Gln Leu Glu Arg 40 Thr Ile Ala Ile Lys Glu Phe Met Pro Ser Ser Leu Ala Val Arg Gly 55 Glu Asp Met Thr Leu Val Leu Arg Ser Glu Arg Phe Gly Lys Ala Phe 70 75 Ser Ala Gly Leu Asn Ser Phe Ile Gln Glu Ala Arg Leu Leu Ala Arg 90 Phe Asn His Pro Asn Leu Leu His Val Leu Arg Phe Trp Val Gln Asn 100 105 Asp Thr Ala Tyr Met Gly Thr Leu Phe Tyr Ser Gly Thr Thr Leu Ser 115 120 125 Arg Leu Arg Glu Glu Lys Pro Glu Leu Ile Asn Glu Ala Trp Ile Arg 135 130 140 Arg Met Leu Pro Met Leu Phe Gly Ala Ile Lys Thr Ile His Asp Glu 150 145 155 Gly Tyr Leu His Arg Asp Ile Ser Leu Asp Asn Ile Gln Ile Gln Asp 165 170 175 Asn Gly Leu Pro Val Leu Leu Asp Phe Gly Ser Ala Arg Arg Thr Ile 180 185 190 Gly Asn Leu Ser Asp Glu Thr Glu Thr Met Leu Arg Pro Gly Phe Ala 200 195 205 Pro Ile Glu Gln Tyr Thr Asp Asp Asn Glu Ser Glu Gln Gly Pro Trp 215 210

```
Thr Asp Ile Tyr Ala Leu Gly Ala Val Leu Arg Thr Leu Ile Val Gly
                    235
           230
Ser Pro Pro Pro Val Ser Val Val Arg Ser Ile Gln Asp Thr Cys Lys
           245
                         250
Pro Leu Val Glu Leu Met Pro Gln Gly Tyr Ser Ile Pro Leu Leu Gln
            265
        260
Ala Ile Asp Lys Ala Leu Ala Leu His Met Glu Asp Arg Pro Gln Ser
                   280
                                  285
Ile Glu Glu Phe Ala Ala Leu Ile Glu Met Pro Val Ala Gly Ile Asp
      295 300
  290
Glu Val Leu Thr Ala Lys Lys Thr Gly Thr Met Leu Val Pro Val Glu
    310 315
Glu Glu Ala Ser Ala Ser Ala Leu Asp Trp Arg Arg Tyr Lys Leu Pro
          325 330
                                       335
Gly Leu Val Ala Ala Gly Val Leu Val Gly Val Val Ala Gly Ala Met
       340 345 350
Leu Phe Gly Gly Ser Gln Glu Thr Pro Glu Gln Thr Ala Gln Thr
 355 360 365
Pro Ala Val Ser Pro Pro Ala Glu Thr Ser Ser Gln Ser Glu Thr Arg
370 375 380
Pro Ala Thr Ala Asp Val Ser Glu Pro Val Ala Pro Pro Ala Thr Ala
385 390 395
Gln Gln Ser Ala Pro Pro Val Asp Ala Ser Pro Val Ala Leu Val Tyr
 405 410 415
Ile Arg Met Leu Asp Gly Glu Thr Leu Lys Val Asn Gly Glu Ser Lys
                      425 430
 420
Ala Leu Arg Pro Gly Asn Asn Gly Tyr Ala Ser Leu Lys Leu Pro Ala
435 440
                       445
Gly Glu Thr Arg Ile Glu Leu Glu Gly Asn Gly Arg Thr Arg Thr Gln
450 455 460
Thr Leu Asp Ile Ala Lys Pro Gly Thr Trp Leu Val Asn Pro
465
             470
```

<210> 7678 <211> 263 <212> PRT <213> Enterobacter cloacae

165

<400> 7678 Gly Tyr Phe Asp Asn Arg Glu Ser Ile Val Lys Lys Gly Leu Met Ala 10 Phe Val Ala Leu Cys Phe Leu Phe Met Ile Gln Gly Cys Lys Gln Asp 25 Met Asp Leu Asn Pro Gln Asp Tyr Phe Ser Gly Gln Gln Leu Glu Leu 40 Ala Lys Ala Ile Glu Glu Gly Asp Val Asp Ala Val Lys Thr Leu Ala Pro Asp Ser Asp Leu Asn Lys Pro Gly Lys Gln Asp Met Thr Leu Leu 75 7.0 65 Phe Trp Ala Ile Gly Asn Ala Ile Asn Asp Lys Lys Thr Ser Pro His 85 90 Leu Lys Val Ile Thr Leu Leu Val Lys Ala Gly Ala Asp Pro Leu Gln 100 105 110 Pro Arg Pro Gln Gly Lys Ser Ser Pro Ala Glu Phe Ala Leu Lys Gly 115 120 125 Asp Ser Ala Asp Trp Ile Asp Ala Met Leu Asp Gly Gly Leu Ser Pro 135 140 130 Asn Val Lys Asp Lys Val Phe His Glu Pro Ile Val Phe Gln Ser Leu 150 155 Lys Ala Lys Asn Thr Glu Thr Leu Glu Ala Met Leu Asn Arg Gly Ala

Asp Val Asn Ser Thr Asn Ser Leu Gly Lys Thr Leu Val Phe Asp Ala 185 Leu Asp Asn Gln Ala Tyr Asp His Val Leu Leu Leu Asp Arg Gly 195 200 Ala Asp Pro Ser Ile Lys Ala Lys Asn Gly Trp Ser Met Ser Asn Ala 210 215 220 Leu Ala Asp Ala Leu Asn Gly Leu Glu Arg Gly Ser Glu Gln Tyr Glu 230 235 Lys Leu Asn Glu Ile Lys Glu Lys Leu Ile Gln Lys Gly Gly Glu Trp 245 250 Pro Pro Ala Pro Val Lys 260 <210> 7679 <211> 398 <212> PRT <213> Enterobacter cloacae <400> 7679 Arg Val Arg Arg Pro Ile Thr Arg Thr Phe Thr Phe Lys Lys Pro Cys 1.0 Val Lys Asn Ile Leu Ser Ile Asn His Tyr Gly Ile Lys Ile Met Leu 20 25 Asn Arg Ile Thr Val Gln Leu Pro Val Glu Gly Leu Leu Phe Trp Lys 35 40 45 Leu Ser Gly Arg Glu Ala Met Ser Glu Ser Phe Ala Leu Thr Leu Thr 55 60 Leu Leu Gly Thr Asp Ala Arg Ile Asp Arg Ser Arg Leu Leu Gly Gln 70 75 Pro Val Thr Val Thr Ile Pro Thr Gln Ser Leu Leu Thr Pro Arg Phe 85 90 95 Ile Asn Gly Lys Val Thr Arg Val Ala Val Ser Ala Val Glu Leu Thr 100 105 110 Gly Thr Arg Tyr Ala Val Tyr Gln Leu Thr Val Glu Pro Asp Leu Trp 115 120 125 Pro Met Lys Arg Asp Arg Asn Leu Arg Ile Phe Gln Gly Gln Thr Val 130 135 140 Pro Gln Ile Val Lys Thr Leu Leu Gly Glu His Gln Val Asn Leu Glu 150 155 160 Asp Lys Leu Thr Gly Ser Tyr Arg Val Trp Asp Tyr Cys Val Gln Tyr 165 170 175 Gln Glu Ser Ser Leu Asp Phe Ile Ser Arg Leu Met Glu Leu Glu Gly 180 185 190 Ile Ala Tyr Tyr Phe Ser His Glu Ala Asp Lys His Thr Leu Val Leu 195 200 205 Thr Asp Ala Ala Pro Gln His Gln Pro Phe Ser Gly Tyr Glu Val Ile 210 215 220 Pro Tyr His Gln Thr Pro Ser Gly Gly Ser Thr Asp Glu Glu Gly Ile 225 230 235 Ser Gln Trp Ala Leu Glu Asp Ser Val Thr Pro Gly Ile Tyr Ser Leu 245 250 Asp Asp Tyr Asp Phe Arg Lys Pro Asn Ala Trp Leu Phe Gln Ala Gln 260 265 Glm Tyr Pro Ala Ser Pro Lys Pro Gly Ser Ile Asp Val Tyr Asp Trp 280 285 Pro Gly Arg Phe Val Glu Ser Ala His Thr Glu Ile Tyr Ala Ser Phe 290 295 300 Pro Arg Glu Leu Trp Gln Leu Glu His Gln Gln Ile Gln Ala Ser Thr 310 315 Trp Arg Arg Gly Val Thr Pro Ser Ser Ser Ile Pro Ala Met Cys Ser

330

Met Lys Met Trp Arg Cys Leu Pro Val Ser Trp Arg Ala Arg Lys Lys 345 340 350 Met Pro Cys Leu Ser Val Met Arg Cys Leu Ile Ser Ala Arg Gly Lys 355 360 Lys Cys Cys Ala Val Arg Asn Gln Ala Gly Ile Ser Thr Thr Ala Ser 375 380 Arg Pro Ala Ile Arg Leu Phe Ser Ser Gln Gly Ala Val 390 <210> 7680 <211> 599 <212> PRT <213> Enterobacter cloacae <400> 7680 Ser Tyr Gln Gln Glu Tyr Ala Met Arg Phe Thr Ile Ile Ser Thr Lys 10 Pro Gly His Gln Pro Pro Gln Ser Ser Cys Asp Phe Tyr Ala Pro Gly 20 25 30 Gly Thr Ile Gly Arg Gly Thr Asp Asn Asn Leu Val Leu Pro Asp Asn 4.0 35 4.5 Asp Arg Thr Ile Ser Arg Leu Gln Ala Ile Val His Val Asp Ala Ser 50 55 Gly Glu Cys Arg Val Thr Asn Arg Gly Ser Val Thr Arg Val Val Leu 70 75 Asn Asp Ile Pro Leu Glu Arg Gly Arg Gln Val Glu Leu Gln Asp Gly 85 90 Asp Ile Leu Gly Ile Asp Asp Tyr Arg Ile Glu Val Ser Glu Leu Ile 100 105 110 His Asp Thr Gln Pro Val Ser Arg Met Ala Ala Ser Met Gln Gln Ala 115 120 125 Arg Pro Ala Ala Thr Pro Ala Pro Ala Pro Gln Pro Lys Pro Ala Ser 130 135 140 Ala Ala Pro Arg Gly Lys Ala Glu Pro Thr Ala Val Pro Ser Glu Ile 145 150 155 Trp Asp Ser Leu Met Gln Glu Phe Ser Ile Ser Asp Ser Ile Ser Ser 165 170 Asn Arg Ala Lys Pro Gln Pro Ala Ala Ser His Asp Pro Phe Ser Gln 180 185 190 Pro Ala Ala Pro Glu Arg Asn Ala Glu Asp Pro Leu Ala Met Phe Asn 200 Asp Ala Glu Pro Ser Leu Glu Arg Lys Asn Val Asp Pro Asp Thr Leu 215 220 Phe Ser Asp Glu Ala Leu Phe Lys Lys Glu Ser Ile Phe Asp Asp Val 230 235 Thr Pro Ser Thr Leu Val Gln Pro Asp Glu Ser Lys Pro Ala Gln Pro 250 245 Lys Glu Glu Ala Ser Asp Glu Leu Asp Pro Leu Ala Leu Phe Gly Gly 260 265 270 Ser Ala Ser Ala Pro Ala Ala Arg His Asp Asp Pro Leu Gly Leu Met 280 285 Gly Gly Ala Pro Leu Thr His Pro Asp Glu Ile Val Ala Asp Lys Pro 295 300 Glu Pro Lys Pro Glu Ala Gln Ala Ala Gln Glu Glu Asp Ala Leu Ala 310 315 Ser Ser Pro Leu Phe Asp Pro Glu Pro Thr Glu Pro Gln Asp Ala Pro 325 330 Arg Ala Glu Glu Glu Pro Ala Arg Pro Asp Tyr Ala Gly Phe Thr Met 345 340 Pro Thr Pro Gln Ala Val Ala Arg Ser Asn Ala Gln Ala Pro Lys Gly

360

```
Arg Leu Arg Ile Asp Pro Val Lys Asn Ala Ala Ser Pro Ala Ala Ser
                375
Ala Gln Thr Gly Glu Arg Gly Glu Val Leu Gln Gly Glu Leu Leu Glu
385
             390
                            395
Ala Leu Leu Glu Gly Met Gly Leu Ser Glu Met Gln Pro Val Pro Gln
           405
                         410
Phe Asp Arg Glu Asn Met Arg Gln Leu Gly Gln Ile Leu Gly Met Phe
     420 425
                                     430
Ser Gln Gly Thr Val Ala Leu Leu Ser Ser Arg Ser Ile Leu Lys Arg
    435 440 445
Gly Val Lys Ala Asp Met Thr Met Val Leu Asp Asp Ala Asn Asn Pro
 450 455 460
Phe Lys Leu Leu Pro Thr Gly Lys Thr Val Leu Ile Gln Met Phe Gly
465 470 475 480
Thr Pro Met Pro Gly Phe Met Pro Pro Thr Lys Ser Val Arg Asp Ala
    485 490 495
Leu Ile Asp Leu Gln Ala His Gln Leu Gly Met Ile Ser Gly Ile Arg
       500 505 510
Ala Ile Ile Ala Ala Met Leu Gln Ser Phe Asn Pro Glu Gln Leu Glu
515 520 525
Glu Gln Ala Lys Gln Asn Gly Met Thr Ser Arg Leu Ala Leu Pro Gly
530 535 540
Ser Arg Lys Ala Ala Leu Trp Asp Tyr Phe Val Arg Ser Tyr Gly Glu
545 550 555
Thr Ala Gly Glu Ile Glu Asp Asp Phe His Thr Leu Phe Gly Glu Ala
          565 570 575
Phe Leu His Ala Tyr Asp Met Glu Val Asn Gln Tyr Lys Asp Ser Gln
                      585
Ser Gly Ser Glu Glu Lys
```

<210> 7681 <211> 151 <212> PRT

<213> Enterobacter cloacae

<400> 7681 Leu Pro Gln Ala Glu Arg Val Ala Val Pro Gly Pro Ala Val Pro Gly 10 Val Thr Glu Thr Gly Gln His Arg Arg Val Arg Leu Ala Gly Ala Leu 25 Cys Gly Val Gly Pro Tyr Gly Asn Leu Arg Gln Leu Pro Ser Gly Ala 35 40 4.5 Leu Ala Ile Gly Ala Ser Ala Asp Ser Gly Ile Asn Met Ala Gln Gly 5.5 60 Arg Tyr Ala Ile Phe Leu Asn Ser Gly Asp Val Phe His Glu Asn Val 75 65 7.0 Ala Leu Phe Ala Arg Gln Leu Ala Arg Gln Lys Glu Asp Ala Met Phe 85 90 Ile Gly Asp Ala Leu Leu Asp Phe Gly Glu Gly Lys Lys Val Leu Arg 100 105 110 Gly Ala Lys Pro Gly Trp Tyr Ile Tyr His Ser Leu Pro Ala Ser His 115 120 Gln Ala Ile Phe Phe Pro Arg Arg Gly Leu Lys Phe Ser Met Arg Arg 130 135 140 Cys Arg Ser Ile Val Phe 145

<210> 7682 <211> 388 <212> PRT

<213> Enterobacter cloacae

```
<400> 7682
Thr Gly Gly Phe Ser Gly Ser Asn Ser Lys Pro Asn Ala Lys Ser Phe
Thr Val Thr Thr Tyr Phe Phe Tyr Phe Phe Pro Thr Ser Ala Val Pro
         20
                           25
Arg Phe His Pro Ala Arg Leu Ile Cys Leu Cys Asp Gly Val Cys Leu
      35
                       4.0
Pro Leu Asp Leu Phe Cys Asp Lys Gly Thr Phe Gln Asp Met Lys Lys
                    55
Ile Leu Ile Ile Val Pro Asp Gly Gly Met Leu Phe Glu Ala Ala Gly
                70
                                 75
Ile Ala Asp Ile Leu Met Gln Ala Asn Arg Leu His Pro Asp Gly Leu
                           90
             85
Ala Gln Pro Arg Tyr Cys Ile Ile Ile Ala Thr Thr Gln Pro His Leu
                          105 110
        100
Val Ile His Gly Gln Ser Gly Leu Asn Leu Leu Ala Asp Tyr Arg Leu
                       120 125
Pro Glu Leu Asp Pro Arg Glu Pro Leu Asp Thr Ile Ile Ile Thr Gly
                    1.35
                         140
Arg Gly Met Asn Glu Gln Glu Ser Thr Ala Val Val Asp Trp Leu His
                150 155
Leu Ala Ala Pro His Ala Arg Arg Val Ala Ser Val Cys Gly Gly Ala
                     170
             165
Leu Leu Leu Ala Gln Ala Gly Leu Leu Asp Gly Arg Arg Ala Thr Thr
                          185 190
         180
His Trp Arg Leu Leu Glu Thr Leu Lys Thr Arg Tyr Pro Ala Val Asn
      195
                       200
                                       205
Val Glu Gly Gly Pro Leu Tyr Ile Gln Asp Gly Pro Val Trp Thr Ser
   210
                    215
                                     220
Gly Gly Val Ser Ser Gly Phe Asp Leu Thr Leu Ala Leu Val Glu Asp
                230
                               235
225
Asp Tyr Gly Phe Thr Leu Ala Arg Asn Val Ala Gln Asp Met Val Met
             245
                              250 255
Tyr Leu Arg Arg Pro Gly Gly Gln Leu Gln Phe Ser Arg Tyr Lys Leu
                           265 270
          260
Glu Gln Ser Gly Ala Thr Gly Pro Val Ser Glu Leu Gln Ser Trp Ile
                       280 285
      275
Leu Gln Asn Leu Thr Ala Asp Leu Cys Val Glu Arg Leu Ala Glu Arg
                    295 300
Val Ala Met Ser Pro Arg Asn Phe Thr Arg Val Phe Thr Arg Asp Val
                310
                                  315
Gly Val Pro Pro Ala Arg Tyr Val Thr Glu Ala Arg Leu Ala Ala Ala
             325
                               330
Arg Gln Leu Leu Glu Gln Thr Ser Tyr Pro Leu Glu Val Ile Ala Glu
          340
                           345
Lys Ser Gly Phe Gly Thr Ser Ile Asn Leu Arg Arg Val Phe Glu Lys
                            365
                        360
Gln Leu His Leu Thr Pro Gly Glu Tyr Arg Gln Arg Phe His Cys Arg
                    375
   370
Arg Met Ala
385
```

<210> 7683 <211> 363 <212> PRT

<213> Enterobacter cloacae

<400> 7683

Ser Asp Pro Phe Leu Ser Phe Thr Pro Ser Asp Leu Thr Pro Lys Val

```
Thr Pro Asp Asn Thr Asp Lys Glu Cys Ile Met Val Lys Val Gly Ile
        20
                                            3.0
Asn Gly Phe Gly Arg Ile Gly Arg Asn Val Leu Arg Ala Ala Leu Gly
                       40
Asn Pro Asp Leu Gln Ile Val Ala Ile Asn Asp Leu Thr Asp Ser Arg
                   55
Thr Leu Ala His Leu Leu Lys Tyr Asp Ser Leu Leu Gly Thr Leu Pro
                                 75
              7.0
Val Pro Val Glu Ala Ala Asp Gly Ala Leu Gln Val Asp Gly Gln Arg
           85 90
Ile Thr Val Phe Ser Glu Arg Asp Pro Ala Asn Ile Ala Trp Lys Asp
                 105 110
         100
Ala Gly Val Glu Val Val Ile Glu Ala Thr Gly Phe Phe Thr Glu Arg
      115 120 125
Glu Lys Ala Ala Val His Ile Thr Ser Gly Gly Ala Lys Arg Val Ile
       135 140
Ile Ser Ala Pro Ala Lys Asn Asp Asp Leu Thr Val Val Met Gly Val
                150 155
Asn His Thr Leu Tyr Asp Pro Ala Gln His Phe Val Val Ser Asn Gly
            165 170 175
Ser Cys Thr Thr Asn Gly Leu Ala Pro Ala Ala Gln Val Leu His Gln
          180
                        185
Gln Phe Gly Ile Glu His Gly Leu Met Asn Thr Thr His Ala Tyr Thr
 195
                     200
Asn Ser Gln Ala Leu His Asp Gln Pro Glu Lys Asp Leu Arg Gly Ala
                   215
                                     220
 210
Arg Ala Ala Leu Ser Ile Val Pro Tyr Ser Ser Gly Ala Ala Lys
              230
                                235
225
Ala Leu Gly Lys Val Ile Pro Glu Leu Asp Gly Lys Leu Thr Gly Tyr
             245
                  250 255
Ser Leu Arg Val Pro Val Pro Val Val Ser Ile Val Asp Leu Thr Val
         260
                          265
Thr Leu Ser Arg Asn Val Thr Ala Glu Glu Val Asn Asp Ala Phe Arg
                        280
Gin Ala Ala Ile Ser Gly Pro Leu Lys Gly Ile Leu Gly Tyr Ser Asp
                    295
 290
Glu Pro Leu Val Ser Arg Asp Tyr Gln Gly Asp Pro Arg Ser Ser Ile
                 310
                                  315
305
Ile Asp Gly Leu Ser Thr Leu Val Ile Gly Gly Asn Met Val Lys Ile
                              330
             325
Leu Ser Trp Tyr Asp Asn Glu Trp Gly Phe Ser Asn Arg Leu Val Asp
                           345
          340
Leu Ala Val Leu Met Asp Lys Lys Gly Leu
                        360
       355
<210> 7684
<211> 575
<212> PRT
<213> Enterobacter cloacae
<400> 7684
Gln Gln Arg Ser Arg Cys Ser Val Lys Thr Gly Asp Glu Pro Met Ile
Arg Pro Arg Ala Arg Arg Pro Ala Phe Leu Pro Leu Ala Leu Ala Gly
Ala Leu Leu Gly Val Thr Ala Phe Gly Tyr Ala Glu Asp Gln Pro Thr
                       4.0
Ser Gln Gln Ser Ser Pro Asp Ile Leu Leu Gly Pro Leu Phe Asn Asp
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Val Gln Ser Ala Lys Leu Phe Pro Asp Gln Lys Thr Phe Ala Asp Ala

Val Pro Lys Ser Asp Pro Leu Met Ile Leu Ala Asp Tyr Arg Met Gln 85 90 His Thr Gln Ser Gly Phe Asp Leu Arg His Phe Val Glu Met Asn Phe 100 105 110 Ile Leu Pro Lys Glu Gly Glu Lys Tyr Val Pro Pro Glu Gly Gln Ser 115 120 Leu Arg Glu His Ile Asp Asp Leu Trp Pro Val Leu Thr Arg Thr Thr 130 135 140 Asp Lys Ala Asn Lys Trp Asp Ser Leu Leu Pro Leu Pro Lys Pro Tyr 150 155 160 Val Val Pro Gly Gly Arg Phe Arg Glu Val Tyr Tyr Trp Asp Ser Tyr 165 170 175 Phe Thr Met Leu Gly Leu Ala Glu Ser Gly His Trp Asp Lys Ile Gly 180 185 190 Asp Met Val Asp Asn Phe Ala Tyr Glu Leu Asp Thr Trp Gly His Ile 195 200 205 Pro Asn Gly Asn Arg Thr Tyr Tyr Leu Ser Arg Ser Gln Pro Pro Phe 210 215 220 Phe Ser Leu Met Val Glu Leu Leu Ala Thr His Asp Ser Asp Ala Leu 225 230 235 240 Lys Lys Tyr Arg Pro Gln Met Glu Lys Glu Tyr Ala Tyr Trp Met Glu 245 250 255 Gly Ala Asp Gly Leu Gln Pro Gly Gln Ala Asn Lys Arg Val Val Lys 260 265 270 Leu Asp Asp Gly Ser Ile Leu Asn Arg Tyr Trp Asp Asp Arg Asp Thr 275 280 285 Pro Arg Pro Glu Ser Trp Leu Asp Asp Val Thr Thr Ala Lys Asn Asn 290 295 300 Pro Asn Arg Pro Ala Thr Glu Ile Tyr Arg Asp Leu Arg Ser Ala Ala 305 310 315 320 Ala Ser Gly Trp Asp Phe Ser Ser Arg Trp Met Asp Asp Pro Gln Lys 325 330 Leu Gly Thr Ile Arg Thr Thr Ser Ile Val Pro Val Asp Leu Asn Ala 340 345 350 Leu Met Phe Lys Met Glu Lys Leu Leu Ala Arg Ala Ser Gln Glu Asp 355 360 365 Gly Asp Thr Ala Ser Ala Ser Lys Tyr Asp Ala Leu Ala Ser Ala Arg 370 375 380 Gln Lys Ala Met Glu Ser His Leu Trp Asn Asp Lys Glu Gly Trp Tyr 390 395 Ala Asp Tyr Asp Leu Lys Thr Arg Lys Val Arg Asn Gln Leu Thr Ala 405 410 415 Ala Ala Leu Phe Pro Leu Tyr Val Lys Ala Ala Ser Gln Asp Arg Ala 425 430 420 Asp Lys Val Ala Ala Ala Ala Ser Ser Arg Leu Leu Lys Pro Gly Gly 440 445 435 Ile Ser Thr Thr Thr Ile Asn Ser Gly Gln Gln Trp Asp Ala Pro Asn 455 460 Gly Trp Ala Pro Leu Gln Trp Val Ala Val Glu Gly Leu Gln Asn Tyr 475 465 470 Gly Gln Gln Lys Val Ala Met Asp Val Thr Trp Arg Phe Leu Lys Asn 485 490 Val Gln His Thr Tyr Asp Arg Glu Lys Lys Leu Val Glu Lys Tyr Asp 505 510 Val Ser Ser Thr Gly Thr Gly Gly Gly Gly Glu Tyr Pro Leu Gln 520 525 Asp Gly Phe Gly Trp Ser Asn Gly Val Thr Leu Arg Met Leu Asp Met 540 Val Cys Pro Lys Glu Lys Pro Cys Asp Thr Val Pro Glu Asn Gln Pro 550 555

Ala Ala Asn Asp Asp Val Ala Pro Ala Lys Gln Ala Ala Gln

<211> 575 <212> PRT

<213> Enterobacter cloacae

<400> 7685

<210> 7685

Thr Arg Ser Cys Val Met Pro Gly Ala Phe Pro Thr Glu Val Arg Gly 10 . 5 Ser Thr Ser Tyr Met Ser Glu Tyr Lys Ile Arg Gly Phe Asn Val Asp 20 25 30 Gln Glu Phe Tyr Asn Gly Leu Gln Leu Pro Tyr Asn Val Thr Gly Asn 4.5 40 Thr Lys Ala Arg Ile Asp Pro Leu Leu Ile Glu Ser Val Asp Ile Leu 55 60 Lys Gly Pro Ser Ser Val Leu Tyr Gly Gly Gly Ser Pro Gly Gly Leu 70 75 Val Asn Ile Gln Ser Lys Lys Pro Gln Lys Glu Ala Lys Thr Glu Leu 8.5 90 Gly Phe Asn Thr Gly Asn Arg Asn Leu Lys Glu Gly Tyr Leu Asp Ser 100 105 Thr Gly Gln Ile Ala Asn Ser Asp Trp Asn Tyr Arg Leu Leu Gly Lys 115 120 125 Ala Thr Glu Ser Asp Glu Gln Ala His Thr Thr Arg Tyr Glu Asn Tyr 130 135 140 Leu Val Ala Pro Ser Val Thr Trp Gln Pro Asp Asp Lys Thr Arg Leu 150 155 Thr Ile Asp Ala Leu Ala Gln Asn Thr Pro Ser Leu Thr Pro Ser Asp 165 170 175 Pro Met Pro Leu Ser Tyr Leu Arg Ser Lys Tyr Ala Asp Arg Arg Asp 180 185 Tyr Ala Gly Asp Glu Trp Ser Gly Phe Lys Gln Arg Gln Trp Met Leu 195 200 205 Gly Tyr Ser Phe Glu His Glu Phe Asp Ser Gly Trp Gly Phe Asn Gln 210 215 220 Lys Ala Arg Tyr Phe Asp Val Asp Thr His Gln Arg Ser Ala Tyr Ser 230 235 225 Thr Gly Thr Gly Ser Glu Val Tyr Gln Leu Asn Arg Phe Ala Tyr Thr 245 250 Thr Asp Glu Asp Leu Gln Ser Phe Asn Ile Asp Asn Gln Val Thr Arg 260 265 270 Thr Val Ala Leu Gly Asp Trp Lys His His Leu Leu Ala Gly Phe Asp 280 285 275 Tyr Gln Lys Leu Asn Ser His Phe His Tyr Arg Tyr Ala Ser Ser Thr 295 300 Pro Gly Ile Asp Met Arg His Pro Asp His Ser Gln Ile Asp Asn Asp 310 315 305 Ala Leu Gly Leu Glu Thr Ala Gln Lys Asn Arg Leu Ser Tyr Gln Gln 325 330 Asn Gly Tyr Tyr Leu Gln Asp Gln Ile Ala Phe Gly Gly Leu Asn Val 340 345 350 Leu Ala Ser Leu Arg Tyr Asp Asp Tyr Arg Ser Val Thr Thr Asn Tyr 355 360 365 Leu Gln Asn Gly Asp Lys Ala Trp Val Ser Gln Asp Arg Leu Thr Lys 375 380 Arg Leu Gly Ala Leu Tyr Ala Phe Asp Asn Gly Leu Ser Pro Phe Ile 390 395 385 Ser Tyr Ser Glu Gly Phe Ala Pro Val Ser Pro Gln Gly Thr Leu Thr

410

```
Ala Lys Asp Val Lys Pro Thr Thr Ser Lys Gln Val Glu Gly Gly Val
     420
              425
Lys Tyr Leu Leu Ala Glu Tyr Ala Thr Thr Phe Thr Ala Ser Val Phe
     435 440
                                  445
Asn Ile Arg Gln Lys Asn Val Val Thr Ser Asp Pro Gly Phe Leu Asn
 450 455 460
Tyr Arg Gln Thr Gly Glu Val Glu Ser Lys Gly Ala Glu Leu Ser Ala
465 470 475
Met Ser Arg Pro Thr Asp Asn Leu Thr Leu Ile Ala Asn Tyr Ala Tyr
        485 490 495
Thr His Ala Ile Asn Thr Glu Asp Asp Lys Tyr Gln Gly Lys Gly Pro
 500 505 510
Thr Gln Val Pro Glu Asn Ala Phe Asn Leu Trp Gly Asp Tyr Thr Phe
 515 520 525
Asp Ser Thr Pro Leu Lys Arg Gly Asn Ala Gly Gly Arg Arg Thr Leu
 530 535 540
His Arg Ala Asp Gly Asp Leu Ala Ser Gln Arg Arg Arg Gln Ala Gly 545 550 555
Arg Tyr Asp Ala Val Arg Ser Gly Gly Ile Leu Pro His Gly
            565
<210> 7686
<211> 1222
<212> PRT
<213> Enterobacter cloacae
<400> 7686
Gln Tyr Pro Gly Arg Ala Glu Arg Ile Ala Ala Arg Lys Leu Arg Met
1 5
                         10
Leu Thr Thr Leu Leu Ser Ile Leu Thr Asn Arg Ile Leu Trp Ser Phe
20
Leu Gly Val Thr Ala Leu Ala Ala Val Ile Trp Met Ile Gly Pro Leu
35 40
Leu Ser Ile Val Asp Thr Arg Pro Leu Glu Ser Glu Gln Asn Arg Val
                55 60
Ile Ser Ile Ala Val Val Tyr Leu Ile Trp Ala Gln Ser His Ile Leu
            70 75
65
Pro Arg Leu Tyr Asn Ala Trp Leu Asn Arg Lys Leu Met Asp Lys Leu
           85
               90
Asn Glu Asn Thr Thr Ser Pro Glu Ala Ala Asp Pro Gln Lys Arg Leu
         100 105 110
Asn Ser Glu Glu Gln Ile Leu Ala Gly Arg Phe Asp Glu Ala Ala Gln
                     120
                                    125
 115
Met Leu Lys Lys Ala His Phe Ser Lys Ala Gly His Gly Ala Gln Trp
                  135 140
   130
Thr Gln Arg Phe Ser Thr Gln Tyr Leu Tyr Gln Leu Pro Trp Tyr Val
               150 155
Ile Ile Gly Ala Pro Gly Ser Gly Lys Thr Thr Ala Leu Ala Asn Ser
                170 175
            165
Gly Leu Gln Phe Pro Leu Ala Asp Arg Phe Gly Lys Thr Ala Leu Arg
                        185 190
    180
Gly Ile Gly Gly Thr Arg Asn Cys Asp Trp Trp Phe Thr Asn Glu Ala
                  200
      195
                                    205
Val Leu Leu Asp Thr Ala Gly Arg Tyr Thr Thr Gln Glu Ser Glu Gln
                                  220
                  215
Val Gln Asp Ala Gly Glu Trp Leu Glu Phe Ile Asn Leu Leu Arg Lys
                              235 240
               230
Tyr Arg Arg Arg Gln Pro Ile Asn Gly Val Ile Ile Thr Ile Ser Ile
            245
                           250
                                          255
Ser Asp Leu Leu Ser Gln Ser Ala Glu Ala Ser Arg Gln Gln Ala Val
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270

Asn Leu Arg Gln Arg Leu Ser Glu Leu His Glu Gln Leu Gly Ile Arg 280 275 Phe Pro Val Tyr Val Met Val Thr Lys Ala Asp Leu Leu Lys Gly Phe 295 300 Arg Ala Trp Phe Ala Asp Tyr Asp Lys Ala Gln Arg Asp Gln Ile Trp 315 310 Gly Phe Thr Leu Pro Trp Glu Gln Thr Lys His Ala Asp Tyr Asp Leu 330 325 Met Gly Asn Phe His Gln Glu Phe Ser Leu Leu Gln Gln Arg Leu Asp 340 345 Ala Gly Leu Pro Glu Thr Met Leu Lys Glu His Asp Ala Lys Thr Arg 365 355 360 Ala Glu Ala Tyr Leu Phe Pro Gln Glu Phe Ala Ala Leu Arg Pro Leu 375 380 Leu Ala Asp Tyr Leu Ser Thr Val Phe Ala Arg Ser Asn Phe Glu Thr 390 395 400 Glu Phe Ser Pro Arg Gly Ile Tyr Phe Ala Ser Gly Thr Gln Glu Gly 405 410 415Met Pro Phe Asp Arg Val Met Gly Glu Leu Asn Arg Ala Leu Ser Leu 425 430 420 Pro Glu Gly Glu Glu Ser Thr Arg Trp Asp Ser Val Ser Lys Glu Ala 445 435 440 Pro Ile Pro Gly Ala Lys Gly Gln Ser Phe Phe Ile Lys Asn Leu Leu 450 455 460 Gln Asn Val Ile Phe Gln Glu Ala Gly Ile Ala Gly Glu Asn Arg Trp 475 470 Trp Glu Leu Arg Asn Arg Ala Val Met Trp Ser Gly Tyr Ala Ala Leu 490 495 485 Leu Ala Leu Leu Val Ile Leu Gly Gly Leu Trp Leu Thr Ser Tyr Ala 505 510 500 Lys Asn Lys Ala Tyr Leu Glu Glu Val Asp Ala Lys Val Pro Met Leu 520 525 515 Glu Gln Gln Ser Lys Ala Leu Gln Asn Gln Pro Gln Arg Asp Leu Phe 535 540 530 Ala Leu Leu Pro Leu Leu Asn Ser Leu Val Asp Leu Pro Lys Ser Asp 555 545 550 Ala Phe Asp Val Asn Asp Pro Pro Val Ser Arg Arg Met Gly Leu Tyr 565 570 Arg Gly Asp Asp Val Ser Asp Ala Ser Gln Ser Leu Tyr Gln Lys Ala 585 580 Leu Asp Gln Met Leu Leu Pro Ala Val Ala Met His Ile Thr Thr Trp 595 600 605 Leu Arg Asn Asp Asn Gly Ser Asp Val Glu Tyr Ser Tyr Glu Ala Leu 615 620 Lys Ala Tyr Gln Met Leu Tyr Gln Pro Lys His Tyr Asp Gly Lys Phe 635 630 Leu His Ser Trp Val Met Leu Asn Leu Gln Arg Asn Leu Pro Gln Asn 645 650 Val Thr Gln Ala Gln Leu Glu Glu Leu Glu Trp His Leu Thr Gln Leu 670 665 Leu Glu Pro Lys Ile Gln Ala Ser Pro Tyr Ala Gln Asp Glu Asp Leu 685 680 675 Val Ala Arg Glu Arg Ala Leu Ile Asn Gln Gln Pro Leu Ser Thr Arg 695 700 Val Tyr Gly Arg Leu Lys Arg Leu Leu Glu His Asp Glu Asn Leu Lys 715 710 Pro Val Ser Leu Ser Asp Leu Gly Gly Pro Gln Ser Glu Leu Val Phe 730 725 Ser Arg Lys Ser Gly Lys Pro Val Ser Glu Gly Val Pro Gly Leu Tyr 750 745 Thr Pro Asp Gly Tyr Trp Lys Ser Phe Asn Asp Gln Ile Asp Ser Val

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760
Thr Thr Ala Leu His Glu Asp Asp Ala Trp Val Leu Gly Ala Ala Thr
        775
                             780
Ala Gln Glu Asp Lys Gln Gln Ile Asp Asn Ala Val Arg Gln Leu Tyr
   790 795
Met Arg Asp Phe Ile Val Asn Trp Asp Arg Phe Leu Ala Asp Ile Gln
     805 810 815
Leu Asn Asn Ser Ala Asp Leu Ser Gln Arg Ile Asn Thr Ala Arg Leu
   820 825 830
Leu Ser Gly Thr Asn Ser Pro Leu Arg Arg Leu Val Leu Asn Leu Gly
835 840 845
Lys Val Leu Thr Leu Ser Arg Thr Ala Pro Ala Pro Glu Asp Ala Gln
 850 855 860
Lys Ala Glu Asp Gln Ser Asn Arg Ala Thr Arg Thr Leu Glu Ala Leu
865 870 875 880
Phe Ser Asn Gly Asp Asn Ala Pro Thr Gln Gly Ala Val Val Thr Gln
     885 890 895
Ala Pro Glu Gln Leu Val Thr Asp His Tyr Ala Pro Met Ile Glu Leu
   900 905 910
Ala Gln Pro Leu Glu Lys Gly Gly Lys Thr Ile Val Phe Asp Asp Phe
   915 920 925
Leu Lys Gln Val Asp Glu Leu Tyr Arg Tyr Leu Thr Ala Val Gln Asp
930 935 940
Ala Ala Asn Ser Gly Met Pro Ala Pro Gly Gly Asp Ala Ile Ser Arg
945 950 955 960
Leu Gln Ala Ser Ala Gly Arg Leu Pro Gly Gly Leu Gln Thr Met Phe
          965 970 975
Ser Asn Met Ala Val Gly Ala Ser Ser Asp Thr Gln Arg Arg Asp Leu
 980 985 990
Glu Asn Val Arg Lys Arg Ile Asn Val Glu Val Gly Gly Phe Cys Arg
995 1000 1005
Gln Ala Ile Ala Gly Arg Tyr Pro Leu Val Arg Ser Ala Ser Thr Glu
1010 1015 1020
Val Thr Pro Asp Asp Leu Ala Arg Met Phe Ala Pro Gly Thr Gly Leu
1025 1030 1035 1040
Met Asp Thr Phe Phe Arg Asp Asn Leu Thr Asn Lys Val Asp Thr Thr
        1045 1050 1055
Gln Ala Asn Trp Arg Phe Met Pro Gly Ile Asp Gly Lys Thr Leu Pro
     1060 1065 1070
Gly Ser Glu Gly Leu Leu Arg Pro Phe Gln Gln Ala Gln Ser Val Arg
1075 1080 1085
Asp Ala Phe Phe Ala Asn Gly Ala Thr Thr Pro Ser Phe Lys Val Thr
1090 1095 1100
Val Arg Thr Val Arg Met Asp Asn Thr Ile Leu Asn Leu Thr Leu Asp
1105 1110 1115 1120
Val Asp Gly Gln Leu Leu Arg Tyr Ser His Gly Pro Gln Ala Val Gln
          1125 1130 1135
Ile Met Thr Trp Pro Gly Pro Gly Gly Thr Asn Gln Val Arg Met Gln
   1140 1145 1150
Leu Gly Leu Ala Asn Gly Ser Thr Ala Thr Leu Val Thr Asn Gly Ser
     1155 1160 1165
Trp Ala Leu Asn Arg Phe Phe Asp Lys Ala Arg Thr Ser Pro Gly Ala
  1170 1175 1180
Gly Ser Leu Ser Arg Gln Ala Thr Phe Asn Val Asp Gly His Gln Val
1185 1190 1195 1200
Thr Leu Glu Phe Ala Pro Asn Ser Ile Arg Asn Pro Phe Gln Leu Pro
                       1210
Arg Phe Ser Cys Pro
        1220
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225

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<212> PRT
<213> Enterobacter cloacae
<400> 7687
Lys Gly Val Thr Leu Gly Gly Gly Ala Arg Tyr Thr Gly Pro Met Glu
Ile Ser Pro Ala Asn Asp Ala Gly Lys Leu Gly Gly Thr Thr Gln Tyr
         2.0
                           25
Asp Leu Ala Ala Ser Tyr Arg Met Gly Glu Leu Ala Pro Ser Leu Glu
     35
                      4.0
                                       45
Gly Leu Thr Leu Lys Ala Ser Ala Gln Asn Val Thr Asn Lys Glu Thr
 50 55
                        60
Leu Thr Cys Tyr Asp Ala Thr Asn Cys Trp Ile Gly Arg Asp Arg Thr
              70
Phe Gln Val Gly Ala Ser Tyr Ser Phe
             85
<210> 7688
<211> 423
<212> PRT
<213> Enterobacter cloacae
<400> 7688
Pro Asp Arg Ile Ile Lys Arg Ala Leu Asn Met Gln Glu Arg Gln Asp
                             10
Thr Gly Ser Asp Ala Val Phe Thr Gly Ala Ser Gly Asn Asn Gln Leu
      20
                   2.5
Val Ala Ala Ala Asn Pro Leu Leu Asn Ala Ile Pro Gln Ile Arg His
                40
                              4.5
Ser Val Ser His Asp Asp Gln Val Gly Leu Arg Gln Arg Leu Ile Asp
                   5.5
                                    60
Glu Ile Arg Arg Phe Glu Val Arg Cys Gln Gln Ala Gly Leu Pro Tyr
              7.0
                                 7.5
Glu Val Ile Val Gly Ala Arg Tyr Cys Leu Cys Thr Ala Leu Asp Glu
             85
                             90
Ala Ala Ala Leu Thr Pro Trp Gly Ser Ser Gly Val Trp Ser Ser Asn
         100 105
Gly Leu Leu Val Thr Phe His Asn Glu Thr Trp Gly Gly Glu Lys Phe
     115
                      120
                                      125
Phe Gln Leu Leu Ala Arg Leu Ser Gln Asn Pro Arg Glu His Ile Leu
                   135
                                    140
Leu Leu Glu Met Ile Asn Tyr Cys Leu Leu Gly Phe Glu Gly Arg
                150 155
Tyr Arg Val Leu Asp Asn Gly Arg Thr Gln Leu Glu Thr Ile Lys Gln
             165
                              170
Arg Leu Trp Gln Met Ile Arg Gly Val Arg Gly Ser Tyr Pro Pro Pro
          180
                          185
Leu Ser Pro His Pro Glu Asp Arg Pro Val Leu Arg Lys Leu Trp Arg
                       200
                                        205
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Pro Met Ile Pro Leu Trp Ala Cys Val Ala Leu Val Gly Phe Ile Ala

Cys Leu Phe Tyr Ile Val Leu Asn Trp Arg Leu Gly Asp Asn Thr Ser

Pro Val Leu Ala Lys Ile Tyr Gln Ser Gln Leu Pro Glu Thr Thr Ile

265

250

220

270

235

215

245

260

295 Ser Thr Val Val Arg Asp Arg Tyr Glu Pro Val Ile Asp Arg Ile Ala 315 310 Gin Ala Met Asn Asn Val Ser Gly Lys Ile Leu Val Val Gly Tyr Ser 325 330 335 Asp Asn Val Pro Ile Arg Ser Ala Arg Phe Ala Ser Asn Tyr Glu Leu 340 345 350 Ser Leu Glu Arg Ala Arg Ser Val Gln Lys Gln Leu Gln Gly Ser Leu 355 360 365 Ser Gln Pro Glu Arg Val Lys Ala Glu Gly Arg Gly Glu Ile Asn Pro 375 380 Val Ala Pro Asn Thr Thr Pro Glu Asn Arg Ala Arg Asn Arg Arg Val 385 390 395 Glu Ile Thr Leu Leu Val Ser Pro Asp Asn Thr Gln Ala Glu Leu Asn 405 410 415 Gly Leu Pro Gln Gly Asn 420 <210> 7689 <211> 344 <212> PRT <213> Enterobacter cloacae <400> 7689 Ser Arg Arg Lys Lys Ser Val Trp Trp Ile Thr Ala Cys Met Thr Ala 1.0 Ile Val Asn Phe Ala Pro Leu Arg Ala Ile Pro Val Lys Gly Val Asn 25 Arg Trp Ser Ser Thr Val Arg Thr Met Arg Ser Phe Leu Lys Arg Thr 40 Leu Cys Ala Gln Ser Arg Ser Thr Pro Leu Leu Asn Phe Ser Thr Gly 50 55 Ile Thr Asp Tyr Cys Phe Pro Pro Glu Val Glu Ile Pro Met Tyr Gln 70 75 Val Val Ala Ser Asp Leu Asp Gly Thr Leu Leu Ser Pro Asp His Thr 85 90 Leu Ser Pro Tyr Ala Lys Glu Thr Leu Lys Leu Leu Thr Ala Arg Gly 100 105 110 Val Asn Phe Val Phe Ala Thr Gly Arg His His Val Asp Val Gly Gln 120 125 Ile Arg Asp Asn Leu Glu Ile Lys Ser Tyr Met Ile Thr Ser Asn Gly 130 135 140 Ala Arg Val His Asp Thr Asp Gly Asn Leu Ile Phe Thr His Asn Leu 145 150 160 Asp Arg Asp Ile Ala Thr Asp Leu Phe Gly Ile Val His Asn Asn Pro 165 170 175 Asp Ile Val Thr Asn Val Tyr Arg Asp Asp Glu Trp Phe Met Asn Arg 180 185 His Arg Pro Glu Glu Met Arg Phe Phe Lys Glu Ala Val Phe Gln Tyr 195 200 205 Ser Leu Tyr Glu Pro Gly Leu Leu Glu Pro Glu Gly Ile Ser Lys Val 210 215 220 Phe Phe Thr Cys Val Asn His Glu Glu Leu Leu Pro Leu Glu Gln Ala 230

Ile Asn Ala Arg Trp Gly Asp Arg Val Asn Val Ser Phe Ser Thr Leu

Thr Cys Leu Glu Val Met Ala Gly Gly Val Ser Lys Gly His Ala Leu

Glu Ala Val Ala Lys Arg Leu Gly Phe Asp Leu Lys Asp Cys Ile Ala

Phe Gly Asp Gly Met Asn Asp Ala Glu Met Leu Ser Met Ala Gly Lys

250

265 270

285

245

280

260

3614 295 Gly Cys Ile Met Gln Asn Ala His Gln Arg Leu Lys Asp Leu His Pro 315 310 Glu Leu Glu Val Ile Gly Thr Asn Ala Asp Asn Ala Val Pro Lys Tyr 330 325 Leu Arg Lys Leu Phe Leu Glu 340 <210> 7690 <211> 220 <212> PRT <213> Enterobacter cloacae <400> 7690 Arg Arg Val Ser Ser Arg Cys Ile Val Val Thr Ser Ser Glu Trp Arg 1.0 Phe Pro Val Pro Ile Lys Pro Leu Val Thr Ala Gly Ile Glu Asn Val 2.5 Leu Asn Ala Phe Leu Tyr Arg Ala Pro Ala Leu Lys Thr Ala Arg Gln 40 45 Arg Leu Asn Gly Lys Val Leu Arg Ile Val Leu Lys Glu Phe Ser Thr 55 60 Pro Leu Val Leu Val Phe Ser Glu Arg Gln Leu Asp Val Leu Gly Glu 7.5 7.0 Trp Glu Gly Glu Ala Asp Cys Ser Val Ile Thr His Met Ser Val Leu 85 90 Pro Lys Leu Arg Asp Arg Gln Gln Met Thr Ala Leu Ile Arg Ser Gly 100 105 110 Glu Leu Glu Val Glu Gly Asp Ile Gln Val Val Gln Asn Phe Val Ala 115 120 125 Leu Ser Asp Gln Ala Glu Phe Asp Pro Ala Glu Leu Leu Ala Pro Tyr 130 135 140 Ile Gly Asp Ile Ala Ala Glu Gly Ile Ser Lys Thr Leu Arg Thr Gly 150 155 Ser Ala Phe Leu Arg Lys Gly Leu Leu Arg Gln Gln Arg Tyr Ala Ala 165 170 175 Glu Val Leu Thr Glu Glu Trp Arg Met Ala Pro Gly Pro Leu Glu Val 180 185 190 Ala Trp Phe Ala Glu Glu Thr Ala Ala Val Glu Arg Ala Val Asp Ala 200 195 Leu Thr Lys Arg Leu Glu Lys Leu Glu Gly Lys 210 215 <210> 7691 <211> 94 <212> PRT <213> Enterobacter cloacae <400> 7691 Leu Ile Ile Tyr His Trp Gly Thr Arg Met Gly Gly Ile Ser Ile Trp 10 Gln Leu Val Ile Ile Ala Val Ile Val Val Leu Leu Phe Gly Thr Lys 2.5 20 Lys Leu Gly Ser Ile Gly Ser Asp Leu Gly Ala Ser Ile Lys Gly Phe 40 Lys Lys Ala Met Ser Asp Asp Glu Asn Lys Gln Glu Lys Thr Ser Gln 50 55 60 Asp Ala Asp Phe Thr Ala Lys Ser Ile Ala Asp Lys Gln Asp Glu Ala 75 70 Lys Lys Glu Glu Ala Lys Arg His Asp Lys Glu Gln Val

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<210> 7692
<211> 182
<212> PRT
<213> Enterobacter cloacae
<400> 7692
Phe Val Phe Asp Ile Gly Phe Gly Glu Leu Leu Val Phe Val Ile
                            1.0
Gly Leu Ile Val Leu Gly Pro Gln Arg Leu Pro Val Ala Val Lys Thr
                         25
                                         30
         20
Val Val Gly Trp Val Arg Ala Leu Arg Ser Leu Ala Thr Thr Val Gln
                     40
                                    45
Asn Glu Leu Ala Gln Glu Leu Lys Leu Gln Glu Phe Gln Asp Ser Leu
                  55
                         60
Lys Lys Val Glu Lys Ala Ser Met Asp Asn Leu Thr Pro Glu Leu Lys
       70 75
Ala Ser Met Asp Glu Leu Arg Glu Ala Ala Glu Ser Met Lys Arg Ser
                     90
           8.5
Tyr Ser Ile Asn Asp Pro Glu Lys Ala Ser Asp Glu Ala Asn Thr Ile
                       105 110
His Asn Pro Val Val Lys Gly Ser Glu Glu Gln Arg Glu Gly Val Thr
115
                     120 125
Pro Ser Ser Ala Glu His Gln Ala Ala Ser Pro Glu Gln Ser Pro Gln
130 135 140
Glu Pro Glu Val Lys Lys Gln Val Pro Pro Glu Glu Pro Val Val Lys
145
             150 155 160
Thr Ala Glu Val Lys Pro Ala Ala Pro Val Ser Glu Ser Ser Pro Ser
            165
Ser Ser Asp Lys Ala
        180
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<212> PRT <213> Enterobacter cloacae

<220> <221>UNSURE <222>(174)

<210> 7693 <211> 174

<400> 7693 Lys Leu Tyr Leu Ala Arg Leu Thr Trp Thr Ile Leu Val Ser Val Gly 10 His Ala Cys Ala Gly Val Arg Phe Leu Gly Glu Arg Ser Asn Lys Met 25 Ala Thr Gly Lys Ser Cys Ser Arg Trp Phe Ala Pro Ile Ala Ala Leu 35 40 Leu Met Val Val Ser Leu Ser Gly Cys Phe Asp Lys Glu Gly Asp Gln 60 Arg Lys Ala Phe Ile Asp Phe Leu Gln Asn Thr Val Met Arg Ser Gly 70 7.5 Glu Arg Leu Pro Thr Leu Thr Ala Asp Gln Lys Lys Gln Phe Gly Pro 90 85 Phe Val Ser Asp Tyr Ala Ile Leu Tyr Gly Tyr Ser Gln Gln Val Ser 100 105 110 Gln Ala Met Asp Ser Gly Ile Arg Pro Val Val Asp Ser Val Asn Ala 125 115 120 Ile Arg Val Pro Gln Asp Tyr Met Thr Gln Arg Glu Pro Leu Arg Gln 140 135 130 Ser Asn Gly Ala Leu Gly Val Leu Ser Gln Gln Leu Gln Asn Ala Gln (3

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3616
                                               160
145
               150
Met Glu Ala Asp Ala Phe Arg Pro Ala Leu Lys Gln Gly Xaa
           165
<210> 7694
<211> 304
<212> PRT
<213> Enterobacter cloacae
<400> 7694
Glu Thr Ser Ile Val Ala Leu Leu Ile Ile Thr Thr Ile Leu Trp Ala
                       10
Phe Ser Phe Ser Leu Ile Gly Glu Tyr Leu Ala Gly Ser Val Asp Ser
   20
                      25
                                         30
Tyr Phe Ser Val Leu Met Arg Val Gly Leu Ala Ala Leu Val Phe Leu
                     4.0
Pro Phe Leu Arg Thr Arg Gly Gln Ser Leu Lys Thr Ile Leu Leu Tyr
                 5.5
                                  60
Met Leu Val Gly Ala Met Gln Leu Gly Ile Met Tyr Leu Phe Ser Phe
               70
                               75
Arg Ala Tyr Val Tyr Leu Ser Val Ser Glu Phe Leu Leu Phe Thr Val
          85 90 95
Leu Thr Pro Leu Tyr Ile Thr Leu Ile Tyr Asp Leu Leu Ser Arg Arg
        100
                        105 110
Arg Leu Arg Trp Gly Tyr Leu Leu Ser Ala Ala Leu Ala Val Ile Gly
                   120 125
115
Ala Ala Ile Ile Arg Tyr Asp Lys Val Ser Asp His Phe Trp Thr Gly
 130
                 135
Leu Met Phe Val Gln Leu Ala Asn Ile Ser Phe Ala Ile Gly Met Val
               150 155
145
Gly Tyr Lys Arg Leu Met Glu Thr Arg Pro Met Pro Gln His Asn Ala
          165 170
                                            175
Phe Ala Trp Phe Tyr Met Gly Ala Ala Ile Val Ala Ile Ala Ala Trp
                        185 190
         180
Phe Met Leu Gly Asn Pro Gln Lys Leu Pro Thr Thr Pro Val Gln Trp
                     200 205
195
Ser Val Leu Val Trp Leu Gly Val Val Ala Ser Gly Leu Gly Tyr Phe
                 215
                                  220
Met Trp Asn Tyr Gly Ala Thr Gln Val Asp Ala Gly Thr Leu Gly Ile
               230
                               235
Met Asn Asn Val His Val Pro Ala Gly Leu Leu Val Asn Leu Ala Ile
            245 250 255
Trp Gln Glu Gln Pro His Trp Pro Ser Phe Leu Ile Gly Gly Thr Val
                         265
         260
                                         270
Ile Leu Ala Ser Leu Trp Val His Arg Arg Trp Val Ala Pro Arg Ser
   275 280 285
Ala Gln Thr Glu Asp Gly Arg Thr Arg Gly Ser Ala Leu Ser Glu
                   295
<210> 7695
<211> 763
<212> PRT
<213> Enterobacter cloacae
<400> 7695
Ile Thr Asn Phe Tyr Lys Gly Tyr Ala Met Thr Ile Arg Thr His Thr
                          10
Leu Gly Phe Pro Arg Val Gly Leu Arg Arg Glu Leu Lys Lys Ala Gln
       2.0
                       2.5
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Glu Ser Tyr Trp Ala Gly Asn Ala Thr Arg Glu Glu Leu Leu Ala Val

4.0

Gly Arg Glu Leu Arg Ala Arg His Trp Asp Gln Gln Lys Gln Ala Gly Val Asp Leu Leu Pro Val Gly Asp Phe Ala Trp Tyr Asp His Val Leu 75 7.0 Thr Thr Ser Leu Leu Ceu Gly Asn Val Pro Ala Arg His Gln Asn Asn 8.5 Asp Gly Ser Val Asp Ile Asp Thr Leu Pne Arg Ile Gly Arg Gly Arg 105 100 Ala Pro Thr Gly Glu Pro Ala Ala Ala Ala Glu Met Thr Lys Trp Phe 120 115 Asn Thr Asn Tyr His Tyr Met Val Pro Glu Phe Val Lys Gly Gln Gln 130 135 140 Phe Lys Leu Thr Trp Thr Gln Leu Leu Asp Glu Val Asp Glu Ala Leu 150 155 Ala Leu Gly His Gln Val Lys Pro Val Leu Leu Gly Pro Val Thr Tyr 165 170 175 Leu Trp Leu Gly Lys Val Lys Gly Glu Gln Phe Asp Arg Leu Ser Leu 180 185 Leu Asn Asp Ile Leu Pro Val Tyr Lys Gln Val Leu Ile Glu Leu Gly 205 195 200 Lys Arg Gly Ile Gln Trp Val Gln Ile Asp Glu Pro Ala Leu Val Leu 210 215 220 Glu Leu Pro Gln Ala Trp Leu Asp Ala Phe Lys Pro Ala Tyr Asp Ala 225 230 235 Leu Thr Gly Gln Val Lys Leu Leu Leu Thr Thr Tyr Phe Glu Gly Val 245 250 255 Thr Pro Asn Leu Asp Thr Ile Thr Ala Leu Pro Val Gln Gly Leu His 265 270 260 Val Asp Leu Val His Gly Lys Asp Asp Val Ala Glu Leu His Lys Arg 285 280 275 Leu Pro Ala Glu Trp Leu Leu Ser Ala Gly Leu Val Asn Gly Arg Asn 290 295 300 Val Trp Arg Ala Asp Leu Thr Glu Lys Tyr Ala Gln Ile Lys Asp Ile 310 315 Val Gly Lys Arg Glu Leu Trp Ile Ala Ser Ser Cys Ser Leu Leu His 325 330 335 Ser Pro Ile Asp Leu Ser Val Glu Thr Arg Leu Asp Pro Glu Val Lys 340 345 350 Ser Trp Phe Ala Phe Ala Leu Gln Lys Cys Glu Glu Leu Ala Leu Leu 360 365 Arg Asp Ala Leu Asn Ser Gly Asp Thr Ala Ala Ile Thr His Trp Ser 375 380 Ala Pro Ile Gln Ala Arg Arg His Ser Thr Arg Val His Asn Pro Ala 390 395 Val Glu Lys Arg Leu Ala Ala Ile Thr Ala Arg Asp Ser Gln Arg Gln 405 410 415 Ser Pro Tyr Glu Val Arg Ala Glu Ala Gln Arg Ala Arg Phe Asn Leu 420 425 430 Pro Ala Trp Pro Thr Thr Thr Ile Gly Ser Phe Pro Gln Thr Thr Glu 435 Ile Arg Gly Leu Arg Leu Asp Phe Lys Lys Gly Asn Leu Asp Ala Asn 455 460 His Tyr Arg Thr Gly Ile Ala Glu His Ile Lys Gln Ala Ile Val Glu 470 475 Gln Glu Arg Leu Gly Leu Asp Val Leu Val His Gly Glu Ala Glu Arg 485 490 Asn Asp Met Val Glu Tyr Phe Gly Glu His Leu Asp Gly Phe Val Phe 500 505 510 Thr Gln Asn Gly Trp Val Gln Ser Tyr Gly Ser Arg Cys Val Lys Pro 520 Pro Val Val Ile Gly Asp Val Ser Arg Pro Glu Ala Ile Thr Val Glu

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535
Trp Ala Lys Tyr Ala Gln Ser Leu Thr Asp Lys Pro Val Lys Gly Met
                            555
         550
Leu Thr Gly Pro Val Thr Ile Leu Cys Trp Ser Phe Pro Arg Glu Asp
          565
                       570
Val Ser Arg Glu Thr Ile Ala Lys Gln Ile Ala Leu Ala Leu Arg Asp
                            590
       580
                     585
Glu Val Ala Asp Leu Glu Ala Ala Gly Ile Gly Ile Ile Gln Ile Asp
   595 - 600
                         605
Glu Pro Ala Leu Arg Glu Gly Leu Pro Leu Arg Arg Ser Asp Trp Asp
      615 620
Ala Tyr Leu Gln Trp Gly Val Glu Ala Phe Arg Leu Asn Ala Ala Val
     630 635
Ala Lys Asp Asp Thr Gln Ile His Thr His Met Cys Tyr Cys Glu Phe
          645 650 655
Asn Asp Ile Met Asp Ser Ile Ala Ala Leu Asp Ala Asp Val Ile Thr
       660 665 670
Ile Glu Thr Ser Arg Ser Asp Met Glu Leu Leu Glu Ser Phe Glu Glu
     675 680 685
Phe Asp Tyr Pro Asn Glu Ile Gly Pro Gly Val Tyr Asp Ile His Ser
       695 700
Pro Asn Val Pro Ser Val Glu Trp Ile Glu Ser Leu Leu Gln Lys Ala
705 710 715
Ala Gln Arg Ile Pro Ala Glu Arg Leu Trp Val Asn Pro Asp Cys Gly
           725 730 735
Leu Lys Thr Arg Gly Trp Pro Glu Thr Arg Ala Ala Leu Ala Asn Met
            745
        740
Val Gln Ala Ala Gln Asn Leu Arg Gln Ala
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<210> 7696 <211> 270 <212> PRT

<213> Enterobacter cloacae

<400> 7696 Ser Thr Val Leu Leu Leu Thr Asn Arg Pro Thr Glu Glu Ser Pro 10 Met Ser Lys Ser Asp Val Phe His Leu Gly Leu Thr Lys Asn Asp Leu 25 20 Gln Gly Ala Thr Leu Ala Ile Val Pro Gly Asp Pro Glu Arg Val Glu 45 35 40 Lys Ile Ala Ala Leu Met Asp Lys Pro Val Lys Leu Ala Ala His Arg 55 Glu Phe Thr Trp Arg Ala Glu Leu Asp Gly Lys Ala Val Ile Val 70 75 Cys Ser Thr Gly Ile Gly Gly Pro Ser Thr Ser Ile Ala Val Glu Glu 85 90 Leu Ala Gln Leu Gly Ile Arg Thr Phe Leu Arg Ile Gly Thr Thr Gly 105 110 100 Ala Ile Gln Pro His Ile Asn Val Gly Asp Val Leu Val Thr Thr Ala 120 Ser Val Arg Leu Asp Gly Ala Ser Leu His Phe Ala Pro Met Glu Phe 140 130 135 Pro Ala Val Ala Asp Phe Glu Cys Thr Thr Ala Leu Val Glu Ala Ala 155 150 Lys Ser Val Gly Ala Thr Thr His Val Gly Val Thr Ala Ser Ser Asp 165 170 175 Thr Phe Tyr Pro Gly Gln Glu Arg Tyr Asp Thr Phe Ser Gly Arg Val 185 180 Val Ser Arg Phe Lys Gly Ser Met Glu Glu Trp Gln Ser Met Gly Val

200 Met Asn Tyr Glu Met Glu Ser Ala Thr Leu Leu Thr Met Cys Ala Ser 215 220 Gln Gly Leu Arg Ala Gly Met Val Ala Gly Val Ile Val Asn Arg Thr 230 235 Gln Gln Glu Ile Pro Asn Ala Glu Thr Met Lys Gln Thr Glu Ser His 245 250 Ala Val Lys Ile Val Val Glu Ala Ala Arg Arg Leu Ile <210> 7697 <211> 277 <212> PRT <213> Enterobacter cloacae <400> 7697 Arg Ile Lys Pro Thr Ala Arg Gln Gly Gly Cys His Met Gly Ile Arg 10 Met Phe Asp Ile Gly Leu Asn Leu Thr Ser Ala Gln Phe Ala Lys Asp 25 3.0 His Asp Glu Val Val Ala Arg Ala Phe Ala Ala Gly Val Ser Gly Leu 4.5 4.0 Leu Leu Thr Gly Thr Asn Leu His Glu Ser Glu Gln Ala Arg Gln Leu 60 55 Ala Gln Arg Tyr Gln His Cys Trp Ser Thr Ala Gly Val His Pro His 75 7.0 Asp Ser Ser Gln Trp Thr His Glu Ser Ala Glu Ala Leu His Arg Leu 85 90 Ala Ala Thr Pro Glu Val Val Ala Ile Gly Glu Cys Gly Leu Asp Phe 100 105 Asn Arg Asn Phe Ser Thr Pro Glu Glu Gln Glu Lys Ala Phe Thr Ala 115 120 Gln Leu Ala Leu Ala Ala Glu Leu Glu Met Pro Val Phe Met His Cys 130 135 140 Arg Asp Ala His Glu Arg Phe Met Ala Leu Leu Glu Pro Trp Leu Glu 155 160 145 150 Lys Leu Pro Gly Ala Val Leu His Cys Phe Thr Gly Ser Arg Gln Glu 165 170 175 Ala Leu Asp Cys Leu Asn Arg Gly Leu Tyr Leu Gly Ile Thr Gly Trp 180 185 190 Val Cys Asp Glu Arg Arg Gly Leu Glu Leu Arg Glu Leu Leu Pro Val 200 195 Ile Pro Ala Asp Arg Leu Leu Leu Glu Thr Asp Ala Pro Tyr Leu Leu 210 215 220 Pro Arg Asp Met Gln Pro Lys Pro Pro Ser Arg Arg Asn Glu Pro Ala 230 235 Tyr Leu Gly His Ile Ala Glu Arg Val Ala His Trp Arg Gly Glu Asp 245 250 255 Ala Gln Trp Leu Ala Ala Gln Thr Asp Asp Asn Val Arg Arg Leu Phe 265 260 Gly Val Gln Phe 275 <210> 7698 <211> 505 <212> PRT <213> Enterobacter cloacae

<400> 7698
Ser Ala Tyr Arg Glu Ala Met Ile Asn Cys Met Lys Tyr His Asp Leu
1 5 10 15

Arg Asp Phe Leu Ala Leu Leu Glu Lys Gln Gly Glu Leu Lys Arg Ile 20 Thr Leu Pro Val Asp Pro Tyr Leu Glu Met Thr Glu Ile Ala Asp Arg 40 Thr Leu Arg Ala Gly Gly Pro Ala Leu Leu Phe Glu Asn Pro Lys Gly 55 Tyr Thr Met Pro Val Leu Cys Asn Leu Phe Gly Thr Pro Arg Arg Val 70 75 Ala Leu Gly Met Gly Gln Glu Asp Val Thr Ala Leu Arg Glu Val Gly 90 85 Lys Leu Leu Ala Phe Leu Lys Glu Pro Glu Pro Pro Lys Gly Phe Arg 100 105 110 Asp Leu Phe Asp Lys Leu Pro Gln Phe Lys Gln Val Leu Asn Met Pro 115 120 125 Thr Lys Arg Leu Arg Gly Ala Pro Cys Gln Gln Lys Val Leu Glu Gly 140 135 130 Asp Ala Val Asp Leu Thr Lys Ile Pro Ile Met Gln Cys Trp Pro Glu 145 150 155 Asp Ala Ala Pro Leu Ile Thr Trp Gly Leu Thr Val Thr Arg Gly Pro 165 170 175 His Lys Glu Arg Gln Asn Leu Gly Ile Tyr Arg Gln Gln Leu Ile Gly 190 180 185 Lys Asn Lys Leu Ile Met Arg Trp Leu Ser His Arg Gly Gly Ala Leu 195 200 205 Asp Phe Gln Glu Trp Cys Ala Ala His Pro Gly Glu Arg Phe Pro Val 210 · 215 220 Ser Val Ala Leu Gly Ala Asp Pro Ala Thr Ile Leu Gly Ala Val Thr 225 230 235 240 Pro Val Pro Asp Thr Leu Ser Glu Tyr Ala Phe Ala Gly Leu Leu Arg 245 250 255 Gly Thr Lys Thr Glu Val Val Lys Cys Ile Ser Asn Asp Leu Glu Val 265 270 260 Pro Ala Ser Ala Glu Ile Val Leu Glu Gly Tyr Ile Glu Gln Gly Glu 275 280 285 Leu Ala Pro Glu Gly Pro Tyr Gly Asp His Thr Gly Tyr Tyr Asn Glu 290 295 300 Val Asp Asn Phe Pro Val Phe Thr Val Thr His Ile Thr Gln Arg Glu 315 310 305 Asp Ala Ile Tyr His Ser Thr Tyr Thr Gly Arg Pro Pro Asp Glu Pro 330 335 325 Ala Val Leu Gly Val Ala Leu Asn Glu Val Phe Val Pro Ile Leu Gln 345 350 340 Lys Gln Phe Pro Glu Ile Val Asp Phe Tyr Leu Pro Pro Glu Gly Cys 360 365 Ser Tyr Arg Leu Ala Val Val Thr Met Lys Lys Gln Tyr Ala Gly His 375 380 370 Ala Lys Arg Val Met Met Gly Val Trp Ser Phe Leu Arg Gln Phe Met 390 395 Tyr Thr Lys Phe Val Ile Val Cys Asp Asp Asp Val Asn Ala Arg Asp 410 415 405 Trp Asn Asp Val Ile Trp Ala Ile Thr Thr Arg Met Asp Pro Ala Arg 425 420 Asp Thr Val Leu Val Glu Asn Thr Pro Ile Asp Tyr Leu Asp Phe Ala 435 440 Ser Pro Val Ser Gly Leu Gly Ser Lys Met Gly Leu Asp Ala Thr Asn 455 460 450 Lys Trp Pro Gly Glu Thr Asp Arg Glu Trp Gly Arg Pro Ile Glu Lys 470 475 Asp Pro Ala Val Thr Ala Arg Ile Asp Ala Ile Trp Asp Glu Leu Ala 490 485 Ile Met Asn Asn Gly Lys Ala Glu

<210> 7699 <211> 241 <212> PRT <213> Enterobacter cloacae

<400> 7699 Thr Ser Arg Gln Arg Glu Arg Met Thr Thr Leu Ser Cys Lys Val Thr 10 Ser Val Asp Ala Ile Thr Asp Thr Val Tyr Arg Val Arg Leu Val Pro 20 25 Glu Ala Ala Phe Ser Phe Arg Ala Gly Gln Tyr Leu Met Val Val Met 4.0 Asp Glu Arg Asp Lys Arg Pro Phe Ser Met Ala Ser Thr Pro Ala Glu 55 Lys Glu Phe Ile Glu Leu His Ile Gly Ala Ser Glu Leu Asn Leu Tyr 65 70 Ala Met Ala Val Met Asp Arg Ile Leu Lys Glu Arg Glu Ile Val Val 8.5 90 Asp Ile Pro His Gly Glu Ala Trp Leu Arg Glu Asp Glu Asp Arg Pro 100 105 110 Leu Ile Leu Ile Ala Gly Gly Thr Gly Phe Ser Tyr Val Arg Ser Ile 115 120 125 Leu Leu Thr Ala Leu Ala Arg Asn Pro Asn Arg Asp Ile Thr Ile Tyr 135 140 130 Trp Gly Gly Arg Glu Glu Lys His Leu Tyr Asp Leu Ser Glu Leu Glu 150 155 145 Ala Leu Ser Val Asn His Pro Asn Leu Arg Ile Glu Pro Val Val Glu 165 170 175 Gln Pro Glu Glu Gly Trp Arg Gly Arg Ser Gly Thr Val Leu Thr Ala 185 190 180 Val Leu Gln Asp His Gly Thr Leu Ala Gly His Asp Ile Tyr Ile Ala 195 200 205 Gly Arg Phe Glu Met Ala Lys Ile Ala Arg Asp Leu Phe Cys Asn Glu 215 220 210 Arg Asp Ala Arg Glu Asp Arg Leu Phe Gly Asp Ala Phe Ala Phe Ile

<210> 7700 <211> 546 <212> PRT <213> Enterobacter cloacae

225

230

<400> 7700 Phe His Ser Gly Val Leu Met Ala His Phe Ala Gln Ser Pro Ser Phe 10 Ile Leu His Gln Val Thr Cys Gln Phe Ala Thr Gly Asp Ile Leu Phe 25 20 Gly Pro Leu Asn Leu Ser Leu Asp Ala Ser Val Cys Ala Leu Val Gly 4.0 35 Arg Asn Gly Ser Gly Lys Thr Arg Leu Leu Arg Leu Leu Ala Gly Val 55 Asp Glu Pro Ala Ser Gly His Ile Glu Arg Phe Gly Thr His Val Tyr 70 Val Ala Gln Gln Asp Ile Ser Ala Asp Thr Thr Leu Ala Glu Leu 90 85 Leu Gly Tyr Asp Ala Ile Phe Ala Ala Arg Thr Arg Ile Asp Ser Gly 100 105

```
His Tyr Glu Pro Asp Asp Leu Asp Thr Leu Asp Gly Tyr Trp Asp Leu
         120 125
 115
Ala Glu Arg Leu Ser Gln Ala Phe Ile Ala Ala Lys Leu Pro Pro Phe
                                140
 130
            135
Asp Pro Ser Lys Arg Ala Ala Glu Leu Ser Gly Gly Glu Arg Ile Arg
                  155
145 150
Ala Leu Leu Cys Ser Ala Phe Thr Ala Asp Ala Asp Tyr Leu Leu Leu
               170
     165
Asp Glu Pro Thr Asn His Leu Asp Arg Gln Gly Arg Lys Trp Phe Tyr
                           190
   180
                       185
Glu Gln Leu Ser Arg Tyr Gln Gly Gly Val Leu Val Ala Ser His Asp
 195 200
                                   205
Arg Glu Leu Leu Ala Gln Val Pro Arg Ile Leu Glu Leu Ser Ala Leu
 210 215
                                220
Gly Leu Arg Ser Tyr Gly Gly Asn Tyr Ala Asp Tyr Arg Thr Gln Arg
225 230 235
Asp Ala Glu Gln Leu Ala Ala Arg Ala Ala Leu Glu His Ala Ala Thr
          245 250
Glu Arg Lys Arg Thr Arg Ala Arg Met His Lys Glu His Asp Asp Ser
        260 265 270
Leu Arg Arg Ser Ala Lys Thr Leu Arg Thr Val Asp Ser Leu Asn Ile
 275 280 285
Ala Ser Phe Glu Arg Val Lys Tyr Lys Gly Ala Ala Lys Glu Arg Ile
      295 300
Gly Ser Trp Lys Lys Gln His Ser Val Gln Asn His Ala Leu Asn Ala
305 310 315
Ala Val Asn Gln Ala Arg Glu Arg Val Glu Glu Asp Asn Ala Val Met
         325 330
                                         335
Phe Thr Leu Pro Gly Ser Glu Ile Pro Glu Gly Lys Gln Val Leu Val
        340 345 350
Leu Glu Glu Leu Val Leu Pro His Val Pro Val Pro Pro Ile Asn Trp
 355 360
                                   365
Arg Met Asp Gly Pro Met Arg Val Ala Leu Arg Gly Pro Asn Gly Cys 370 380
Gly Lys Ser Thr Leu Leu Lys Val Met Leu Gly Glu Thr Ala Pro Val
              390 395
Thr Gly Thr Cys Lys Val Ser Val Arg Cys Ala Tyr Leu Asp Gln His \frac{405}{405}
Leu Ser Arg Leu Asp Leu Ser Gln Ser Val Met Thr His Leu Ser Leu
                       425 430
         420
Gly Asn Thr Pro Leu Glu Glu Gly Ala Leu Arg Thr Arg Leu Ala Gln
                    440 445
      435
Leu Gln Leu Gly Ala Glu Lys Val Thr Leu Pro Leu Ala Glu Leu Ser
                 455 460
Gly Gly Glu Arg Leu Lys Ala Ala Leu Ala Cys Val Leu Trp Arg Glu
              470 475
Ala Ala Thr Gln Leu Leu Leu Asp Glu Pro Thr Asn His Leu Asp
                          490 495
            485
Leu Ala Ser Val Gln Ala Ile Glu Ala Ala Leu Ala Asp Tyr Pro Gly
         500 505 510
Ala Leu Leu Val Val Ser His Asp Glu Ala Phe Leu Ala Gly Leu Lys
 515
                  520 525
 Leu Thr His Glu Leu Val Trp Glu Glu Thr Gly Trp Arg Cys Glu Ser
                                 540
                  535
Leu
545
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<210> 7701 <211> 76

<212> PRT

<213> Enterobacter cloacae

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<400> 7701
Ala Asp Asp Asp Thr Arg Thr Leu Leu Ile Gln Ala Glu Glu Glu Arg
                     1.0
Val Val Asp Asn Arg Met His Asp Arg Tyr Cys Glu Leu Arg Ala Ala
   2.0
                        25
                                        30
Ala Gly His Pro Cys Glu Gly Gly Lys Pro Leu Val Ile Asn Gly Ala
                            4.5
         40
Tyr His Glu Ile Leu Phe Glu Lys Asp Ala Met Arg Ser Val Ala Leu
50 55
Asn Ala Ile Val Glu Phe Phe Asn Arg His Asn
              7.0
<210> 7702
<211> 534
<212> PRT
<213> Enterobacter cloacae
<400> 7702
Ser Asn Ser Leu Phe Ser Ala Lys Arg Pro Thr Cys Ser Ala Phe Ser
Phe Cys Val Thr Pro Arg Arg Lys Thr Leu Ser Asn Trp Thr Phe Ile
                      25
                                        30
Gln His Asn Ser Ile Leu Cys Gly Leu Asp Val Asp Ala Gly Gly Ile
                    4.0
                                4.5
Val Asp Ile Ser Ile Leu Val Tyr Ala Val Val Ala Leu Val Ser Val
                5.5
                                60
Gly Ile Gly Trp Leu Ile Cys Gly Tyr Gln His Ala Gln Gln Lys Ala
                            75
   70
Asp Gln Leu Ala Glu Arg Glu Glu Ile Val Ala Glu Leu Ser Ala Thr
         8.5
                90 95
Lys Gln Gln Leu Ala Leu Ser Asp His Trp Arg Asp Glu Cys Glu Leu
 100 105 110
Leu Asn Asn Glu Leu Arg Asn Leu Arg Asp Ile Asn Thr Ser Leu Glu
115 120 125
Ala Asp Leu Arg Glu Val Thr Thr Arg Leu Glu Ser Thr Gln Leu His
130 135 140
Ala Glu Asp Lys Ile Arg Gln Met Ile Asn Ser Glu Gln Arg Leu Ser
145 150 155
Glu Gln Phe Glu Asn Leu Ala Asn Arg Ile Phe Glu His Ser Asn Arg
         165 170 175
Arg Val Asp Glu Gln Asn Arg Gln Ser Leu Asn Ser Leu Leu Thr Pro
    180 185 190
Leu Arg Glu Gln Leu Asp Gly Phe Arg Arg Gln Val Gln Asp Ser Phe
   195
         200
                                   205
Gly Gln Glu Ala Arg Glu Arg His Thr Leu Ala His Glu Ile Arg Asn
 210 215
                                 220
Leu Gln Gln Leu Asn Ala Gln Met Ala Gln Glu Ala Val Asn Leu Thr
   230
                              235
Arg Ala Leu Lys Gly Asp Asn Lys Ala Gln Gly Asn Trp Gly Glu Val
           245
                250
                                           255
Val Met Thr Arg Val Leu Glu Ala Ser Gly Leu Arg Glu Gly Tyr Glu
       260
                        265
Tyr Glu Thr Gln Val Ser Ile Glu Asn Asp Ala Arg Ser Arg Met Gln
                    280
                          285
Pro Asp Val Ile Val Arg Leu Pro Gln Gly Lys Asp Val Val Ile Asp
 290
                 295
                                 300
Ala Lys Met Thr Leu Val Ala Tyr Glu Arg Tyr Phe Asn Ala Glu Asp
   310
                     315
Asp Tyr Thr Arg Glu Thr Ala Leu Gln Glu His Ile Ala Ser Val Arg
```

```
Asn His Ile Arg Leu Leu Gly Arg Lys Asp Tyr Gln Gln Leu Pro Gly
        340
                     345
Leu Arg Ser Leu Asp Tyr Val Leu Met Phe Ile Pro Val Glu Pro Ala
     355 360 365
Phe Leu Leu Ala Leu Asp Arg Gln Pro Glu Leu Ile Thr Glu Ala Leu
 370 375 380
Lys Asn Asn Ile Met Leu Val Ser Pro Thr Thr Leu Leu Val Ala Leu
    390 395
Arg Thr Ile Ala Asn Leu Trp Arg Tyr Glu His Gln Ser Arg Asn Ala
        405 410 415
Gln Gln Ile Ala Asp Arg Ala Ser Lys Leu Tyr Asp Lys Met Arg Leu
        420 425 430
Phe Val Asp Asp Met Ser Ser Val Gly Gln Ser Leu Asp Arg Ala Gln
   435 440 445
Asp Asn Tyr Arg Gln Ala Met Lys Lys Leu Ser Ser Gly Arg Gly Asn
                 455 460
Leu Leu Ala Gln Ala Glu Ala Phe Arg Ser Leu Gly Val Glu Val Lys
465 470 475
Arg Glu Ile Asn Pro Glu Leu Val Glu Gln Ala Thr Ala Gln Asp Glu
          485 490 495
Glu Phe Arg Leu Arg Glu Gly Asp Gly Glu Gln Asn Ser Arg Asn Glu
       500 505 510
Asp Asn Gly Leu Ala Ala Ser Leu Ser Pro Glu Ala Gln Pro Ala Arg
 515
           520
Phe Phe His Gly Gly
 530
<210> 7703
<211> 257
<212> PRT
<213> Enterobacter cloacae
<400> 7703
Leu Ala Gly Ser Glu Met Val Asp Asp Ser Gln Asp Thr Thr His Phe
        5
                       10
Gly Phe Gln Thr Val Ala Lys Ala Gln Lys Ala Asp Met Val Ala His
     20
                       25
                                 30
Val Phe His Ser Val Ala Ala Lys Tyr Asp Val Met Asn Asp Leu Met
   35
                    40
                                 4.5
Ser Phe Gly Ile His Arg Leu Trp Lys Arg Phe Thr Ile Asp Cys Ser
 50
                 55
                              60
Gly Val Arg Arg Gly Gln Thr Val Leu Asp Leu Ala Gly Gly Thr Gly
              70
                             75
Asp Leu Thr Ala Lys Phe Ser Arg Leu Val Gly Glu Thr Gly Arg Val
          8.5
              9.0
Val Leu Ala Asp Ile Asn Asp Ser Met Leu Lys Met Gly Arg Glu Lys
     100 105
                           110
Leu Arg Asn Ile Gly Val Val Gly Asn Val Glu Tyr Val Gln Ala Asn
                  120 125
   115
Ala Glu Ala Leu Pro Phe Pro Asp Asn Thr Phe Asp Cys Ile Thr Ile
 130 135 140
Ser Phe Gly Leu Arg Asn Val Thr Asp Lys Asp Lys Ala Leu Arg Ser
   150 155
Met Tyr Arg Val Leu Lys Pro Gly Gly Arg Leu Leu Val Leu Glu Phe
           165 170
                               175
Ser Lys Pro Ile Ile Asp Pro Leu Ser Lys Ala Tyr Asp Ala Tyr Ser
      180 185 190
Phe His Val Leu Pro Arg Ile Gly Glu Leu Val Ala Asn Asp Ala Glu
    195
                    200 205
Ser Tyr Arg Tyr Leu Ala Glu Ser Ile Arg Met His Pro Asp Gln Asp
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Thr Leu Lys Ala Met Met Gln Asp Ala Glu Phe Glu Asp Val Glu Tyr 225 230 235 240 Phe Asp Met Thr Ala Gly Val Val Ala Leu His Arg Gly Tyr Lys Phe 245 250 250

<210> 7704 <211> 559 <212> PRT <213> Enterobacter cloacae <400> 7704 Cys Val Asn Gln Thr Ala Gly Lys Thr Gly Gly Gln Met Thr Pro Gly 10 Glu Ile Arg Arg Leu Tyr Phe Ile Val Arg Thr Phe Leu Ser Tyr Gly 20 25 Leu Asp Glu Leu Ile Pro Arg Met Arg Ile Thr Leu Pro Leu Arg Leu 35 4.0 4.5 Trp Arg Arg Thr Leu Phe Trp Met Pro Asn Arg His Lys Asp Gln Glu 55 Leu Gly Ala Arg Leu Arg Leu Ala Leu Gln Glu Leu Gly Pro Val Trp 70 75 8.0 Ile Lys Phe Gly Gln Met Leu Ser Thr Arg Arg Asp Leu Phe Pro Pro 85 90 Gln Ile Ala Asp Gln Leu Ala Leu Leu Gln Asp Arg Val Ala Pro Phe 100 105 110 Asp Gly Glu Arg Ala Lys Lys Gln Ile Glu Glu Ala Met Gly Asn Ile 115 120 125 Pro Ile Glu Thr Trp Phe Asp Asp Phe Asp Ile Gln Pro Leu Ala Ser 130 135 Ala Ser Ile Ala Gln Val His Thr Ala Arg Leu Lys Glu Asn Gly Lys 145 150 155 160 Glu Val Val Ile Lys Val Ile Arg Pro Asp Ile Leu Pro Val Ile Lys 165 170 175 Ala Asp Met Lys Leu Ile Tyr Arg Leu Ala Arg Trp Val Pro Arg Leu 180 185 190 Leu Pro Asp Gly Arg Arg Leu Arg Pro Leu Glu Val Val Arg Glu Tyr 195 200 205 Glu Lys Thr Leu Ile Asp Glu Leu Asn Leu Leu Arg Glu Ser Ala Asn 210 215 220 Ala Ile Gln Leu Arg Arg Asn Phe Glu Asp Ser Pro Met Leu Tyr Val 230 235 Pro Glu Val Tyr Ser Asp Tyr Cys Ser Gln Asn Met Met Val Met Glu 245 250 255 Arg Ile Tyr Gly Ile Pro Val Ser Asp Val Thr Ala Leu Glu Lys Gln 260 265 270 Gly Thr Asn Met Lys Leu Leu Ala Glu Arg Gly Val Gln Val Phe Phe 275 280 285 Thr Gln Val Phe Arg Asp Ser Phe Phe His Ala Asp Met His Pro Gly 295 Asn Ile Phe Val Ser Tyr Glu His Pro Glu Asp Pro Lys Tyr Ile Gly 310 315 Ile Asp Cys Gly Ile Val Gly Ser Leu Asn Lys Glu Asp Lys Arg Tyr 325 330 Leu Ala Glu Asn Phe Ile Ala Phe Phe Asn Arg Asp Tyr Arg Lys Val 345 Ala Glu Leu His Val Asp Ser Gly Trp Val Pro Pro Asp Thr Asn Val 360 Glu Glu Phe Glu Phe Ala Ile Arg Thr Val Cys Glu Pro Ile Phe Glu 375 380

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Lys Pro Leu Ser Glu Ile Ser Phe Gly His Val Leu Leu Asn Leu Phe
              390
                             395
Asn Thr Ala Arg Arg Phe Asn Met Glu Val Gln Pro Gln Leu Val Leu
           405
                          410 415
Leu Gln Lys Thr Leu Leu Tyr Val Glu Gly Val Gly Arg Gln Leu Tyr
        420
                       425
                           430
Pro Gln Leu Asp Leu Trp Lys Thr Ala Lys Pro Phe Leu Glu Ser Trp
     435
                    440
                        445
Ile Lys Asp Gin Val Gly Ile Pro Ala Leu Val Arg Ser Leu Lys Glu
  450
                 455 460
Lys Gly Pro Phe Trp Ile Glu Lys Met Pro Glu Ile Pro Glu Leu Val
     470
                  475 480
Tyr Asp Ser Leu Arg Gln Ser Lys Asn Leu Gln His Ser Met Asp Lys
           485 490 495
Ile Ala His Glu Leu Gln Ser Ser Arg Val Arg Gln Gly Gln Ser Arg
        500 505 510
Tyr Leu Phe Gly Ile Gly Ala Thr Leu Leu Ile Ser Gly Thr Leu Leu
   515 520 525
Leu Ile Asn Arg Pro Asp Trp Glu Met Met Pro Ala Trp Ile Met Ala
 530 535 540
Ala Gly Val Val Val Trp Leu Ala Gly Trp Arg Lys Thr Arg
545 550
<210> 7705
<211> 260
<212> PRT
<213> Enterobacter cloacae
<400> 7705
Ser Val Asn Met Ala Val Asp Asp Thr Gln Pro Leu Ile Ala His Leu
1 5
               10
Ile Glu Leu Arg Lys Arg Leu Leu Asn Cys Ile Ile Ala Val Phe Leu
20 25
Ile Phe Leu Cys Leu Val Tyr Phe Ala Asn Asp Ile Tyr Gln Val Val
35 40
Ser Ala Pro Leu Ile Lys Gln Met Pro Leu Gly Ala Thr Met Ile Ala
               55 60
Thr Asp Val Ala Ser Pro Phe Phe Thr Pro Ile Lys Leu Thr Phe Trp
65 70 75
                                         80
Val Ser Leu Ile Ala Ser Ala Pro Val Ile Leu Tyr Gln Val Trp Ala
        85 90
Phe Val Ala Pro Ala Leu Tyr Arg His Glu Arg Lys Leu Val Ile Pro
      100 105 110
Leu Leu Val Ser Ser Ser Leu Leu Phe Tyr Ile Gly Met Ala Phe Ala
115 120 125
Tyr Phe Val Val Phe Pro Leu Ala Phe Gly Phe Leu Thr His Thr Ala
      135
                              140
Pro Glu Gly Val Gln Val Ser Thr Asp Ile Ala Ser Tyr Leu Ser Phe
145 150
                            155
Val Met Ala Leu Phe Met Ala Phe Gly Val Ala Phe Glu Val Pro Val
         165 170 175
Ala Ile Val Leu Leu Cys Trp Val Gly Val Thr Thr Pro Asp Asp Leu
       180 185 190
Arg Lys Lys Arg Pro Tyr Ile Leu Val Gly Ala Phe Val Val Gly Met
    195 200
Leu Leu Thr Pro Pro Asp Val Phe Ser Gln Thr Leu Leu Ala Ile Pro
 210 215
Met Tyr Cys Leu Phe Glu Val Gly Val Phe Phe Ala Arg Phe Tyr Val
225 230 235
Gly Lys Gly Arg Thr Arg Asp Glu Glu Asp Glu Pro Ser Glu Glu Thr
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<400> 7708

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Thr Lys Glu
         260
<210> 7706
<211> 106
<212> PRT
<213> Enterobacter cloacae
<400> 7706
Ser Arg Cys Val Ile Tyr Glu Glu Phe Ser Met Glu Leu Lys Asp Pro
                            10
Glu Phe Glu Leu Leu Ser Ser Leu Glu Gln Ile Ile Phe Lys Asp Val
    20
                       25
                                       3.0
Pro Pro Thr Val Thr Leu Asn Gln Lys Ser Asn Pro Phe Ser Glu Phe
    35
                 4.0
Glu Arg Leu Arg Lys Gly Ser Gly Leu Lys Thr Asp Glu Phe Ala Arg
  50
                  5.5
Ala Met Gly Val Ser Val Ala Met Val Leu Glu Trp Glu Ser Lys Arg
65 70 75
Glu Lys Pro Thr Pro Ala Glu Leu Lys Leu Met Arg Leu Ile Gln Ala
       85
Asn Pro Asp Leu Arg Lys Gln Leu Ala
         100
<210> 7707
<211> 182
<212> PRT
<213> Enterobacter cloacae
<400> 7707
Arg Ser Arg Gln Gly Phe Gly Met Leu Ala Pro Arg Thr Met Gly Arg
1 5
                            10
Val Ile Met Gln Ala Trp Tyr Leu Leu Tyr Cys Lys Arg Gly Gln Leu
 20
                          25
                                         30
Gln Arg Ala Gln Glu His Leu Glu Arg Gln Ser Val Asn Cys Leu Thr
35
                     4.0
                                      4.5
Pro Val Ile Thr Leu Glu Lys Met Gln Arg Gly Arg Arg Thr Thr Val
 50 55
Ser Glu Pro Leu Phe Pro Asn Tyr Leu Phe Val Glu Phe Asp Pro Glu
    70
                                75
Val Ile His Thr Thr Thr Ile Ser Ala Thr Arg Gly Val Ser His Phe
          8.5
                            90
Val Arg Phe Gly Ala His Pro Ala Arg Val Pro Ser Ser Val Ile His
    100
                         105
                                         110
Gln Leu Ser Val Tyr Gln Gln Pro Glu Asp Ile Thr Asp Pro Glu Thr
 115
                      120
                                      125
Pro Tyr Ala Gly Asp Ser Val Val Ile Thr Glu Gly Ala Phe Glu Gly
 130
                   135
                                   140
Leu Gln Ala Ile Phe Ala Glu Pro Asp Gly Glu Ala Arg Ser Met Leu
145 150 155
Leu Leu Asn Leu Asn Lys Glu Val Leu Gln Ser Val Lys Asn Thr
 165
                           170
Asp Phe Arg Lys Val
        180
<210> 7708
<211> 287
<212> PRT
<213> Enterobacter cloacae
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Pro Gly Val Tyr Ile Tyr Leu Cys Ala Asn Pro Phe Ile Gly Thr Glu Asn Ala Met Thr Glu Lys Thr Gly Phe Ala Pro Ala Ala Ala Pro His 20 Ala Ser Thr Ile Val Ser Thr Pro Glu Glu Ala Ile Thr Ala Gly Glu 40 Thr Ser Ile Pro Ser Gln Gly Glu Asn Met Pro Ala Tyr His Ala Arg 5.5 60 Pro Lys Ser Ala Asp Gly Pro Leu Pro Ile Val Ile Val Val Gln Glu 70 7.5 Ile Phe Gly Val His Glu His Ile Arg Asp Leu Cys Arg Arg Leu Ala 85 90 Leu Glu Gly Tyr Leu Ala Val Ala Pro Glu Leu Tyr Phe Arg Gln Gly 105 110 100 Asp Pro Asn Asp Tyr Ser Asp Ile Pro Thr Leu Phe Ser Asn Leu Val 120 125 115 Ser Lys Val Pro Asp Ala Gln Val Leu Ala Asp Leu Asp His Val Ala 130 135 140 Ser Trp Ala Ala Arg Asn Gly Gly Asp Pro His Arg Leu Met Val Thr 150 155 Gly Phe Cys Trp Gly Gly Arg Ile Ser Trp Leu Tyr Ala Ala His Asn 165 170 175 Pro Gln Leu Lys Ala Ala Val Ala Trp Tyr Gly Lys Leu Val Gly Glu 180 185 Lys Thr Leu Asn Ser Pro Lys His Pro Val Asp Ile Ala Thr Asp Leu 195 200 205 Asn Ala Pro Val Leu Gly Leu Tyr Gly Gly Gln Asp Thr Gly Ile Pro 210 215 220 Leu Asp Thr Val Glu Thr Met Arg His Ala Leu Arg Ala Ala Asn Ala 230 235 240 Lys Ala Glu Ile Val Val Tyr Pro Asp Ala Gly His Ala Phe Asn Ala 245 250 255 Asp Tyr Arg Pro Ser Tyr His Ala Glu Ser Ala Lys Asp Gly Trp Gln 260 265 270 Arg Met Leu Ala Trp Phe Ser Gln Tyr Gly Gly Lys Lys Ala 280

<210> 7709 <211> 148 <212> PRT

<213> Enterobacter cloacae

<400> 7709

Gly Cys Met Ala Val Arg Ile Pro Ala Phe Arg Leu Ile Pro Ser Arg 10 Pro Cys Ala Thr Arg Cys Gly Arg Gln Thr Arg Arg Pro Lys Ser Trp 20 25 Cys Thr Arg Met Arg Asp Thr Arg Leu Met Pro Ile Ile Val Arg Ala 4.0 45 Ile Thr Arg Asn Pro Arg Lys Met Ala Gly Arg Glu Cys Trp Arg Gly 55 Ser Ala Ser Thr Ala Gly Arg Lys Arg Asn Thr Lys Ser Pro Val Ala 7.0 75 80 Ala Thr Pro Thr Gly Gln Ser Ser Pro Thr Thr Pro Asp Ala Asn Ser 85 90 Ala Pro Pro Ala Pro Cys Ser Pro Ala Pro Arg Gly Phe Gln Ala Ser 100 105 Arg Glu Phe Ser Gly Arg Ser Pro Gly Leu Pro Thr Asp Val Pro Pro 115 120 125 Gly Cys Ala Gly Pro Leu Phe Ala Ala Ala Ile Gln Ser Thr Pro Arg 130 135 140

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Leu Ala Arg
145
<210> 7710
<211> 321
<212> PRT
<213> Enterobacter cloacae
<400> 7710
Arg Thr Phe Met Ile Glu Ile Lys His Leu Lys Thr Leu Gln Ala Leu
Arg Asn Cys Gly Ser Leu Ala Ala Ala Ala Ala Thr Leu His Gln Thr
                      25
                                 30
Gln Ser Ala Leu Ser His Gln Phe Ser Asp Leu Glu Gln Arg Leu Gly
                   4.0
                          45
Phe Arg Leu Phe Val Arg Lys Ser Gln Pro Leu Arg Phe Thr Pro Gln
                 55 60
Gly Glu Ile Leu Leu Gln Leu Ala Asn Gln Val Leu Pro Gln Ile Ala
           70 75 80
Ser Ala Leu Gln Ser Cys Asn Glu Pro Gln Gln Thr Thr Leu Arg Ile
         85 90
Ala Ile Glu Cys His Ser Cys Ile Gln Trp Leu Thr Pro Ala Leu Glu
     100 105 110
Asn Phe Arg Gln Lys Trp Pro Gln Val Glu Met Asp Phe Lys Ser Gly
 115 120 125
Val Thr Phe Asp Pro Gln Pro Ser Leu Gln Gln Gly Glu Leu Asp Leu
 130 135 140
Val Met Thr Ser Asp Ile Leu Pro Arg Ser Gly Leu His Tyr Ser Pro
   150 155
Met Phe Asp Phe Glu Val Arg Leu Val Leu Ala Pro Asp His Pro Leu
      165 170 175
Ala Ala Lys Thr Arg Ile Thr Pro Glu Asp Leu Ala Thr Glu Thr Leu
     180 185 190
Leu Ile Tyr Pro Val Gln Arg Ser Arg Leu Asp Ile Trp Arg His Phe
195 200 205
Leu Gln Pro Ala Gly Ile Ser Pro Gln Leu Lys Ser Val Asp Asn Thr
 210 215 220
Leu Leu Ile Gln Met Val Ala Ala Arg Met Gly Ile Ala Ala Leu
225 230 235
Pro His Trp Val Val Glu Thr Val Glu Arg Gln Gly Leu Val Val Thr
         245 250 255
Lys Thr Leu Gly Glu Gly Leu Trp Ser Arg Leu Tyr Ala Ala Val Arg
      260 265 270
Asp Gly Glu Gln Arg Gln Pro Ile Thr Glu Ala Phe Ile Arg Ser Ala
 275 280 285
Arg Asn His Ala Cys Asp His Leu Pro Phe Val Arg Ser Ala Glu Arg
 290 295 300
Pro Ser Gly Asp Val Pro Thr Ala Lys Pro Gly Ser Pro Phe Pro Gln
                            315
<210> 7711
<212> PRT
<213> Enterobacter cloacae
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<400> 7711

Lys Glu Pro Pro Gly Tyr Val Phe Leu Val Pro Arg Gly Gly Met Met 1 5 10 15 Asm Ile Pro Gly Asp Glu Leu Tyr Thr Leu Leu His Ala Ala Leu Lys

25 Lys Arg Gly Thr Glu Thr Leu Gln Arg Ala Leu Tyr Leu Ala Leu Arg 40 Glu Ala Ile Leu Cys Gly Arg Leu Arg Ser Gly Ser His Leu Pro Gly 55 Ser Arg Thr Leu Ala His Gln Ile Ser Val Ser Arg Asn Thr Val Asn 70 75 Ala Ala Leu Asp Gln Leu Thr Leu Glu Gly Tyr Leu Leu Arg Ser Arg 85 90 Gln Gly Thr Arg Val Gly Gln Phe Ala Pro Arg Thr Ile Ala Arg Thr 105 110 Leu Pro Asp Pro Asp Val Arg Leu Thr Lys Arg Val Ala Arg Leu Pro 120 Ala Pro Val Pro Arg Asp Thr Pro Val Met Ala Phe Thr Pro Gly Thr 140 135 Pro Ala Ile Asn Tyr Phe Pro Leu Pro Leu Trp Arg Arg Leu Tyr Asp 150 155 160 Arg Val Leu Arg Glu Glu Gly Ser Ala Leu Leu Gly Tyr Gly Asp Pro 165 170 175 Ala Gly Glu Pro Ser Leu Arg Ala Ala Ile Ala Arg His Leu Ala Leu 180 185 190 Ser Arg Gly Ile Asp Cys Asp Ala Ser Gln Ile Val Ile Thr Glu Gly 195 200 205 Ala Leu Glu Gly Val Asn Leu Cys Thr Met Leu Leu Ser Glu Pro Gly 210 215 220 Asp Val Ala Trp Val Glu Asn Pro Gly Tyr Ser Gly Ala Lys Ser Ala 230 235 240 Phe Val Lys Thr Gly Leu Ala Met Thr Gly Ile Pro Val Asp Asp Glu 245 250 255 Gly Met Cys Trp Glu Gly Leu Cys Ala Pro Ser Pro Thr Leu Ile Phe 260 265 270 Thr Ser Pro Ser His Gln Phe Pro Tyr Gly Ser Val Leu Ser Ala Arg 275 280 285 Arg Arg Leu Ala Leu Leu Glu Leu Ala Arg Gln His Asn Ala Trp Ile 290 295 300 Ile Glu Asp Asp Tyr Asp Ser Glu Phe Arg Tyr Thr Gly Glu Pro Val 305 310 315 Pro Ala Met Leu Gly Met Val Asn Asn Ala Pro Val Val Tyr Leu Gly 325 330 Thr Phe Ser Lys Thr Leu Phe Pro Ser Leu Arg Met Gly Phe Met Val 340 345 350 Leu Pro Pro Ala Leu Ala Lys Ala Ala Arg Pro Ala Ile Gly Ser Leu 355 360 365 Leu Arg Gly Gly His Arg Ala Glu Gln Arg Thr Leu Ala Leu Phe Ile 375 380 Glu Glu Gly His Tyr Ala Arg His Leu Ala Ala Met Arg Arg Leu Tyr 390 395 Arg Lys Arg Tyr Arg Gln Leu Arg Glu Val Leu Ser Ala Glu Leu His 405 410 Thr Pro His Arg Val Leu Ala Gly Glu Gly Gly Met His Leu Ala Leu 420 425 Ala Ile Asp Gly Ile Asp Asp Gln Arg Leu Val Glu Gln Ala Arg Ala 435 440 445 Phe Gln Leu Ala Pro Ala Ala Leu Ser Gly Tyr Tyr Leu Glu Thr Lys 450 455 460 Gln Gly Gln Thr Gly Leu Val Leu Gly Tyr Gly Asn Thr Ser Ala Ser 465 470 475 Gln Phe Ala Pro Gly Ile Arg Arg Leu Gln Ala Leu Ile Thr Gln Gln 485 490 Trp Gly Gly Lys Gly

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<210> 7712
<211> 222
<212> PRT
<213> Enterobacter cloacae
<400> 7712
Ile His Gln Arg Met Ala Arg Lys Thr Lys Gln Gln Ala Leu Glu Thr
                             1.0
Arg Gln His Ile Leu Asp Val Ala Met Arg Leu Phe Ser Gln Gln Gly
        20
                        25
Val Ser Ala Thr Ser Leu Ala Gln Ile Ala Gln Ala Ala Gly Val Thr
     35
                    40
Arg Gly Ala Ile Tyr Trp His Phe Lys Asp Lys Ser Asp Leu Phe Gly
   50
                   55
Glu Ile Trp Glu Leu Ser Glu Ser Ser Ile Ser Asp Leu Glu Ser Glu
          70 75
Tyr Arg Ala Lys Phe Pro His Asp Pro Leu Ser Val Leu Arg Glu Ile
          85 90
Leu Val Tyr Ile Leu Glu Ala Thr Val Val Glu Glu Arg Arg Leu
         100 105 110
Met Met Glu Ile Ile Phe His Lys Cys Glu Phe Val Gly Glu Met Ala
 115 120
                            125
Val Val Gln Gln Ala Gln Arg Asp Leu Cys Leu Glu Ser Tyr Asp Arg
 130 135 140
Ile Glu Gln Val Leu Thr Glu Cys Met Gln Ala Lys Met Leu Pro Ala
    150 155
Thr Leu Leu Thr Arg Arg Ala Ala Ile Leu Met Arg Ser Tyr Ile Ser
            165 170
Gly Leu Met Glu Asn Trp Leu Phe Ala Pro Glu Ser Phe Asp Leu Arg
180 185 190
Ser Glu Ala Arg Ser Tyr Val Asp Ile Phe Leu Glu Met Cys Gln Leu
195
                 200
                           205
Cys Pro Thr Leu Gln Ser Lys His His Pro Arg Ser Thr
<210> 7713
<211> 206
<212> PRT
<213> Enterobacter cloacae
<400> 7713
Thr Thr Val Thr Leu Thr Asp Ser Ser Arg Ala Val Ser Asn Thr Val
            5
                              1.0
Ser Phe Arg His Lys Pro Met Thr Ala Thr Ala Gln Gln Leu Glu Tyr
 20
                          25
                                           3.0
Leu Lys Asn Ser Ile Lys Ser Ile Gln Asp Tyr Pro Lys Pro Gly Ile
    35
                       40
Leu Phe Arg Asp Val Thr Ser Leu Leu Glu Asp Pro Lys Ala Tyr Ala
                  5.5
                                    60
Leu Ser Ile Glu Leu Leu Val Glu Arg Tyr Lys Asn Ala Gly Ile Thr
65 70
                                 75
Lys Val Val Gly Thr Glu Ala Arg Gly Phe Leu Phe Gly Ala Pro Val
           8.5
                             90
                                           95
Ala Leu Ala Met Gly Val Gly Phe Val Pro Val Arg Lys Pro Arg Lys
         100
                          105
Leu Pro Arg Glu Thr Ile Ala Glu Ser Tyr Glu Leu Glu Tyr Gly Thr
                      120
Asp Gln Leu Glu Ile His Val Asp Ala Ile Lys Pro Gly Asp Lys Val
                   135
                                    140
Leu Val Val Asp Asp Leu Leu Ala Thr Gly Gly Thr Ile Glu Ala Thr
```

1.60 Val Lys Leu Ile Arg Arg Leu Gly Gly Glu Val Thr Asp Ala Ala Phe 165 170 175 Ile Ile Asn Leu Phe Asp Leu Gly Gly Glu Gln Arg Leu Glu Lys Gln 180 185 Gly Ile Thr Ser Tyr Ser Leu Val Pro Phe Pro Gly His 200

<210> 7714 <211> 118 <212> PRT

<213> Enterobacter cloacae

<400> 7714

Arg Glu Arg Arg Glu Lys Pro Met Phe Gly Gly Lys Gly Gly Leu Gly 10 Gly Leu Met Lys Gln Ala Gln Gln Met Gln Glu Lys Met Gln Lys Met 20 25 Gln Glu Glu Ile Ala Gln Leu Glu Val Thr Gly Glu Ser Gly Ala Gly 35 40 Leu Val Lys Val Thr Ile Asn Gly Ala His Asn Cys Arg Arg Val Glu 50 55 60 Ile Asp Pro Ser Leu Leu Glu Asp Asp Lys Glu Met Leu Glu Asp Leu 70 75 Val Ala Ala Ala Phe Asn Asp Ala Ala Arg Arg Ile Asp Glu Thr Gln $85 \\ 90 \\ 95$

Lys Glu Lys Met Ala Ser Val Ser Ser Gly Met Gln Leu Pro Pro Gly 100 105

Phe Lys Met Pro Phe

115

<210> 7715

<211> 658 <212> PRT

<213> Enterobacter cloacae

<400> 7715

His Ser Pro Pro Leu Ile His Leu Pro Ala Leu Gln Ser Leu Pro Met 10 Ser Tyr Gln Val Leu Ala Arg Lys Trp Arg Pro Gln Thr Phe Ala Asp 20 25 3.0 Val Val Gly Gln Glu His Val Leu Thr Ala Leu Ala Asn Gly Leu Ser 35 4.0 4.5 Leu Gly Arg Ile His His Ala Tyr Leu Phe Ser Gly Thr Arg Gly Val 55 Gly Lys Thr Ser Ile Ala Arg Leu Leu Ala Lys Gly Leu Asn Cys Glu 70 75 8.0 Thr Gly Ile Thr Ala Thr Pro Cys Gly Val Cys Asp Asn Cys Arg Glu 85 90 Ile Glu Gln Gly Arg Phe Val Asp Leu Ile Glu Ile Asp Ala Ala Ser 100 105 Arg Thr Lys Val Glu Asp Thr Arg Asp Leu Leu Asp Asn Val Gln Tyr 115 120 125 Ala Pro Ala Arg Gly Arg Phe Lys Val Tyr Leu Ile Asp Glu Val His 130 135 140 Met Leu Ser Arg His Ser Phe Asn Ala Leu Leu Lys Thr Leu Glu Glu 145 150 155 Pro Pro Ala His Val Lys Phe Leu Leu Ala Thr Thr Asp Pro Gln Lys 165 170 Leu Pro Val Thr Ile Leu Ser Arg Cys Leu Gln Phe His Leu Lys Ala 185 190

```
Leu Asp Val Glu Gln Ile Arg Ala Gln Leu Glu His Ile Leu Asp Glu
 195
                     200
Glu Asn Ile Val His Glu Pro Arg Ala Leu Gln Leu Leu Ala Arg Ala
                  215
Ala Asp Gly Ser Leu Arg Asp Ala Leu Ser Leu Thr Asp Gln Ala Ile
                              235
              230
Ala Ser Gly Asp Gly Lys Leu Ser Thr Asp Ala Val Ser Thr Met Leu
           245
                           250
Gly Thr Leu Asp Asp Gln Ala Leu Ser Leu Ile Glu Ala Met Ile
             265
Ala Ala Asn Gly Glu Arg Val Met Thr Leu Val Asn Asp Ala Ala Ala
           280 285
Arg Gly Ile Glu Trp Glu Ala Leu Leu Val Glu Met Leu Ser Leu Leu
         295 300
His Arg Val Ala Met Leu Gln Leu Ser Pro Ser Ala Ile Gly Ala Asp
       310 315
Met Ala Thr Ile Glu Gln Arg Met Arg Glu Leu Ala Arg Thr Val Pro
            325 330 335
Pro Ala Asp Val Gln Leu Tyr Tyr Gln Thr Leu Leu Ile Gly Arg Lys
  340 345 350
Glu Leu Pro Phe Ala Pro Asp Arg Arg Met Gly Val Glu Met Thr Leu
 355 360 365
Leu Arg Ala Leu Ala Phe His Pro Arg Lys Pro Leu Pro Glu Pro Glu
 370 375 380
Thr Pro Arg Gin Ser Phe Ala Pro Val Ala Pro Thr Ala Val Met Ser
385 390
                              395
Pro Gln Gln Val Pro Pro Gln Pro Ala Ser Pro Pro Pro Gln Asn Val
   405
                           410 415
Pro Leu Ser Asp Ala Thr Ser Ser Val Leu Ala Ala Arg Ser Gln Leu
 420
                        425 430
Gln Arg Ala Gln Gly Ala Thr Lys Pro Lys Lys Ser Glu Pro Ala Ala
                     440 445
Pro Ala Arg Ala Arg Pro Val Asn Asn Ala Ala Leu Glu Arg Leu Ala
450 455
                                 460
Ser Val Thr Glu Arg Val Gln Ser Arg Pro Ala Pro Ser Ala Leu Glu
    470
                              475 480
Gln Lys Ala Pro Ala Lys Glu Glu Ala Tyr Arg Trp Lys Ala Thr Thr
        485
                           490
Val Val Glu Thr Val Lys Glu Val Val Ala Thr Pro Lys Ala Leu Lys
        500
                        505
                                       510
Lys Ala Leu Glu His Glu Lys Thr Pro Glu Leu Ser Ala Lys Leu Ala
     515 520
                                    525
Glu Glu Ser Ile Glu Arg Asp Ala Trp Ala Ala Glu Val Ser Lys Leu
                 535
                                 540
Gln Leu Pro Lys Leu Val Glu Gln Val Ala Leu Asn Ala Trp Lys Glu
              550
                              555
Gln Asp Gly Asn Gln Val Arg Leu His Leu Arg Pro Gly Gln Arg His
            565
                           570
                                          575
Leu Asn Ser Pro Gly Ala Gln Lys Ala Leu Ala Glu Ala Leu Thr Ala
                        585
                                       590
Leu Gln Gly Val Pro Val Glu Leu Thr Ile Ile Glu Asp Asp Asn Pro
                     600
Ala Val Lys Thr Pro Leu Glu Trp Arg Gln Ala Ile Tyr Glu Glu Lys
                 615
                                 620
Leu Ala Gin Ala Arg Glu Ala Ile Ile Ala Asp Asn Asn Ile Gln Thr
                    635
              630
Leu Arg Arg Tyr Phe Asp Ala Asp Leu Asp Glu Glu Ser Ile Arg Pro
           645
                          650
```

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<210> 7716
<211> 625
<212> PRT
<213> Enterobacter cloacae
<400> 7716
Met Lys Gly Gln Glu Thr Arg Gly Phe Gln Ser Glu Val Lys Gln Leu
                        10
Leu His Leu Met Ile His Ser Leu Tyr Ser Asn Lys Glu Ile Phe Leu
                        2.5
Arg Glu Leu Ile Ser Asn Ala Ser Asp Ala Ala Asp Lys Leu Arg Phe
            40
Arg Ala Leu Ser Asn Pro Asp Leu Tyr Glu Gly Asp Gly Glu Leu Arg
            55
Val Arg Val Ser Phe Asn Lys Glu Asn Arg Thr Leu Thr Ile Ala Asp
          70
                             75
Asn Gly Ile Gly Met Asn Arg Asp Glu Val Ile Asp His Leu Gly Thr
          85 90 95
Ile Ala Lys Ser Gly Thr Lys Ala Phe Leu Glu Ser Met Gly Ser Asp
        100 105 110
Gln Ala Lys Asp Ser Gln Leu Ile Gly Gln Phe Gly Val Gly Phe Tyr
 115 120 125
Ser Ala Phe Ile Val Ala Asp Lys Val Thr Val Arg Thr Arg Ala Ala
 130 135 140
Gly Asp Ser Ala Glu Asn Gly Val Leu Trp Glu Ser Lys Gly Glu Gly
145 150
                              155
Glu Tyr Thr Val Asp Asp Ile Thr Lys Ala Asp Arg Gly Thr Glu Ile
      165 170 175
Thr Leu His Leu Arg Glu Gly Glu Tyr Asp Phe Leu Asn Asp Trp Arg
   180 185 190
Val Arg Ser Ile Ile Ser Lys Tyr Ser Asp His Ile Ala Leu Pro Val
 195 200 205
Glu Lys Ile Asn Lys Ala Gln Ala Leu Trp Thr Arg Asn Lys Ala Glu 225 230 235 240
Ile Lys Asp Asp Glu Tyr Asn Glu Phe Tyr Lys His Ile Ala His Asp
      245 250
Phe Thr Asp Pro Leu Thr Trp Ser His Asn Arg Val Glu Gly Lys Gln
        260 265
                                       270
Glu Tyr Thr Ser Leu Leu Tyr Ile Pro Ala Gln Ala Pro Trp Asp Met
                    280
                                    285
Trp Asn Arg Asp His Lys His Gly Leu Lys Leu Tyr Val Gln Arg Val
 290 295 300
Phe \stackrel{-}{\text{Ile}} Met Asp Asp Ala Glu Gln Phe Met Pro Asn Tyr Leu Arg Phe 305 310 315
Val Arg Gly Leu Ile Asp Ser Asn Asp Leu Pro Leu Asn Val Ser Arg
           325
                          330
                                         3.3.5
Glu Ile Leu Gln Asp Ser Thr Val Thr Arg Asn Leu Arg Asn Ala Leu
        340
                       345
                                       350
Thr Lys Arg Ala Leu Gln Met Leu Glu Lys Leu Ala Lys Asp Asp Ala
     355 360
                                    365
Glu Lys Tyr Gln Thr Phe Trp Lys Gln Phe Gly Leu Val Leu Lys Glu
 370 375
                                 380
Gly Pro Ala Glu Asp Thr Ala Asn Val Glu Ala Ile Ala Lys Leu Leu
              390
                             395
Arg Phe Ala Ser Thr His Asn Asp Ser Ser Ala Gln Thr Val Ser Leu
          405 410
Glu Glu Tyr Val Ser Arg Met Lys Glu Gly Gln Glu Lys Ile Tyr Tyr
```

Ile Thr Ala Asp Ser Tyr Ala Ala Ala Lys Ser Ser Pro His Leu Glu

440 Leu Leu Arg Lys Lys Gly Ile Glu Val Leu Leu Ser Asp Arg Ile 455 Asp Glu Trp Met Met Asn Tyr Leu Thr Glu Phe Asp Gly Lys Ala Phe 470 475 Gln Ser Val Ala Lys Ala Asp Glu Ser Ile Asp Lys Leu Ala Asp Glu 485 490 Val Asp Glu Ser Ala Lys Glu Ala Glu Lys Ala Leu Glu Pro Phe Ile 500 505 510 Glu Arg Val Lys Thr Leu Leu Gly Asp Arg Val Lys Glu Val Arg Phe 520 525 Thr His Arg Leu Thr Asp Thr Pro Ala Ile Val Thr Thr Asp Ala Asp 535 540 Glu Met Ser Thr Gln Met Ala Lys Leu Phe Ala Ala Ala Gly Gln Ala 550 555 Val Pro Glu Val Lys Tyr Ile Phe Glu Leu Asn Pro Asp His Pro Leu 565 570 575 Val Lys Arg Ala Ala Asp Thr Gln Asp Asp Ala Arg Phe Ala Glu Trp 580 585 590 Val Glu Leu Leu Asp Gln Ser Leu Leu Ala Glu Arg Gly Thr Leu 595 600 605 Glu Asp Pro Asn Leu Phe Ile Lys Arg Val Asn Ala Leu Leu Leu Ala 610 615 625 <210> 7717 <211> 226 <212> PRT <213> Enterobacter cloacae <400> 7717 Lys Ile Glu Ser Thr Phe Glu Gly Ile Phe Ala Met Arg Ile Ile Leu 5 10 Leu Gly Ala Pro Gly Ala Gly Lys Gly Thr Gln Ala Gln Phe Ile Met 20 25 Glu Lys Tyr Gly Ile Pro Gln Ile Ser Thr Gly Asp Met Leu Arg Ala 35 4.0 Ala Val Lys Ser Gly Ser Glu Leu Gly Lys Gln Ala Lys Asp Ile Met 55 60 Asp Ala Gly Lys Leu Val Thr Asp Glu Leu Val Ile Ala Leu Val Lys 70 75 Glu Arg Ile Ala Gln Glu Asp Cys Arg Asn Gly Phe Leu Leu Asp Gly 85 90 Phe Pro Arg Thr Ile Pro Gln Ala Asp Ala Met Lys Glu Ala Gly Ile 100 1.05 110 Asn Val Asp Tyr Val Leu Glu Phe Asp Val Pro Asp Glu Leu Ile Val 115 120 Asp Arg Ile Val Gly Arg Arg Val His Ala Ala Ser Gly Arg Val Tyr 130 135 140 His Ile Lys Phe Asn Pro Pro Lys Val Glu Gly Lys Asp Asp Val Thr 145 150 155 Gly Glu Glu Leu Thr Thr Arg Lys Asp Asp Gln Glu Glu Thr Val Arg 165 170 Lys Arg Leu Val Glu Tyr His Gln Met Thr Ala Pro Leu Ile Gly Tyr 185 190 Tyr Thr Lys Glu Ala Gln Ala Gly Asn Thr Lys Tyr Ala Lys Val Asp 200 Gly Thr Lys Ala Val Ala Asp Val Arg Ala Glu Leu Glu Lys Ile Leu 215 220 Gly

225

```
<210> 7718
<211> 470
<212> PRT
<213> Enterobacter cloacae
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<400> 7718
Thr His Arg His Asp Gly Val Thr Gly His His Pro Pro Leu Ile Ala
                         10
Leu Arg Ala Gly Phe Val Leu Pro Phe Pro Ala Arg Ile Leu Cys Thr
       20
                       25
Val Gln Thr Met Lys Phe Pro Gly Lys Arg Lys Ser Lys His Tyr Phe
   35 40
                         4.5
Pro Val Asp Ala Arg Asp Pro Leu Leu Gln Gln Ile Gln Gln Glu Ser
 50
              5.5
                     60
Glu Thr Ser Ala Ala Trp Val Val Gly Ile Asp Gln Thr Leu Val Asp
65 70
                           75
Ile Glu Ala Lys Val Asp Asp Ala Phe Val Ala Arg Tyr Gly Leu Ser
      85 90
Ala Gly His Ser Leu Val Ile Glu Asp Asp Val Ala Glu Ala Leu Tyr
 100 105 110
Gln Glu Leu Val Arg Glu Asn Leu Ile Thr His Gln Phe Ala Gly Gly
115 120 125
Thr Ile Gly Asn Thr Met His Asn Tyr Ser Val Leu Ala Asp Asp Arg
130 135 140
Ser Val Leu Leu Gly Val Met Cys Ser Asn Ile Glu Ile Gly Gly Tyr
145 130 155 160
Ala Tyr Arg Tyr Leu Cys Asn Thr Ser Ser Arg Thr Asp Leu Asn Tyr
          165
                          170 175
Leu Gln Gly Val Asp Gly Pro Ile Gly Arg Cys Phe Thr Leu Ile Ser
       180 185 190
Asp Ser Gly Glu Arg Thr Phe Ala Ile Ser Pro Gly His Met Asn Lys
195 200
                                   205
Leu Arg Ala Glu Ser Ile Pro Glu Glu Val Ile Ala Gly Ala Ser Ala
 210 215
                                220
Leu Val Leu Thr Ser Tyr Leu Val Arg Cys Lys Pro Gly Glu Pro Met
225 230
                           235 240
Pro Asp Ala Thr Met Lys Ala Ile Glu Tyr Ala Lys Lys Tyr Asn Val
           245
                         250 255
Pro Val Val Leu Thr Leu Gly Thr Lys Phe Val Ile Ala Asp Asn Pro
                      265
                                      270
Glu Trp Trp Gln Ala Phe Leu Lys Glu His Val Ser Ile Leu Ala Met
    275
                   280
                                   285
Asn Glu Glu Glu Ala Glu Ala Leu Thr Gly Glu Ser Asp Pro Leu Leu
                 295
                                300
Ala Ser Asp Lys Ala Leu Asp Trp Val Asp Leu Val Leu Cys Thr Ala
              310
                            315
Gly Pro Val Gly Leu Tyr Met Ala Gly Phe Thr Glu Glu Glu Ser Lys
           325
                          330
Arg Lys Thr Gln His Pro Leu Leu Pro Gly Ala Ile Ala Glu Phe Asn
        340
                       345
                                      350
Gln Tyr Glu Phe Ser Arg Ala Met Arg His Lys Asp Cys Ile Asn Pro
     355
                    360
                                   365
Leu Arg Ile Phe Ser His Ile Ala Pro Tyr Met Gly Gly Pro Glu Lys
  370
                 375
                                380
Ile Met Asn Thr Asn Gly Ala Gly Asp Gly Ala Leu Ala Ala Leu Leu
                             395
            390
His Asp Ile Thr Ala Asn Ala Tyr His Lys Thr Asn Val Pro Asn Ser
           405
                          410
```

Ser Lys His Thr Phe Asp Trp Leu Thr Tyr Ser Ser Leu Ala Gln Val

```
420
                         425
Cys Lys Tyr Ala Asn Arg Val Ser Tyr Gln Val Leu Asn Gln His Ser
    435
                    440
Pro Arg Leu Thr Arg Gly Leu Pro Glu Arg Glu Asp Ser Leu Glu Glu
   450
                  455
Ala Tyr Trp Asp Arg
<210> 7719
<211> 1161
<212> PRT
<213> Enterobacter cloacae
<400> 7719
Ala Ser Pro Pro Phe Tyr Leu Ile Gly Tyr Gly Lys Asn Arg Arg Pro
                           1.0
Phe Pro Ser Tyr Tyr Ser Ala Ser Ala Gly Arg Asp Ile Leu His Ala
         20
                      25
Arg Leu Phe Pro Val Ile Ser His Ile Thr Phe Thr Thr Met Leu His
 35
                   4 ∩
Ile Asn Arg Ser Gln His Leu Val Leu Ala Leu Phe Leu Ile Leu Leu
  50
       55 60
Phe Tyr Phe Ala Ala Ala Pro Leu Ser Trp Ala Arg Ala Asp Asn Gly
      70 75
Ser Asp Ile Pro Thr Arg Ala Asp Val Gln Ala Gln Leu Asp Thr Leu
       85
                           90 95
Asn Lys Gln Lys Asp Leu Ser Ala Leu Glu Lys Leu Val Gln Gln Asp
 100 105 110
Leu Thr Glu Thr Leu Glu Thr Leu Asp Lys Ile Glu Arg Ile Lys Ala
 115 120 125
Glu Thr Ala Gln Leu Arg Gln Lys Val Ala Gln Ala Pro Glu Asn Met
 130
                 135 140
Arg Lys Ala Thr Glu Ala Leu Asn Ala Leu Ser Asp Val Asp Asn Asp
145
    150 155
Asp Glu Thr Arg Lys Thr Leu Ala Thr Leu Ser Leu Arg Gln Leu Glu
       165 170 175
Ser Arg Val Ala Gln Leu Leu Asp Asp Leu Gln Thr Ala Gln Ser Asp
       180 185 190
Leu Ser Thr Tyr Asn Ser Gln Leu Val Ser Leu Gln Thr Gln Pro Glu
    195 200
                                     205
Arg Val Gln Asn Ala Met Tyr Ser Ala Ser Gln Gln Leu Gln Gln Ile
 210 215
                                 220
Arg Asn Arg Leu Asn Gly Val Thr Val Gly Glu Gly Ala Leu Arg Pro
225 230
                              235
Thr Gln Gln Thr Leu Leu Asn Ile Gln Gln Thr Leu Leu Asn Ala Glu
                           250 255
           245
Ile Glu Gln Gln Arg Lys Ser Leu Glu Gly Asn Thr Val Leu Gln Asp
        260
                       265
Ala Leu Gln Lys Gln Arg Asp Tyr Val Thr Ala Asn Ile Asn Arg Leu
    275
                    280
                                    285
Glu His Gln Leu Gln Leu Gln Glu Ala Val Asn Ser Lys Arg Leu
 290 295
                                 300
Thr Leu Thr Glu Lys Thr Ala Gln Glu Ala Val Ser Pro Asp Glu Thr
              310
                              315
Ala Arg Ile Gin Ala Asn Pro Leu Val Lys Gin Glu Leu Glu Ile Asn
           325
                           330
                                           335
His Gln Leu Ser Glu Arg Leu Ile Gln Ala Thr Glu Asn Gly Ser Ala
        340
                        345
                                       350
Leu Val Gln Gln Asn Ile Lys Val Lys Asn Trp Leu Asp Arg Ala Leu
                     360
                                   3.65
Gln Ala Glu Arg Asn Val Lys Glu Gln Ile Ala Val Leu Lys Gly Ser
```

375 Leu Leu Ser Arg Ile Leu Tyr Gln Gln Gln Thr Leu Pro Ser 390 395 400 Ala Asp Glu Leu Glu Asp Met Thr Asn Arg Ile Ala Asp Leu Arg Leu 405 410 415 Glu Gln Phe Asp Val Asn Gln Gln Arg Asp Ala Leu Phe Gln Ser Asp 425 430 Thr Phe Val Ala Lys Val Glu Glu Gly His Ser Gly Glu Val Asn Ala 435 440 445 Glu Val His Asp Ala Leu Leu Gln Val Val Asp Met Arg Arg Glu Leu 455 460 Leu Asp Gln Leu Asn Lys Gln Leu Gly Asn Gln Leu Met Met Ala Ile 470 475 480 Asn Leu Gln Ile Asn Gln Gln Gln Leu Val Ser Val Ser Lys Ser Leu 485 490 495 Gln Glu Ile Leu Thr Gln Gln Ile Phe Trp Val Asn Ser Asn Lys Pro 500 505 510 Met Asp Trp Asp Trp Phe Lys Ser Phe Pro Glu Thr Leu Lys Ser Gln 515 520 525 Ile Lys Ser Met Lys Ile Thr Val Asn Trp Glu Lys Ala Trp Pro Ala 530 535 540 Val Met Ile Ala Phe Leu Ala Gly Leu Pro Leu Leu Leu Ile Ala Gly 545 550 555 Val Ile Arg Trp Arg Leu Lys Trp Leu Lys Gln Tyr Gln Ala Lys Leu 565 570 575 Ala Ser Glu Val Gly Gln Leu Arg Asn Asp Ser Gln Leu His Thr Pro 580 585 590 Lys Ala Ile Leu Ile Asp Leu Ile Arg Ala Leu Pro Val Cys Leu Leu 595 600 605 Ile Leu Ala Val Gly Leu Ile Leu Leu Thr Met Gln Leu Asn Ile Ser 610 615 620 Asp Leu Leu Trp Ala Phe Ser Lys Lys Leu Ala Leu Phe Trp Leu Val 625 630 635 640 Phe Gly Leu Cys Trp Lys Val Leu Glu Lys Asp Gly Val Ala Val Arg 645 650 655 His Phe Asn Met Pro Glu Lys Leu Thr Ser His Trp Arg Arg Gln Ile 660 665 670 Val Arg Ile Ser Leu Ala Leu Leu Pro Leu His Phe Trp Ser Val Val 675 680 685 Ala Glu Leu Ser Pro Leu His Leu Met Asp Asp Val Leu Gly Gln Leu 690 695 700 Val Ile Met Leu Asn Leu Leu Leu Ile Ala Val Leu Met Trp Pro Met 705 710 715 Cys Arg Asp Ser Trp Arg Asp Lys Glu Ser His Asn Leu Arg Leu Val 725 730 Thr Val Thr Val Leu Ala Ile Ile Pro Leu Ala Met Met Val Leu Thr 740 745 750 Ala Thr Gly Tyr Phe Tyr Thr Thr Leu Arg Leu Ser Gly Arg Trp Ile 755 760 765 Glu Thr Val Tyr Leu Val Ile Val Trp Asn Leu Leu Phe Gln Thr Val 775 780 Leu Arg Gly Leu Ser Val Ala Ala Arg Arg Ile Ala Tyr Arg Arg Ala 785 790 795 Val Ala Arg Arg Gln His Gln Val Lys Glu Gly Ala Glu Gly Ala Glu 805 810 Pro Gln Glu Glu Pro Thr Ile Ala Leu Glu Gln Val Asn Gln Gln Thr 820 825 830 Met Arg Ile Thr Met Leu Val Met Ile Ala Leu Phe Ala Val Met Phe 835 840 845 Trp Ala Ile Trp Ser Asp Leu Ile Thr Val Phe Ala Tyr Leu Asp Ser 855 860

```
Ile Thr Leu Trp Gln Tyr Asn Gly Thr Glu Ala Gly Ala Ala Val Met
    870
                            875
Lys Ser Val Thr Met Gly Ser Leu Leu Phe Ala Leu Val Ser Ser Val
                 890
           885
Val Ala Trp Ala Leu Ile Arg Asn Leu Pro Gly Leu Leu Glu Val Leu
        900
             905 910
Val Leu Ser Arg Leu Asn Leu Arg Gln Gly Ala Ser Tyr Ala Ile Thr
         920 925
Thr Ile Leu Asn Tyr Val Ile Ile Ile Val Gly Ala Met Thr Val Phe
      935 940
Gly Ser Leu Gly Val Ser Trp Asp Lys Leu Gln Trp Leu Ala Ala Ala
      950 955 960
945
Leu Ser Val Gly Leu Gly Phe Gly Leu Gln Glu Ile Phe Gly Asn Phe
          965 970 975
Val Ser Gly Leu Ile Ile Leu Phe Glu Arg Pro Val Arg Ile Gly Asp
        980 985 990
Thr Val Thr Ile Gly Thr Phe Ser Gly Thr Val Ser Lys Ile Arg Ile
 995 1000 1005
Arg Ala Thr Thr Ile Thr Asp Phe Asp Arg Lys Glu Val Ile Ile Pro
1010 1015 1020
Asn Lys Ala Phe Val Thr Glu Arg Leu Ile Asn Trp Ser Leu Ser Asp
1025 1030 1035 1040
Thr Thr Thr Arg Val Val Ile Arg Leu Gly Val Ala Tyr Gly Ser Asp
 1045 1050 1055
Leu Asp Lys Val Lys Glu Val Leu Leu Glu Ala Ala Lys Ser His Pro
1060 1065 1070
Lys Val Met His Asp Pro Ala Pro Asp Val Phe Leu Thr Thr Phe Gly
1075 1080 1085
Pro Ser Thr Leu Asp His Glu Leu Arg Leu Tyr Val Arg Glu Leu Arg
1090 1095 1100
Asp Arg Ser Tyr Thr Val Asp Glu Leu Asn Arg Thr Ile Asp Arg Leu 1105 1110 1115 1120
Cys Arg Glu Asn Asn Ile Asn Ile Ala Phe Asn Gln Leu Glu Val His
  1125 1130 1135
Lys Gly Asp Asp Pro Thr Pro Ala
<210> 7720
<211> 135
<212> PRT
<213> Enterobacter cloacae
<400> 7720
Pro Phe Ser Leu Ile Thr Ile Arg Ile Met Gln Arg Thr Ile Leu Ile
              10
                             15
Ile Ile Gly Trp Leu Ala Val Val Leu Gly Thr Leu Gly Val Val Leu
        20 25
                                    3.0
Pro Leu Leu Pro Thr Thr Pro Phe Ile Leu Leu Ala Ala Trp Cys Phe
   35 40
Ala Arg Ser Ser Pro Arg Phe His His Trp Leu Leu Tyr Arg Ser Trp
 50 55
Phe Gly Gly Tyr Leu Arg His Trp Gln Lys His Arg Ala Met Pro Pro
           70
                           75
Gly Ala Lys Pro Arg Ala Ile Ala Phe Ile Leu Ile Thr Phe Ala Val
              90
         8.5
Ser Leu Trp Leu Val Lys Met Met Trp Val Arg Ile Leu Leu Leu Ala
      100 105 110
Ile Leu Val Ser Leu Leu Pee Met Trp Arg Ile Pro Val Val Asp
                   120
```

```
Glu Lys Gln Gln Lys His
  130
<210> 7721
<211> 206
<212> PRT
<213> Enterobacter cloacae
<400> 7721
Asp Ala Ile Leu Met Gln Thr Ser Pro Leu Leu Thr Gln Leu Met Glu
                              1.0
Ala Leu Arg Cys Leu Pro Gly Val Gly Pro Lys Ser Ala Gln Arg Met
                          25
                                           30
Ala Phe Thr Leu Leu Gln Arg Asp Arg Ser Gly Gly Met Arg Leu Ala
                       4.0
Gln Ala Leu Thr Arg Ala Met Ser Glu Ile Gly His Cys Ala Asp Cys
                 5.5
Arg Thr Phe Thr Glu Gln Asp Val Cys Asn Ile Cys Thr Asn Pro Arg
              70
                        75
Arg Gln Glu Asn Gly Gln Ile Cys Val Val Glu Ser Pro Ala Asp Ile
           85
                  90
                                               9.5
Tyr Ala Ile Glu Gln Thr Gly Gln Phe Ser Gly Arg Tyr Phe Val Leu
       100 105
Met Gly His Leu Ser Pro Leu Asp Gly Ile Gly Pro Asp Asp Ile Gly
 115 120 125
Leu Asp Arg Leu Glu Gln Arg Leu Glu Ser Glu Thr Ile Lys Glu Val
130 135 140
Ile Leu Ala Thr Asn Pro Thr Val Glu Gly Glu Ala Thr Ala Asn Tyr
145 150 155
Ile Ala Glu Leu Cys Ala Gln Tyr Gly Val Asp Ala Ser Arg Ile Ala
          165 170
His Gly Val Pro Val Gly Gly Glu Leu Glu Met Val Asp Gly Thr Thr
       180 185 190
Leu Ser His Ser Leu Ala Gly Arg His Lys Ile Ile Phe
                       200
<210> 7722
<211> 321
<212> PRT
<213> Enterobacter cloacae
<400> 7722
Met Ser Gln Ala Lys Thr Gly Ile Leu Leu Ala Asn Leu Gly Thr Pro
       5
                             1.0
Glu Ala Pro Thr Pro Ala Ala Val Lys Arg Tyr Leu Arg Gln Phe Leu
 20
                          2.5
                                           3.0
Ser Asp Thr Arg Val Val Asp Thr Pro Arg Leu Leu Trp Trp Pro Leu
    35
                      40
Leu Arg Gly Val Ile Leu Pro Ile Arg Ser Pro Arg Val Ala Lys Leu
 50 55
                                    60
Tyr Gln Ser Val Trp Met Glu Glu Gly Ser Pro Leu Met Val Tyr Ser
                7.0
                                75
                                                 80
Arg Arg Gln Glu Lys Ala Leu Ala Ala Arg Leu Pro Asp Met Pro Val
          8.5
                             90
Ala Leu Gly Met Ser Tyr Gly Lys Pro Ser Leu Glu Ser Ala Val Asp
        100
                          105
                                           110
Ser Leu Leu Ala Gln Gly Val Glu His Ile Val Val Leu Ala Leu Tyr
     115 120
                                        125
Pro Gln Tyr Ser Cys Ser Thr Val Ala Ala Val Trp Asp Glu Leu Gly
             135
                              140
Arg Ile Leu Ala Thr Arg Arg Ile Pro Gly Ile Thr Phe Ile Arg
```

150 Asp Tyr Ala Asp Asn Glu Leu Tyr Ile Gln Ala Leu Ala Ser Ser Val 165 170 Arg Ala Ser Phe Glu Lys His Gly Glu Pro Asp Leu Leu Leu Ser 180 185 190 Tyr His Gly Ile Pro Gln Arg Phe Ala Asn Glu Gly Asp Asp Tyr Pro 195 200 205 Gln Arg Cys Arg Asp Thr Thr Arg Glu Leu Val Ser Ala Leu Gly Leu 215 220 Pro Pro Glu Lys Val Met Met Thr Phe Gln Ser Arg Phe Gly Arg Glu 230 235 Pro Trp Leu Thr Pro Tyr Thr Asp Glu Thr Leu Lys Met Leu Gly Glu 245 250 255 Lys Gly Val Lys His Ile Gln Val Met Ser Pro Gly Phe Ser Ala Asp 260 265 270 Cys Leu Glu Thr Leu Glu Glu Ile Ala Val Gln Asn Lys Glu Phe Phe 275 280 285 Met Glu Ala Gly Gly Thr Lys Tyr Glu Tyr Ile Pro Ala Leu Asn Asp 290 295 300 Ser Pro Glu His Ile Asp Met Met Val Ser Leu Val Thr Thr Arg Arg 305 310

<210> 7723 <211> 90

<212> PRT <213> Enterobacter cloacae

<210> 7724 <211> 264 <212> PRT <213> Enterobacter cloacae

8.5

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3642
Met Met Ala Ile Asn Ala Thr Thr Leu Pro Met Val Met Leu Ile Ser
         100 105
Ser Ala Ser Glu Ala Lys Pro Ile Phe Ser Phe Ser Ile Ile Pro Ala
      115
Thr Ala Gly Ser Arg Thr Ser Val Asn Thr Ile Thr Arg Ser Ser Thr
                   135
Ile Ser Gln Pro Ile Ala Ile Cys Pro Arg Trp Leu Ser Ile Ser Cys
               150 155
Leu Ser Ser Ser Ala Arg Ser Ser Thr Thr Val Leu Ala Val Glu Arg
            165
                          170 175
His Ser Pro Asn Thr Ile Pro Val Met Ile Asp Gln Pro Ser Thr Ala
         180
             185 190
Glu Ser Ala Met Pro Ser Ser Val Ala Thr Pro Ile Trp Ala Ile Ala
      195 200
                          205
Pro Gly Met Ala Ile Asp Phe Thr Ala Ile Arg Ser Phe Arg Glu Lys
 210
       215 220
Cys Ser Pro Thr Pro Asn Ile Ser Arg Ile Thr Pro Asn Ser Ala Ser
225
    230 235
Ser Gly Ala Ser Leu Val Ser Ala Thr Lys Pro Gly Val Lys Gly Pro
       245 250
Ala Ser Thr Pro Ala Ser Lys
 260
<210> 7725
<211> 104
<212> PRT
<213> Enterobacter cloacae
<400> 7725
Tyr Pro Val Tyr Gly Gly Gly Ser Pro Glu Cys Ala Pro Val Arg Pro
                10
Arg Arg Gln Leu Pro Trp Ser Tnr Asn Thr Ala Asp Ile Glu Pro Ala
      20
             25
                                        3.0
Pro Gln Cys Val Gln Arg Pro Ala Pro Ala Glu Ser Gln Arg Arg Phe
35 40
Pro Gly Thr Ala Tyr Arg Ser Ser Cys Arg Ala Gln Arg Ala Cys Pro
                 55 60
Ala Gly Gly Arg Pro Ala Pro Ser Pro Asp Asp Gly Cys Thr Pro Ser
65 70 75
Ala Ala Ser Pro Leu Pro Ser Thr Arg Thr Asp Arg Ala Leu Pro His
         85
Ala Gly Asn Glu Ser Ala Glu
        100
```

<210> 7726 <211> 173 <212> PRT <213> Enterobacter cloacae

<400> 7726
Ala Ala Asp Trp Phe Ala Ser Glu Trp His Leu Lys Ala Arg Arg Glu 1
15
Leu His Thr Ala Gly Asn Arg Gly His Phe Leu Phe Leu Gly Phe Val 30
Asp Thr Ala Ser Gly Ile Val Lys Arg Gly Cys Asn Gln Ile Phe Gln 35
40
His Leu Phe Val Val Phe Glu Gln Asp Val Asp Phe Val Asp Gly Cys Asn Gly Tle Phe Gln 50
60
Ala Val Met Arg Thr Val Asp Gly His Leu Asp Gln Thr Gly Thr Gly 65
70
75
80
This Leu Phe Gly Thr Gly Gly His Leu Asp Gln Thr Gly Thr Gly 65

Phe Thr Arg Asp Phe Gln Leu Ser Asp Leu Phe Leu His Leu Leu His

```
Phe Phe Leu His Leu Leu Ser Leu Leu His Gln Ala Thr Gln Thr Ala
         100
                       105
Phe Ser Thr Lys His Arg Leu Leu Ser Ser Phe Thr Leu Arg Ile Thr
      115
                 120
Thr Val Ser Gln Thr His Asp Gln Met Gly Arg Ile Leu Ser Ser Ser
              135
                         140
Arg Ser Ala Ser Lys Tyr Arg Arg Arg Val Trp Met Leu Leu Ser Ala
145 150 155
Ile Ile Ala Ser Arg Ala Cys Ala Ser Phe Ser Ser
             165
<210> 7727
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 7727
Thr Ala Thr Leu Pro Leu Glu Ser Ala Leu Lys Thr Ala Leu Leu Leu
1 5
                       10
Glu Arg Leu Gln Asn Gln Leu Ile Ala Leu Arg Ala Gln Ala Thr Pro
20
                          2.5
                                           3.0
Leu Met Gly His Ala Thr Leu Lys Pro Arg Phe Asp Arg Gln Leu Phe
                       40
                                       45
Arg Thr Arg Ser Thr Val Ile Gln Asp Tyr Leu Ala Glu Ala Gln Thr
                 55
                                    60
Asn Leu Asp Glu Leu Arg His Ala Val Glu Ser Glu Gln Gln Glu Gln
65 70
                               7.5
Val Ala Trp Leu Ala Glu His Leu Thr Glu Gln Ile Thr Ala Leu His
           85 90
                                  95
Arg Glu Ile Ala Ala Trp Pro Leu Arg Ala Trp Asp Ser Ala Ser Pro
         100 105
                                          110
Gly Leu Gly Lys Trp Gln Arg Lys Arg Leu Glu Asn Gln Glu Phe Glu
115
                      120
                                       125
Arg Arg Leu Phe Glu Met Lys Arg Glu Arg Glu Ala Arg Leu Asn Ile
130 135
                                    140
Ser Glu Thr Leu Glu Glu Gln Gln Leu Leu Met Arg Glu Ile Ser Ala
145 150 155 160
Leu Glu Gly Arg Ile Val Arg Cys Arg Gln Ala Leu Asp Glu Ile Glu
           165
                             170
Arg Val Ile Glu Arg Leu Thr Arg
<210> 7728
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 7728
Gln Glu Pro Leu Met Ser Leu Glu Asn Ala Pro Asp Glu Val Lys Leu
                             10
                                         1.5
Ala Val Asp Leu Ile Met Leu Leu Glu Asn His Ala Ile Pro Ala Glu
         20
                        25
Thr Val Leu Lys Ala Leu Glu Ile Val Arg Arg Asp Phe Glu Gly Lys
   35
                     40
Leu Pro Pro His Pro Ala Leu Ser Pro Glu Gly Arg Gly Lys
                   55
<210> 7729
<211> 422
<212> PRT
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<213> Enterobacter cloacae

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<400> 7729
Tyr Lys Arg Ser Asn Gly Phe Leu Asp Ser Gly Pro Leu Ile Asn Leu
Lys Ser Asp Thr Arg Gly Leu His Met Asn Lys Asn Arg Gly Leu Thr
        20
                  25
Pro Leu Ala Val Val Leu Met Leu Ser Gly Ser Leu Ala Leu Thr Gly
                    40
                          4.5
Cys Asp Asp Lys Glu Ala Gln Gln Gly Ala Gln Gln Val Pro Glu Val
               5.5
                       60
Gly Val Val Thr Leu Lys Ser Glu Pro Leu Gln Met Thr Thr Glu Leu
            70 75
Pro Gly Arg Thr Ser Ala Tyr Arg Ile Ala Glu Val Arg Pro Gln Val
          85 90 95
Ser Gly Ile Ile Leu Lys Arg Asn Phe Thr Glu Gly Gly Asp Val Lys
        100 105 110
Ala Gly Glu Ser Leu Tyr Gln Ile Asp Pro Ala Thr Tyr Gln Ala Ser
   115 120 125
Tyr Glu Ser Ala Lys Gly Asp Leu Ala Lys Ala Glu Ala Ala Ala Lys
 130 135 140
Ile Ser Gln Leu Thr Leu Asn Arg Tyr Lys Lys Leu Leu Gly Thr Gln
145 150 155 160
Tyr Ile Ser Gln Gln Asp Tyr Asp Ser Ala Leu Ala Asp Ala Gln Gln
   165 170 175
Ala Asn Ala Ala Val Val Ala Ala Lys Ala Ala Val Glu Thr Ala Arg
 180 185 190
Ile Asn Leu Ala Tyr Thr Lys Val Thr Ser Pro Ile Ser Gly Arg Ile
 195 200
Gly Lys Ser Ala Val Thr Glu Gly Ala Leu Val Gln Asn Gly Gln Thr
210 215 220
Asn Ala Leu Ala Thr Val Gln Gln Leu Asp Pro Ile Tyr Val Asp Val
225 230 235
Thr Gln Ser Ser Asn Asp Phe Leu Arg Leu Lys Gln Glu Leu Ala Ser
      245 250 255
Gly Gln Leu Lys Gln Glu Asn Gly Lys Ala Lys Val Glu Leu Val Thr
     260 265
Asn Asp Gly Ile Glu Phe Ser Gln Thr Gly Thr Leu Glu Phe Ser Asp
 275 280
                                 285
Val Thr Val Asp Gln Thr Thr Gly Ser Ile Thr Ile Arg Ala Ile Phe
 290 295
                              300
Pro Asn Pro Asp Lys Thr Leu Leu Pro Gly Met Phe Val Arg Ala Arg
305 310 315
Leu Glu Glu Gly Thr Asn Pro Ser Ala Ile Leu Val Pro Gln Gln Gly
      325 330
Val Thr Arg Thr Pro Arg Gly Asp Ala Ser Ala Leu Val Val Gly Ala
       340 345
Asp Asn Lys Val Glu Met Arg Asn Ile Thr Ala Thr Gln Ala Ile Gly
 355 360
                                 365
Asp Lys Trp Leu Val Thr Glu Gly Leu Lys Asp Gly Asp Arg Val Ile
370 375
                              380
Ile Thr Gly Leu Gln Lys Val Arg Pro Gly Ala Gln Val Lys Ala Gln
385 390
                           395
Glu Val Lys Ser Asp Asp Lys Gln Gln Ala Ser Ala Ala Gly Gln Ser
          405
              410
Glu Gln Thr Lys Ser
        420
```

<210> 7730

<211> 67 <212> PRT

3645 <213> Enterobacter cloacae <400> 7730 Ser Lys Leu Met Asn Thr Trp Thr Thr Pro Leu Cys Cys Ser Ala Ala Thr Ala Leu Thr His Arg Ile Cys Arg Asn Gly Val Asn Gln Glu Thr 25 30 Ala Tyr Phe Ala Ala Ser Leu Met Ser Ala Glu Leu Ile Arg Leu Val 4.0 45 Phe Pro Val Lys Ile Ile Thr Ile Thr Lys Val Asn Leu Cys Leu Ile Asn His 65 <210> 7731 <211> 191 <212> PRT <213> Enterobacter cloacae <400> 7731 Asn Asp Ser Arg Glu Val Pro Met Ser Glu Glu Lys Gln Lys Met Ile 1.0 Ala Gly Glu Tyr Tyr Arg Pro Gly Asp Asp Tnr Leu Arg Ala Asn Arg 20 25 Leu Arg Ala Arg His Leu Val His Arg Tyr Asn His Thr Ala Pro Asp 35 40 Glu Lys Ala Glu Arg Arg Ala Leu Leu Ala Asp Leu Leu Gly Gln Ser 55 60 Glu Gly Ala Tyr Ile Glu Pro Ser Phe Arg Cys Asp Tyr Gly Tyr Asn 70 7.5 80 Ile Tyr Leu Gly Lys Asn Phe Tyr Ala Asn Phe Asp Cys Val Met Leu 85 90 Asp Val Cys Pro Val Arg Ile Gly Asp Asn Cys Met Leu Ala Pro Gly 100 105 110 Val His Ile Tyr Thr Ala Thr His Pro Leu Asp Ala Thr Glu Arg Asn 120 125 Ser Gly Leu Glu Tyr Gly Lys Pro Val Thr Ile Gly Asp Asn Val Trp 130 135 140 Ile Gly Gly Arg Ala Ile Ile Asn Pro Gly Val Thr Ile Gly Asp Asn 150 155 Ala Val Ile Ala Ser Gly Ala Val Val Thr Lys Asp Val Pro Ala Asn 165 170 175 Ala Val Val Gly Gly Asn Pro Ala Lys Ile Ile Lys Met Leu 180 185 <210> 7732 <211> 92 <212> PRT <213> Enterobacter cloacae <400> 7732 Ser Leu His Tyr Phe Thr Leu Leu Ala Ile Ile Gly Phe Val Leu Ala 10 Ser Ala Phe Ser Val Ile Leu Val Tyr Ala Gln Glu Leu Leu Pro Gly 20 25 Arg Ile Gly Met Val Ser Gly Leu Phe Phe Gly Phe Ala Phe Gly Met 3.5 40 Gly Gly Leu Gly Ala Ala Val Leu Gly Met Val Ala Asp His Thr Ser 55 Ile Phe Leu Val Tyr Lys Ile Cys Ala Phe Leu Pro Leu Leu Gly Met

7.0

Leu Thr Ile Phe Leu Pro Asp Asn Arg His Lys Ala 8.5

<210> 7733 <211> 1038

<212> PRT <213> Enterobacter cloacae

405

<400> 7733 Asp Met Pro Asn Phe Phe Ile Asp Arg Pro Ile Phe Ala Trp Val Ile 10 Ala Ile Ile Ile Met Leu Ala Gly Gly Leu Ala Ile Leu Lys Leu Pro 25 30 Val Ala Gln Tyr Pro Thr Ile Ala Pro Pro Ala Val Thr Ile Ser Ala 35 40 45 Thr Tyr Pro Gly Ala Asp Ala Lys Thr Val Gln Asp Thr Val Thr Gln 50 55 Val Ile Glu Gln Asn Met Asn Gly Ile Asp Asn Leu Met Tyr Met Ser 70 75 Ser Asn Ser Asp Ser Thr Gly Thr Val Gln Ile Thr Leu Thr Phe Glu 85 90 Ser Gly Thr Asp Ala Asp Ele Ala Gln Val Gln Val Gln Asn Lys Leu 100 105 110 Gln Leu Ala Met Pro Leu Leu Pro Gln Glu Val Gln Gln Gln Gly Val 115 120 125 Ser Val Glu Lys Ser Ser Ser Ser Phe Leu Met Val Val Gly Val Ile 130 135 140 Asn Thr Asn Gly Thr Met Thr Gln Glu Asp Ile Ser Asp Tyr Val Gly 145 150 155 Ala Asn Met Lys Asp Ala Ile Ser Arg Thr Ser Gly Val Gly Asp Val 165 170 175 Gln Leu Phe Gly Ser Gln Tyr Ala Met Arg Ile Trp Met Asp Pro Asn 180 185 190 Lys Leu Asn Asn Phe Gln Leu Thr Pro Val Asp Val Ile Asn Ala Ile 195 200 205 Lys Ala Gln Asn Ala Gln Val Ala Ala Gly Gln Leu Gly Gly Thr Pro 210 215 220 Pro Val Lys Gly Gln Gln Leu Asn Ala Ser Ile Ile Ala Gln Thr Arg 225 230 235 Leu Thr Ser Ala Asp Glu Phe Ser Lys Ile Leu Leu Lys Val Asn Gln 245 250 Asp Gly Ser Gln Val Arg Leu Arg Asp Val Ala Lys Val Glu Leu Gly 260 265 Gly Glu Asn Tyr Asp Val Ile Ala Lys Phe Asn Gly Lys Pro Ala Ser 275 280 285 Gly Leu Gly Ile Lys Leu Ala Thr Gly Ala Asn Ala Leu Asp Thr Ala 290 295 300 Thr Ala Ile Arg Ala Glu Leu Lys Lys Met Glu Pro Phe Pro Ser 310 315 Gly Leu Lys Ile Val Tyr Pro Tyr Asp Thr Thr Pro Phe Val Lys Ile 325 330 Ser Ile His Glu Val Val Lys Thr Leu Val Glu Ala Ile Ile Leu Val 350 340 345 Phe Leu Val Met Tyr Leu Phe Leu Gln Asn Phe Arg Ala Thr Leu Ile 355 360 365 Pro Thr Ile Ala Val Pro Val Val Leu Leu Gly Thr Phe Ala Val Leu 370 375 380 Ala Ile Phe Gly Tyr Ser Ile Asn Thr Leu Thr Met Phe Gly Met Val 385 390 395 Leu Ala Ile Gly Leu Leu Val Asp Asp Ala Ile Val Val Val Glu Asn

Val Glu Arg Val Met Ala Glu Glu Gly Leu Pro Pro Lys Glu Ala Thr 420 425 Arg Lys Ser Met Gly Gln Ile Gln Gly Ala Leu Val Gly Ile Ala Met 435 440 Val Leu Ser Ala Val Phe Ile Pro Met Ala Phe Phe Gly Gly Ser Thr 450 455 460 Gly Ala Ile Tyr Arg Gln Phe Ser Ile Thr Ile Val Ser Ala Met Ala 470 475 480 Leu Ser Val Leu Val Ala Leu Ile Leu Thr Pro Ala Leu Cys Ala Thr 485 490 495 Met Leu Lys Pro Ile Gln Lys Gly Gly His Gly Glu His Lys Gly Phe 500 505 510 Phe Gly Trp Phe Asn Arg Met Phe Asp Lys Ser Thr His His Tyr Thr 515 520 525 Asp Ser Val Gly Asn Ile Leu Arg Ser Thr Gly Arg Tyr Leu Leu Leu 530 535 540 Tyr Ile Ile Ile Val Val Gly Met Ala Phe Leu Phe Val Arg Leu Pro 545 550 555 Ser Ser Phe Leu Pro Asp Glu Asp Gln Gly Val Phe Leu Ser Met Ala 565 570 575 Gln Leu Pro Ala Gly Ala Thr Gln Glu Arg Thr Gln Lys Val Leu Asp 580 585 590 Glu Met Thr Asp Tyr Phe Leu Thr Lys Glu Lys Asp Asn Val Glu Ser 595 600 605 Val Phe Ala Val Asn Gly Phe Gly Phe Ala Gly Arg Gly Gln Asn Thr 610 615 620 Gly Ile Ala Phe Val Ser Leu Lys Asp Trp Ser Glu Arg Pro Gly Ala 625 630 635 Glu Asn Lys Val Glu Ala Ile Thr Gly Arg Ala Met Gly Thr Phe Ser 645 650 655 Gln Ile Lys Asp Ala Met Val Phe Ala Phe Asn Leu Pro Ala Ile Val 660 665 670 Glu Leu Gly Thr Ala Thr Gly Pne Asp Phe Gln Leu Ile Asp Gln Gly 675 680 685 Gly Leu Gly His Glu Lys Leu Thr Gln Ala Arg Asn Gln Leu Phe Gly 690 695 700 Glu Val Ala Lys His Pro Asp Leu Leu Val Gly Val Arg Pro Asn Gly 705 710 715 Leu Glu Asp Thr Pro Gln Tyr Lys Ile Asp Ile Asp Gln Glu Lys Ala
725 730 735 Gln Ala Leu Gly Val Ser Ile Ser Asp Ile Asn Thr Thr Leu Gly Ala 740 745 750 Ala Trp Gly Gly Ser Tyr Val Asn Asp Phe Ile Asp Arg Gly Arg Val 755 760 765 Lys Lys Val Tyr Val Met Ser Glu Ala Gln Tyr Arg Met Leu Pro Asn 775 780 Asp Ile Asn Asn Trp Tyr Val Arg Gly Ser Asp Gly Gln Met Val Pro 790 795 800 Phe Ser Ala Phe Ser Thr Ser Arg Trp Glu Tyr Gly Ser Pro Arg Leu 805 810 815 Glu Arg Tyr Asn Gly Leu Pro Ser Met Glu Ile Leu Gly Gln Ala Ala 820 825 Pro Gly Arg Ser Thr Gly Glu Ala Met Asn Leu Met Glu Glu Leu Ala 835 840 845 Ser Lys Leu Pro Ala Gly Ile Gly Tyr Asp Trp Thr Gly Met Ser Tyr 855 850 860 Gln Glu Arg Leu Ser Gly Asn Gln Ala Pro Ala Leu Tyr Ala Ile Ser 870 875 Leu Ile Val Val Phe Leu Cys Leu Ala Ala Leu Tyr Glu Ser Trp Ser 885 890 Ile Pro Phe Ser Val Met Leu Val Val Pro Leu Gly Val Ile Gly Ala

```
905
          900
                                           910
Leu Leu Ala Ala Thr Phe Arg Gly Leu Thr Asn Asp Val Tyr Phe Gln
    915
                       920
                                       925
Val Gly Leu Leu Thr Thr Ile Gly Leu Ser Ala Lys Asn Ala Ile Leu
   930
                   935
                            940
Ile Val Glu Phe Ala Lys Asp Leu Met Glu Lys Glu Gly Lys Gly Leu
       950
                       955
Ile Glu Ala Thr Leu Glu Ala Val Arg Met Arg Leu Arg Pro Ile Leu
           965 970 975
Met Thr Ser Leu Ala Phe Ile Leu Arg Arg Tyr Ala Ala Gly Tyr Gln
         980 985 990
Leu Arg Arg Gly Leu Arg Arg Thr Lys Arg Gly Lys Tyr Gly Cys Asn
      995 1000 1005
Gly Trp Tyr Gly His Gly Asp Arg Ser Arg His Leu Leu Arg Thr Gly
 1010 1015 1020
Val Leu Arg Gly Gly Ser Ser Pro Leu Gln Pro Gln Lys
                1030 1035
<210> 7734
<211> 580
<212> PRT
<213> Enterobacter cloacae
<400> 7734
Thr Ile Asn Arg Leu Phe Gly Ile Cys Thr Lys Asn Gly Ser Pro Ile
Ala Lys Gly Asp Gly Met His His Ala Thr Pro Leu Ile Thr Thr Ile
                                           30
Val Gly Gly Leu Val Leu Ala Phe Ile Leu Gly Met Ile Ala Asn Lys
                       4.0
                                       45
Leu Arg Ile Ser Pro Leu Val Gly Tyr Leu Leu Ala Gly Val Leu Ala
                   5.5
                                    60
Gly Pro Phe Thr Pro Gly Phe Val Ala Asp Thr Lys Leu Ala Pro Glu
      7.0
                    7.5
Leu Ala Glu Leu Gly Val Ile Leu Leu Met Phe Gly Val Gly Leu His
          85 90
Phe Ser Leu Lys Asp Leu Met Ala Val Lys Ser Ile Ala Ile Pro Gly
                         105
         100
                                          110
Ala Ile Ala Gln Ile Gly Val Ala Thr Leu Leu Gly Met Ala Leu Ser
                       120
Ala Val Leu Gly Trp Ser Ile Met Thr Gly Ile Val Phe Gly Leu Cys
  130 135
                                    140
Leu Ser Thr Ala Ser Thr Val Val Leu Leu Arg Ala Leu Glu Glu Arg
       150
                               155
Gln Leu Ile Asp Ser Gln Arg Gly Gln Ile Ala Ile Gly Trp Leu Ile
            165
                             170
Val Glu Asp Leu Val Met Val Leu Thr Leu Val Leu Leu Pro Ala Val
         180
                         185
                                          190
Ala Gly Met Met Glu Lys Glu Asn Ile Gly Phe Ala Ser Leu Ala Leu
                      200
Asp Met Ser Ile Thr Ile Gly Lys Val Val Ala Phe Ile Ala Ile Met
                   215
Met Leu Val Gly Arg Arg Leu Val Pro Trp Ile Met Ser Arg Ser Ala
                230
                                235
Ala Thr Gly Ser Arg Glu Leu Phe Thr Leu Ser Val Leu Ala Leu Ala
             245
                              250
Leu Gly Ile Ala Phe Gly Ala Val Glu Leu Phe Asp Val Ser Phe Ala
         260
                          265
Leu Gly Ala Phe Phe Ala Gly Met Val Leu Asn Glu Ser Glu Leu Ser
                              285
                      280
His Arg Ala Ala His Asp Thr Leu Pro Leu Arg Asp Ala Phe Ala Val
```

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295
Leu Phe Phe Val Ser Val Gly Met Leu Phe Asp Pro Leu Ile Leu Ile
             310
                    315
Gln Gln Pro Leu Ala Val Leu Gly Thr Leu Ala Ile Ile Ile Phe Gly
           325
                       330
Lys Ser Val Ala Ala Phe Phe Leu Val Arg Met Phe Gly His Ser Pro
        340
            345
                          350
Arg Thr Ala Leu Thr Ile Ala Ala Ser Leu Ala Gln Ile Gly Glu Phe
   355 360 365
Ala Phe Ile Leu Ala Gly Leu Gly Met Ala Leu Asn Leu Leu Pro Gln
         375 380
Ala Gly Gln Asn Leu Val Leu Ala Gly Ala Ile Leu Ser Ile Met Leu
      390 395 400
Asn Pro Val Leu Phe Ala Leu Leu Glu Lys Tyr Leu Glu Lys Thr Glu
        405 410 415
Thr Leu Glu Glu Leu Thr Leu Glu Glu Ala Thr Glu Glu Glu Lys Gln
      420 425 430
Ile Pro Val Asp Ile Cys Asn His Ala Leu Leu Val Gly Phe Gly Arg
 435 440 445
Val Gly Ser Leu Leu Gly Glu Lys Leu Met Ala Gln Gly Ile Pro Leu
 450 455 460
Val Val Ile Glu Thr Ser Arg Thr Arg Val Asp Glu Leu Arg Glu Arg
465 470 475 480
Gly Ile Arg Ala Val Leu Gly Asn Ala Ala Asn Glu Glu Ile Met Asn
        485 490 495
Leu Ala His Leu Asp Cys Ala Arg Trp Leu Leu Leu Thr Ile Pro Asn
  500 505 510
Gly Tyr Glu Ala Gly Glu Ile Val Ala Thr Ala Arg Glu Lys Cys Pro
515 520 525
His Ile Glu Ile Ile Ala Arg Ala His Tyr Asp Asp Glu Val Glu Tyr
530 535 540
Ile Thr Glu Arg Gly Ala Asn Gln Val Val Met Gly Glu Arg Glu Ile
545 550 555 560
Ala Asn Thr Met Leu Thr Met Leu Thr Lys Pro Pro Val Glu Glu Ala
          565
Val Thr Gly
        580
<210> 7735
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<211> 138 <212> PRT

<213> Enterobacter cloacae

<400> 7735

Cys Ser Val Ser Lys Ser Leu Arg Arg Gly Cys Ala Met Asp Glu 10 Tyr Ser Pro Lys Arg His Asp Ile Ala Gln Leu Lys Phe Leu Cys Glu Ser Leu Tyr His Asp Cys Leu Ala Asn Leu Glu Glu Ser Asn His Gly 40 Trp Val Asn Asp Pro Thr Ser Ala Ile Asn Leu Gln Leu Asn Glu Leu 5.5 60 Ile Glu His Ile Ala Thr Phe Ala Leu Asn Tyr Lys Ile Lys Tyr Asn 7.0 Glu Asp Asn Lys Leu Ile Glu Gln Ile Asp Glu Tyr Leu Asp Asp Thr 90 Phe Met Leu Phe Ser Ser Tyr Gly Ile Asn Ala Gln Asp Leu Gln Lys 100 105 Trp Arg Lys Ser Gly Asn Arg Leu Phe Arg Cys Phe Thr Asn Val Ser 115 120 Arg Ala Asn Pro Val Ser Leu Ser Cys

10

5.0

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130
                      135
<210> 7736
<211> 76
<212> PRT
<213> Enterobacter cloacae
<400> 7736
Gly Glu Phe Met Ser Asp Lys Pro Leu Thr Lys Val Asp Tyr Leu Met
Arg Leu Arg Arg Cys Gln Ser Ile Asp Thr Leu Glu Arg Val Ile Glu
        20
                              25
                                                  30
Lys Asn Lys Tyr Glu Leu Ser Asp Asn Glu Leu Ala Val Phe Tyr Ser
       35
                       4.0
                                       4.5
Ala Ala Asp His Arg Leu Ala Glu Leu Thr Met Asn Lys Leu Tyr Asp
               55 60
Lys Ile Pro Ser Ser Val Trp Lys Phe Val Arg
                  70
<210> 7737
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 7737
Arg Gln Lys Met Thr Glu Ile Gln Arg Leu Leu Thr Ala Thr Ile Asp
                                10
Asp Leu Asn Thr Arg Glu Lys Arg Asp Asn Arg Pro Arg Phe Ser Ile
Ser Phe Ile Arg Lys His Pro Gly Leu Phe Val Ala Met Tyr Ala Ala
 35
                         4.0
Trp Leu Ala Thr Leu Ile Val Met Leu Lys Ser Glu Thr Leu Val Asp
                   55
Ser Val Trp Leu Leu Val Val Leu Phe Val Val Phe Asn Ala Phe Phe
                  70
                                     75
Phe Phe Asp Val Asn Pro Arg Tyr Arg Tyr Glu Asp Ile Asp Val Leu
                                  90
Asp Phe Arg Val Cys Tyr Asn Gly Glu Trp Tyr Asn Thr Arg Tyr Val
                             105
                                                 110
Pro Lys Glu Leu Ile Asp Ser Ile Leu His Ser Pro Ala Val Glu Ala
                          120
                                             125
Gly Gln Lys Glu Lys Leu Gln Lys Met Val Thr Thr Lys Gly Gln Leu
                   135
Ser Phe Tyr Asp Val Phe Thr Leu Ser Arg Pro Thr Ala Ala
<210> 7738
<211> 248
<212> PRT
<213> Enterobacter cloacae
<400> 7738
Ser Gly Asp Leu Leu Asn Ile Met Glu Ile Lys Met Asn Thr Phe Asn
                                  1.0
Glu Phe Gly Gln Pro Val Gly Glu Ser Leu Ile Asp Trp Gln Pro Arg
          20
                                                 30
Pro His Pro Ser Arg Val Val Leu Gln Gly Arg Tyr Cys Arg Leu Glu
   35
                          40
Pro Leu Arg Met Glu His Ala His Ala Leu Phe Ser Ala Tyr Ser Val
```

55

Ala Gly Asp Thr Arg Ser Trp Thr Trp Leu Leu Arg Glu Pro Asp Ala

```
Thr Ala Glu Glu Phe Ala Glu Trp Val Ala Ser Val Ser Glu Leu Ala
                         90
          85
Asp Pro Ile His Phe Thr Val Ile Asp Asn Gln Thr Gln Ser Pro Val
         100
                        105
Gly Thr Leu Ser Leu Met Arg Ile Asp Pro Lys Asn Gly Val Val Glu
      115
             120
                             125
Val Gly His Val His Phe Ser Ser Leu Leu Ser Arg Thr Pro Met Ser
          135 140
Thr Glu Ala Gln Tyr Leu Leu Met Arg Tyr Val Phe Asp Thr Leu Gly
    150 155 160
Tyr Arg Arg Tyr Glu Trp Lys Cys Asn Ser Leu Asn Glu Pro Ser Arg
          165 170 175
Lys Ala Ala Leu Arg Leu Gly Phe Gln Phe Glu Gly Arg Phe Arg Gln
      180 185 190
Ala Leu Val Ile Lys Gly Arg Asn Arg Asp Thr Asp Trp Phe Ser Ile
 195 200 205
Leu Asp Lys Glu Trp Pro Ala Leu Ala Ser Ala Phe Glu Ser Trp Leu
210 215 220
Ala Thr Asp Asn Phe Thr Ala Asp Gly Lys Gln Lys Arg Ser Leu Glu
225 230
                             235
Ser Trp Arg Glu Thr Arg Val
           245
<210> 7739
<211> 266
<212> PRT
<213> Enterobacter cloacae
<400> 7739
Arg Tyr Ala Gln Glu Leu Gln Met Ala Arg Ser Trp Val Arg Leu Phe
                           10
Ala Gly Ala Thr Leu Thr Leu Ser Leu Thr Gly His Ala Leu Ala Asp
20 25
Glu Gly Lys Ile Thr Val Phe Ala Ala Ala Ser Leu Thr Asn Ala Met
35 40
Gln Asp Ile Ala Ala Val Tyr Lys Lys Glu Lys Asn Val Glu Val Val
50 55
                      60
Ser Ser Phe Ala Ser Ser Ser Thr Leu Ala Arg Gln Ile Glu Ala Gly
65 70 75
Ala Pro Ala Asp Leu Phe Ile Ser Ala Asp Gln Lys Trp Met Asp Tyr
         85 90
Ala Val Glu Lys Lys Ser Val Asp Thr Ala Thr Arg Glu Thr Leu Leu 100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}
Gly Asn Ser Leu Val Val Val Ala Pro Ala Asn Ser Lys Gln Gly Asp
   115 120 125
Ile Ala Ile Asn Lys Gln Thr Asp Trp Thr Arg Leu Leu Asn Gly Gly
130 135 140
Arg Leu Ala Val Gly Asp Pro Glu His Val Pro Ala Gly Ile Tyr Ala
              150
                            155
Lys Glu Ala Leu Gln Lys Leu Gly Ala Trp Glu Thr Leu Ser Pro Lys
           165 170 175
Leu Ala Pro Ala Glu Asp Val Arg Gly Ala Leu Ala Leu Val Glu Arg
        180
                        185 190
Asn Glu Val Pro Leu Gly Ile Val Tyr Gly Ser Asp Ala Val Ala Ser
     195
                     200
                                    205
Lys Gly Val Lys Val Val Gly Thr Phe Pro Glu Asp Ser His Lys Lys
                215
                                 220
Val Glu Tyr Pro Val Ala Ile Val Asp Gly His Lys Asn Ala Ser Val
```

235

Thr Ala Phe Val Asp Tyr Leu Lys Gly Pro Glu Ala Ser Ala Ile Phe

3652 245 255 Lys Arg Tyr Gly Phe Thr Thr His Glu <210> 7740 <211> 336 <212> PRT <213> Enterobacter cloacae <400> 7740 Ser Gly Val Phe Met Lys Gln Thr Val Tyr Thr Ala Ser Pro Glu Ser 10 Gln Gln Ile His Val Trp Arg Leu Asn Thr Glu Gly Ser Leu Thr Leu 20 25 30 Val Gln Val Val Asp Val Pro Gly Gln Val Gln Pro Met Val Val Ser 35 40 45 Pro Asp Lys Arg Phe Leu Tyr Val Gly Val Arg Pro Glu Phe Arg Val 50 55 60 Leu Ala Tyr Arg Ile Ser Pro Asp Asp Gly Ala Leu Thr Tyr Thr Ala 70 75 Glu Ala Pro Leu Pro Gly Ser Pro Thr His Ile Ser Thr Asp His Lys 85 90 95 Gly Asn Phe Ile Phe Ser Gly Ser Tyr Asn Ala Gly Ser Val Ser Val 100 105 110 Thr Arg Leu Glu Asp Gly Ile Pro Val Glu Thr Val Asp Val Val Glu 115 120 125 Gly Leu Glu Gly Cys His Ser Ala Asn Ile Ser Pro Asp Asn Arg Thr 130 135 140 Leu Trp Val Pro Ala Leu Lys Gln Asp Arg Ile Cys Leu Phe Thr Leu 150 155 Ser Asp Asp Gly His Leu Val Ala Gln Ser Pro Ala Glu Val Thr Thr 165 170 175 Val Glu Gly Ala Gly Pro Arg His Met Val Phe His Pro Asn Gln Gln 180 185 190 Tyr Ala Tyr Val Val Asn Glu Leu Asn Ser Ser Val Asp Val Trp Glu 195 200 205 Leu Asn Asp Pro Asn Gly Gln Ile Glu Cys Val Gln Thr Leu Asp Met 210 215 220 Met Pro Ser Asp Phe Ser Asp Thr Arg Trp Ala Ala Asp Ile His Ile 225 230 235 Thr Pro Asp Gly Arg His Leu Tyr Ala Cys Asp Arg Thr Ser Ser Leu 245 250 255 Ile Thr Val Phe Ser Val Ser Glu Asp Gly Ser Val Leu Ala Val Glu 265 270 260 Gly Phe Gln Pro Thr Glu Thr Gln Pro Arg Gly Phe Asn Val Asp His 275 280 285 Ser Gly Lys Tyr Leu Ile Ala Ala Gly Gln Lys Ser His His Ile Ala 295 300 Leu Tyr Glu Ile Gln Gly Val Gln Gly Leu Leu Glu Glu Lys Gly Arg 305 310 315 320 Tyr Ala Val Gly Gln Gly Pro Met Trp Val Val Ile Asn Ala His 325 330 <210> 7741 <211> 419

<212> PRT

<213> Enterobacter cloacae

<400> 7741

Met Ser Ile Gln Pro Met Thr Ser Gly Arg His Met Gln Gln Leu Asn 10

```
Pro Asp Asp Val Ile Trp Arg Asn Ala Arg Leu Ala Thr Leu Ala Thr
      2.0
                       25
Gly Glu Ala Glu Pro Tyr Gly Leu Arg Glu Gln His Ala Leu Val Val
Arg Gly Gln Thr Ile Leu Ala Ile Ile Pro Glu Ser Glu Ile Pro Ser
                 55
Gly His Cys Gln Cys Val Asp Leu Asp Gly Arg Leu Val Thr Pro Gly
              70
                              75
Leu Ile Asp Cys His Thr His Leu Val Phe Gly Gly Asp Arg Ala Ala
           85
                           90
Glu Trp Glu Gln Arg Leu Asn Gly Val Ser Tyr Gln Thr Ile Ser Ala
        100 105 110
Gln Gly Gly Gle Asn Ala Thr Val Thr Ala Thr Arg Asn Ser Ser
     115
         120 125
Pro Glu Thr Leu Leu Thr Val Ala Gln Gln Arg Leu Gln Arg Leu Met
         135 140
Asn Glu Gly Val Thr Thr Val Glu Ile Lys Ser Gly Tyr Gly Leu Asn
    150 155
Ala Glu Ala Glu Glu Lys Met Leu Leu Val Ala Arg Gln Leu Ser Leu
     165 170 175
Asn Asn Leu Val Asp Ile Ser Pro Thr Leu Leu Ala Ala His Ala Val
 180 185 190
Pro Ala Glu Tyr Arg Gln Asp Pro Asp Ala Tyr Leu Ala Leu Val Cys
 195
                    200
                                   205
Glu Gln Ile Met Pro Thr Leu Trp Gln Lys Glu Leu Phe Glu Ala Val
 210 215 220
Asp Val Phe Cys Glu Asn Val Gly Phe Thr Pro Ala Gln Thr Glu Arg 225 230 235 240
Leu Phe Arg Ala Ala Ala Leu Gly Ile Pro Val Lys Gly His Val
    245 250
Glu Gln Leu Ser Asn Leu Gly Gly Ala Ala Leu Val Ser Gln Tyr Lys
                      265 270
 260
Gly Leu Ser Ala Asp His Ile Glu Tyr Leu Asp Asp Ala Gly Ile Gln
275 280
Ala Met Ala Gln Ser Gly Thr Val Ala Val Leu Leu Pro Gly Ala Phe
 290 295
                                300
Tyr Phe Leu Gln Glu Arg Gln Arg Pro Pro Val Ala Gln Leu Arg Glu
305 310 315
Gln Gly Val Pro Met Ala Val Ala Thr Asp Tyr Asn Pro Gly Thr Ser
           325
                          330 335
Pro Phe Ala Ser Leu His Leu Ala Met Asn Met Ala Cys Val Gln Phe
        340 345 350
Gly Leu Thr Pro Glu Glu Ala Trp Ala Gly Val Thr Arg His Ala Ala
   355 360 ° 365
Gln Ala Leu Gly Arg Ala Ala Thr His Gly Gln Leu Lys Pro Gly Tyr
               375
                                380
Val Ala Asp Phe Val Val Trp Glu Ala Asn His Pro Val Glu Met Val
385 390 395
Tyr Glu Pro Gly Arg Asn Pro Leu Tyr Gln Arg Val Phe Arg Gly Gln
           405
                          410
```

```
<210> 7742
<211> 296
<212> PRT
```

Val Ala

<400> 7742

<213> Enterobacter cloacae

Leu Ser Val Ser Ala Glu Ala Val Asn Tyr Arg Arg Arg Ile Trp Trp

```
Asn Leu Ile Arg Thr Thr Ile Gly Thr Val Arg Gly Arg Ser Leu Pro
Pro Asp Trp Pro Gly Lys Leu Leu Thr Gly Gly His Asn His Ile Gln
      35
Gly Val Met Met Phe Ser Arg Ser Pro Leu Pro Gln Pro Ser Pro Pro
                   55
Ala Pro Phe Tyr Glu Lys Val Lys Gln Ala Ile Ser Glu Lys Ile Ala
Ala Gly Val Trp Arg Pro His Asp Arg Ile Pro Ser Glu Ala Glu Leu
            85
                            90
Val Ala Gln Phe Gly Phe Ser Arg Met Thr Ile Asn Arg Ala Leu Arg
    100
             105
Glu Leu Thr Asp Glu Gly Leu Leu Val Arg Leu Gln Gly Val Gly Thr
 115 120 125
Phe Val Ala Glu Pro Lys Gly Gln Ser Ala Leu Phe Glu Ile Arg Ser
 130 135 140
Ile Ala Asp Glu Ile Ala Ala Arg Asn His Gln His His Cys Glu Val
              150 155
Leu Val Leu Glu Glu Thr Gln Ala Ser Ala Glu Gln Ala Ile Glu Leu
      165 170 175
Asn Val Thr Glu Gly Thr Arg Ile Phe His Ser Val Met Val His Tyr
                      185 190
Glu Asn Asp Ile Pro Val Gln Ile Glu Asp Arg Cys Val Asn Ala Glu
     195
                     200 205
Arg Ile Pro Asp Tyr Leu Asn Gln Asp Tyr Thr Gln Thr Thr Pro His
                  215
                                  220
Ala Tyr Leu Ser Leu Val Ala Pro Leu Thr Glu Gly Glu His Ile Val
225 230
                              235
Glu Ala Val Arg Ala Thr Pro Gln Glu Cys Glu Leu Leu Arg Ile Lys
         245 250 255
Glu His Asp Pro Cys Leu Leu Ile Arg Arg Arg Thr Trp Ser Ser Ser
       260 265 270
Gln Ile Val Ser His Ala Lys Leu Leu Phe Pro Gly Asn Arg Tyr Arg
 275 280
Leu Gln Gly His Phe Met Ser
```

<210> 7743 <211> 527 <212> PRT

130

<213> Enterobacter cloacae

<400> 7743 Leu Cys Gln Arg Ala Gly Pro Glu Pro Ala Asp Asp Pro Arg His Thr Arg Lys Ala Cys Met Asn Ala Leu Thr Leu Thr Pro Gly Ser Leu Thr 20 25 Leu Lys Gln Leu Arg His Val Trp Arg Gln Pro Val Thr Leu Ser Leu 40 Asp Glu Ser Ala His Arg Ala Ile Asn Asp Ser Val Ala Cys Val Glu 55 Ala Ile Val Ala Glu Gly Arg Thr Ala Tyr Gly Ile Asn Thr Gly Phe 70 75 Gly Leu Leu Ala Gln Thr Arg Ile Ala Thr His Asp Leu Glu Asn Leu 85 Gln Arg Ser Leu Val Leu Ser His Ala Ala Gly Val Gly Gln Pro Leu 105 Asp Asp Glu Ile Val Arg Leu Met Met Val Leu Lys Ile Asn Ser Leu 120 Ala Arg Gly Phe Ser Gly Ile Arg Leu Ser Val Ile Gln Ala Leu Met

```
Ala Leu Val Asn Ala Glu Val Tyr Pro Trp Ile Pro Ala Lys Gly Ser
145
         150
Val Gly Ala Ser Gly Asp Leu Ala Pro Leu Ala His Met Ser Leu Leu
           165
                    170
Leu Leu Gly Glu Gly Gln Ala Arg Trp Gln Gly Glu Trp Leu Pro Ala
        180
                       185
                                      190
Lys Glu Ala Leu Lys Lys Ala Gly Leu Thr Pro Ile Thr Leu Ala Ala
     195 200
                                   205
Lys Glu Gly Leu Ala Leu Leu Asn Gly Thr Gln Ala Ser Thr Ala Phe
 210
      215 220
Ala Leu Arg Gly Leu Phe Glu Ala Glu Asp Leu Phe Ala Ser Ala Val
225 230 235 240
Val Cys Gly Ala Leu Thr Thr Glu Ala Val Leu Gly Ser Arg Arg Pro
        245 250 255
Phe Asp Ala Arg Ile His Glu Val Arg Gly Gln Arg Gly Gln Ile Asp
 260 265 270
Ala Ala Ala Met Tyr Arg His Val Leu Thr Asp Thr Ser Asp Ile Ala
 275 280 285
Glu Ser His His Asn Cys Glu Lys Val Gln Asp Pro Tyr Ser Leu Arg
290 295 300
Cys Gln Pro Gln Val Met Gly Ala Cys Leu Thr Gln Leu Arg Gln Ala
305 310 315
Ala Glu Val Leu Leu Val Glu Ala Asn Ala Val Ser Asp Asn Pro Leu
         325 330 335
Val Phe Ala Gln Glu Asn Glu Val Val Ser Gly Gly Asn Phe His Ala
        340 345 350
Glu Pro Val Ala Met Ala Ala Asp Asn Ile Ala Leu Ala Ile Ala Glu
                    360
                                   365
Ile Gly Ala Leu Ser Glu Arg Arg Ile Ala Leu Met Met Asp Lys His
 370 375
                                380
Met Ser Gln Leu Pro Pro Phe Leu Val Arg Asn Gly Gly Val Asn Ser
385 390
                             395
Gly Phe Met Ile Ala Gln Val Thr Ala Ala Ala Leu Ala Ser Glu Asn
           405
                          410
Lys Ala Leu Ser His Pro His Ser Val Asp Ser Leu Pro Thr Ser Ala
                       425
Asn Gln Glu Asp His Val Ser Met Ala Pro Ala Ala Gly Arg Arg Leu
    435
          440
                                   445
Trp Glu Met Ala Ser Asn Thr Arg Gly Val Leu Ala Val Glu Trp Leu
                455
                                460
Ala Ala Cys Gln Gly Ile Asp Leu Arg Glu Gly Leu Thr Ser Ser Pro
             470 475
Leu Leu Glu Gln Ala Arg His Thr Leu Arg Glu His Val Thr His Tyr
           485 490 495
Asp Asp Asp Arg Phe Phe Ala Pro Asp Ile Asp Lys Ala Met Gln Leu
      500 505 510
Leu Glu Glu Gly Arg Leu Val Gly Leu Leu Pro Ser Val Leu
                    520
```

<210> 7744 <211> 398

<212> PRT <213> Enterobacter cloacae

<400> 7744

Arg Arg His Arg Pro Val Leu Gln Arg Gly Ser His Met Thr Trp Gln 1 5 10 15 Ala Arg Ile Arg Thr Ala Leu Asp Glu Arg Arg Ala Ala Asp Ala Phe 20 25 30 Arg Val Arg Arg Val Val Glu Asn Gly Ala Gly Arg Phe Leu Thr Arg 35 40

Glu Gly Glu Arg Phe Cys Asn Phe Ser Ser Asn Asp Tyr Leu Gly Leu

```
55
Ser Gln His Pro Gln Ile Val Arg Ala Trp Gln Gln Gly Ala Asp Arg
               70
Tyr Gly Val Gly Ser Gly Gly Ser Gly His Val Ser Gly Tyr Thr Thr
           85
                           90
Ala His Gln Ala Leu Glu Glu Glu Leu Ala Asp Trp Leu Gly Tyr Pro
            105
        100
Arg Ala Leu Leu Phe Ile Ser Gly Phe Ala Ala Asn Gln Ala Val Ile
   115 120 125
Ala Ala Leu Met Gly Lys Asp Asp Arg Ile Val Ala Asp Arg Leu Ser
 130 135 140
His Ala Ser Leu Leu Glu Ala Ala Ser Leu Ser Pro Ala Gln Leu Arg
145
    150 155 160
Arg Phe Ala His Asn Asn Ala Ser Gln Leu Asn Val Leu Leu Gly Lys
      165 170 175
Pro Cys Ser Gly Leu Gln Leu Ala Val Thr Glu Gly Val Phe Ser Met
   180 185 190
Asp Gly Asp Ser Ala Pro Leu Ala Thr Leu His Asp Val Ala Lys Gln
 195 200
Gln Asn Ala Trp Leu Leu Val Asp Asp Ala His Gly Ile Gly Val Thr
210 215 220
Gly Glu Glu Gly Arg Gly Ser Ala His Gln Gln Arg Val Arg Pro Glu
225 230
                             235
Leu Leu Val Val Thr Phe Gly Lys Gly Phe Gly Val Ser Gly Ala Ala
           245 250
Val Leu Cys Ser Glu Pro Val Ala Asp Tyr Leu Val Gln Phe Ala Arg
        260 265
                                       270
His Leu Ile Tyr Ser Thr Ser Met Pro Pro Ala Gln Ala Val Ala Leu
275
                    280
                                   285
Ser Ala Ser Leu Ala Val Ile Arg Gly Glu Asp Gly Ala Glu Arg Arg
290 295 300
Ala Arg Leu Ala Asp His Ile Glr Arg Phe Arg Arg Gly Ile Ser Glu
305 310 315
Leu Ser Tyr Arg Leu Thr Asp Ser His Ser Ala Ile Gln Pro Val Ile
           325 330
Val Gly Glu Asn His Arg Ala Leu Met Val Ala Gln Ala Leu Arg Glu
                       345
                                       350
Arg Gly Gln Trp Val Thr Ala Ile Arg Pro Pro Thr Val Pro Pro Gly
                    360
                                   365
Thr Ala Arg Leu Arg Leu Thr Leu Thr Ala Ala His Glu Pro Gln Asp
                 375 380
Ile Asp Thr Leu Leu Glu Ala Leu Tyr Val Ser Arg Gln
              390
<210> 7745
<211> 359
<212> PRT
<213> Enterobacter cloacae
<400> 7745
Thr Asp Gly Glu Ile Val Met Leu Glu Leu Asn Phe Thr Gln Thr Leu
                          10
Gly Ser His Thr Leu Thr Leu Asn Glu Thr Leu Pro Ala Ser Gly Ile
        20
                       25
Thr Ala Ile Phe Gly Val Ser Gly Ala Gly Lys Thr Ser Leu Ile Asn
35
                    40
```

Ala Ile Ser Gly Leu Thr Arg Pro Gln Ser Gly Arg Ile Val Leu Asn

Asn Arg Val Leu Asn Asp Ala Glu Lys Lys Val Cys Leu Ser Pro Asp

8.0

5.5

```
Lys Arg Arg Ile Gly Tyr Val Phe Gln Asp Ala Arg Leu Phe Pro His
          85
Tyr Ser Val Arg Gly Asn Leu Arg Tyr Gly Met Ala Lys Ser Met Ala
Gly Gln Phe Asn Lys Leu Val Ala Leu Leu Gly Ile Glu Pro Leu Leu
      115
                      120
                                   125
Asp Arg Leu Pro Ser Ser Leu Ser Gly Gly Glu Lys Gln Arg Val Ala
   130
                  135 140
Ile Gly Arg Ala Leu Leu Thr Ala Pro Glu Leu Leu Leu Asp Glu
             150
                    155
Pro Leu Ala Ser Leu Asp Ile Pro Arg Lys Arg Glu Leu Leu Pro Tyr
       165 170 175
Leu Gln Arg Leu Ala Arg Glu Ile Asn Val Pro Met Leu Tyr Val Ser
    180 185 190
His Ser Leu Asp Glu Ile Leu His Met Ala Asp Lys Val Leu Val Leu
   195 200 205
Glu Ala Gly Arg Val Lys Ala Phe Gly Asn Leu Glu Glu Val Trp Gly
 210 215 220
Ser Ser Val Met His Pro Trp Leu Pro Lys Glu Gln Gln Ser Ser Ile
225 230 235 240
Leu Lys Val Ser Val Leu Glu His His Pro His Tyr Ala Met Thr Ala
    245 250 255
Leu Ala Leu Gly Asp Gln His Leu Trp Val Asn Lys Ile Asp Thr Pro
 260 265 270
Ile Gln Ser Thr Leu Arg Ile Arg Ile Gln Ala Ser Asp Val Ser Leu
 275 280
                          285
Val Leu Gln Pro Pro Leu Gln Thr Ser Ile Arg Asn Ile Leu Arg Ala
 290 295 300
Lys Val Ala Gln Cys Phe Asp Asp Asn Gly Gln Val Glu Val Gln Leu
305 310 315
Glu Val Gly Ser Arg Thr Leu Trp Ala Arg Ile Ser Pro Trp Ala Arg 325 $330$
Asp Glu Leu Gly Ile Lys Pro Gly Leu Trp Leu Tyr Ala Gln Ile Lys
   340
                        345
Ser Val Ser Ile Thr Ala
     355
<210> 7746
<211> 118
<212> PRT
<213> Enterobacter cloacae
<400> 7746
Ser Ala Leu Arg Phe Asn Glu Leu Gly Gln Thr Pro Ser Phe Ala Val
                           10
Ala Phe Ala Gly Asp Ile His Leu Ile Val Pro Gly Pro Phe Thr Phe
         20
                        25
                                        30
Gln Thr Gln Arg Met Leu Asp Lys Phe Cys Glu Gly Ile Gln Phe Gly
                     4.0
     3.5
Gly Val Phe Ile Gly Gln Gly Lys Phe Pro Asp Cys Phe Asp Val Phe
```

85 90 95 4

Arg Ala Phe Ile His His Gly Val Ile His Ile His Gln Ala Val Asn 100 105 110 Gly Val Leu Ile Gln 115

55

70

Arg Arg Leu Ala Gln Gly Gly Asn Leu Ser Lys His Arg Thr Leu Arg

Phe Arg Gln Arg Gln Ser Pro Val Ala Gly Ala Asp His Met Ala Gly

60

```
<211> 587
```

<212> PRT

<213> Enterobacter cloacae

<400> 7747 Ile Arg Pro Cys Val Cys Leu Ser Ile Gln Val Tyr Leu Asn Ala Ser 10 Ser Val Pro Tyr Glu Glu His Thr Met Ser Ser Asp Lys Tyr Arg Lys 20 25 Gln Asp Val Arg Ala Ala Arg Gly Thr Thr Leu Thr Ala Lys Ser Trp 35 40 4.5 Leu Thr Glu Ala Pro Leu Arg Met Leu Met Asn Asn Leu Asp Pro Glu 50 55 60 Val Ala Glu Asn Pro His Glu Leu Val Val Tyr Gly Gly Ile Gly Arg 65 70 75 Ala Ala Arg Asn Trp Ala Cys Tyr Asp Ala Ile Val Glu Ser Leu Thr 85 90 95 Asn Leu Glu Asn Asp Glu Thr Leu Leu Val Gln Ser Gly Lys Pro Val 100 105 110 Gly Val Phe Lys Thr His Lys Asn Ala Pro Arg Val Leu Ile Ala Asn 115 120 125 Ser Asn Leu Val Pro His Trp Ala Thr Trp Glu His Phe Asn Glu Leu 130 135 140 Asp Ala Lys Gly Leu Ala Met Tyr Gly Gln Met Thr Ala Gly Ser Trp 145 150 150 160 Ile Tyr Ile Gly Ser Gln Gly Ile Val Gln Gly Thr Tyr Glu Thr Phe 165 170 175 Val Glu Ala Gly Arg Gln His Tyr Asn Gly Ser Leu Lys Gly Arg Trp 180 185 190 Val Leu Thr Ala Gly Leu Gly Gly Met Gly Gly Ala Gln Pro Leu Ala 195 200 205 Ala Thr Leu Ala Gly Ala Cys Ser Leu Asn Ile Glu Cys Gln Gln Ser 210 215 220 Arg Ile Asp Phe Arg Leu Arg Thr Arg Tyr Val Asp Glu Gln Ala Asp 225 230 235 Asn Leu Asp Asp Ala Leu Ala Arg Ile Lys Lys Tyr Thr Ser Glu Gly 245 250 255 Lys Ala Val Ser Val Ala Leu Cys Gly Asn Ala Ala Asp Ile Leu Pro $260 \hspace{1cm} 265 \hspace{1cm} 265 \hspace{1cm} 270 \hspace{1cm}$ Glu Leu Val Ala Arg Gly Val Arg Pro Asp Leu Val Thr Asp Gln Thr 275 280 285 Ser Ala His Asp Pro Leu His Gly Tyr Leu Pro Lys Gly Trp Thr Trp 290 295 300 Glu Asp Tyr Gln Gln Lys Ala Glu Thr Asp Pro Glu Gly Thr Val Leu 310 315 Ala Ala Lys Arg Ala Met Ala Glu His Val Ser Ala Met Leu Ala Phe 325 330 335 Ser Lys Met Gly Ile Pro Thr Phe Asp Tyr Gly Asn Asn Ile Arg Gln 340 345 350 Met Ala Lys Glu Met Gly Val Asn Asn Ala Phe Asp Phe Pro Gly Phe 355 360 Val Pro Ala Tyr Ile Arg Pro Leu Phe Cys Arg Gly Ile Gly Pro Phe 375 380 Arg Trp Val Ala Leu Ser Gly Asp Pro Glu Asp Ile Tyr Lys Thr Asp 390 395 Ala Arg Val Lys Glu Ile Val Ala Asp Asp Glu His Leu His Arg Trp 405 410 Leu Asp Met Ala Arg Glu Arg Ile Asn Phe Gln Gly Leu Pro Ala Arg 425 Ile Cys Trp Val Gly Leu Glu Trp Arg Gln Lys Leu Gly Leu Ala Phe

440

```
Asn Glu Met Val Arg Ser Gly Glu Val Ser Ala Pro Ile Val Ile Gly
               455
                                460
Arg Asp His Leu Asp Ser Gly Ser Val Ala Ser Pro Asn Arg Glu Thr
      470
                              475
Glu Ala Met Arg Asp Gly Ser Asp Ala Val Ser Asp Trp Pro Leu Leu
         485
                          490 495
Asn Ala Leu Leu Asn Thr Ala Ser Gly Ala Thr Trp Val Ser Leu His
        500 505 510
His Gly Gly Gly Val Gly Met Gly Phe Ser Gln His Ser Gly Met Val
     515 520 525
Ile Val Cys Asp Gly Thr Asp Glu Ala Ala Ala Arg Ile Ala Arg Val
 530 535 540
Leu His Asn Asp Pro Ala Thr Gly Val Met Arg His Ala Asp Ala Gly
545 550 555 560
Tyr Glu Ile Ala Ile Asp Cys Ala Lys Glu Gln Gly Leu Asn Leu Pro
      565 570
Met Ile Pro Ala Thr Gln Gly Lys Pro Ala
        580
<210> 7748
<211> 360
<212> PRT
<213> Enterobacter cloacae
<400> 7748
Thr Glu Pro Thr Ile Asn Lys Thr Leu Trp Arg Ser Pro Met Ala His
                        10
His Ala Arg Trp Thr Met Ser Gln Val Thr Glu Leu Phe Asn Lys Pro
        20 25
Phe Leu Glu Leu Met Phe Glu Ala Gln Gln Val His Arg Gln His Phe
35 40
                                 4.5
Asp Pro Arg His Val Gln Val Ser Thr Leu Leu Ser Ile Lys Thr Gly
50 55
                                60
Ala Cys Pro Glu Asp Cys Lys Tyr Cys Pro Gln Ser Ala Arg Tyr Lys
   70
                  75
Thr Gly Leu Glu Ser Glu Arg Leu Met Glu Val Glu Gln Val Leu Asp
           85 90
Ser Ala Arg Lys Ala Lys Asn Ala Gly Ser Thr Arg Phe Cys Met Gly
       100 105 110
Ala Ala Trp Lys Asn Pro His Asp Arg Asp Met Pro Tyr Leu Glu Gln
     115 120 125
Met Val Lys Gly Val Lys Glu Met Gly Leu Glu Ala Cys Met Thr Leu
                 135
                                140
Gly Thr Leu Asn Glu Glu Gln Ala Gln Arg Leu Ser Ala Ala Gly Leu
145
   150
                             155
Asp Tyr Tyr Asn His Asn Leu Asp Thr Ser Pro Glu Phe Tyr Gly Asn
           165
                          170
                                         175
Ile Ile Thr Thr Arg Thr Tyr Gln Glu Arg Leu Asp Thr Leu Asp Lys
      180 185
                                       190
Val Arg Asp Ala Gly Ile Lys Val Cys Ser Gly Gly Ile Val Gly Leu
     195 200
                                   205
Gly Glu Thr Val Lys Asp Arg Ala Gly Leu Leu Gln Leu Ala Asn
  210
                 215
                                 220
Leu Pro Thr Pro Pro Glu Ser Val Pro Ile Asn Met Leu Val Lys Val
             230
                             235
Lys Gly Thr Pro Leu Ala Asp Asn Glu Asp Val Asp Ala Phe Asp Phe
            245
                          250
Ile Arg Thr Ile Ala Val Ala Arg Ile Met Met Pro Thr Ser Tyr Val
        260
                       265 270
Arg Leu Ser Ala Gly Arg Glu Gln Met Ser Glu Gln Thr Gln Ala Met
```

```
Cys Phe Met Ala Gly Ala Asn Ser Ile Phe Tyr Gly Cys Lys Leu Leu
 290
                  295
Thr Thr Pro Asn Pro Glu Glu Asp Lys Asp Val Gln Leu Phe Arg Lys
                              315
          310
Leu Gly Leu Asn Pro His Gln Thr Gly Val Gln Val Gly Asp Asn Glu
         325 330
Gln Gln Gln Leu Glu Gln Gln Ile Phe Asn Ala Asp Thr Asp Gln
       340 345
Phe Tyr Asn Ala Ala Ala Ile
   355
<210> 7749
<211> 270
<212> PRT
<213> Enterobacter cloacae
<400> 7749
Arg Ser Arg Gln Arg Met Ser Arg Arg Ile Ser Ile Arg Phe Trp Arg
          5
His Cys Met Ser Leu Val Asn Lys Gln Ala Val Ala Ala Ala Phe Gly
20
                        25
Arg Ala Ala Gln Ser Tyr Ser Gln His Asp Glu Leu Gln Arg Leu Ser
35
                   40
                         4.5
Ala Arg Gly Leu Leu Ala Ala Leu Gly Asp Gly Arg Phe Ala Gln Val
50 55 60
Leu Asp Ala Gly Cys Gly Pro Gly Gly Asn Ser Arg Tyr Trp Arg Ala
             70
                   75
Thr Gly Ser His Val Thr Ala Leu Asp Leu Ser Ala Gln Met Leu Asp
           8.5
                     90
Glu Ala Arg Gln Gln Gln Ser Ala Asp Arg Tyr Leu Val Ala Asp Ile
        100 105 110
Glu Ala Ile Pro Leu Glu Asp Ala Leu Phe Asp Leu Val Trp Ser His
115 120 125
Leu Ala Val Gln Trp Cys Ala Ser Leu Pro Gln Ala Leu Arg Glu Leu
                135 140
Tyr Arg Val Ala Arg Pro Gly Gly Ala Val Ala Phe Thr Thr Leu Leu
145 150 155 160
Glu Ser Ser Leu Pro Glu Leu Asn Gln Ala Trp Arg Ala Val Asp Ala
          165 170
Gln Pro His Ala Asn Arg Phe Leu Ser His Glu Gln Val Thr Gln Ala
    180 185 190
Leu Ala Gly Trp Arg Tyr Arg Ser Val Val Gln Thr Val Thr Leu Glu
                    200
                                   205
Phe Ser Asp Ala Leu Ser Ala Met Arg Ser Leu Lys Gly Ile Gly Ala
                  215
                                220
Thr His Leu His Ala Gly Arg Glu Lys Lys Pro Leu Thr Arg Gly Gln
               230
                   235
Leu Gln Arg Leu Glu Leu Ala Trp Pro Gln Glu Arg Gly Arg Phe Pro
          245
                           250
Leu Ser Tyr His Leu Phe His Gly Ile Ile Glu Arg Asp
                         265
<210> 7750
<211> 239
<212> PRT
<213> Enterobacter cloacae
<400> 7750
Thr Leu Arg Ile Tyr Asp Ser Arg Met Ile Leu Thr Glu Pro Glu Trp
```

1 5 10 15 Gln Ala Val Leu Leu Ser Leu Lys Val Ser Ser Leu Ala Val Ala Leu

```
Ser Leu Pro Phe Gly Val Phe Phe Ala Trp Leu Leu Val Arg Val Lys
                       4.0
Phe Pro Gly Lys Ala Leu Leu Asp Ser Val Leu His Leu Pro Leu Val
Leu Pro Pro Val Val Val Gly Tyr Leu Leu Leu Ile Ser Met Gly Arg
                70
Arg Gly Val Ile Gly Glu Trp Leu Tyr Asp Trp Phe Gly Leu Thr Phe
                             90
Ala Phe Ser Trp Arg Gly Ala Val Leu Ala Ala Ala Val Met Ser Phe
         100
                        105
Pro Leu Met Val Arg Ala Ile Arg Leu Ala Leu Glu Gly Val Asp Ile
    115
            120
                           125
Arg Leu Glu Gln Ala Ala Arg Thr Leu Gly Ala Gly Arg Trp Arg Val
          135 140
Phe Leu Thr Ile Thr Leu Pro Leu Thr Leu Pro Gly Ile Ile Val Gly
145 150 155
Thr Val Leu Ala Phe Ala Arg Ser Leu Gly Glu Phe Gly Ala Thr Ile
          165 170 175
Thr Phe Val Ser Asn Ile Pro Gly Glu Thr Arg Thr Ile Pro Ser Ala
 180 185 190
Met Tyr Thr Leu Ile Gln Thr Pro Gly Gly Glu Gly Ala Ala Arg
195
                   200 205
Leu Cys Ile Ile Ser Ile Val Leu Ala Leu Val Ser Leu Leu Val Ser
210 215 220
Glu Trp Leu Ala Arg Leu Ser Arg Glu Arg Met Gly Lys Ser
                230
<210> 7751
<211> 90
<212> PRT
<213> Enterobacter cloacae
<400> 7751
Ile Lys Ser Ile Arg Arg Phe Ser Pro Arg Tyr Gly Ser Ala Phe Arg
                   10
Arg Arg Met Ser His Trp Ser Cys Asn Arg Arg Cys Lys Pro Val Ser
     20
                         25
Ala Ile Phe Cys Ala Gln Lys Trp Arg Ser Val Leu Met Ile Thr Ala
  35
                      40
Arg Trp Lys Cys Ser Trp Lys Trp Ala Ala Glu Arg Cys Gly Arg Ala
  50
                  55
Ser Ala Arg Gly Pro Gly Met Ser Trp Val Ser Ser Leu Ala Cys Gly
             70
Phe Thr Arg Lys Ser Arg Ala Phe Pro
            85
<210> 7752
<211> 333
<212> PRT
<213> Enterobacter cloacae
```

<400> 7752

Asp Gly Leu Arg Ala Gly Ala Glu Ser Phe Val Ser Thr Arg Val Ser 10 Gly Ala Gly Ser Met Lys Leu Trp His Pro Val Ser Pro Gln Val Trp 25 2.0 Gln Gly Arg Asp Asp Ser Ala Glu Ser Ser Thr Ala Lys Arg Leu Phe 40 Gln Thr Ile Gln Gln Arg Glu His Phe Ser Pro Val Pro Ser Gly Ile

Ala Leu Leu Gly Phe Glu Cys Asp Glu Gly Val Lys Arg Asn Gln Gly Arg Pro Gly Ala Ala Gln Ala Pro Asp Val Leu Arg Gly Ala Leu Ala 85 90 Asn Met Ala Ser His Gln Gly His Ala Arg Leu Val Asp Met Gly Ser 100 105 Val Tyr Val Glu Gly His Ala Leu Glu Ala Ala Gln Gln Ala Leu Ser 115 120 125 Glu Ala Ile Thr Ala Cys Gln Gln Ser Gly Met Arg Thr Leu Val Phe 135 140 130 Gly Gly Gly His Glu Thr Ala Trp Ala His Gly Arg Gly Val Leu Asp 150 155 160 145 Ala Phe Pro Asn Asp Arg Ile Ala Val Ile Asn Leu Asp Ala His Leu 165 170 175 Asp Leu Arg Lys Ala Glu Arg Ala Thr Ser Gly Thr Pro Phe Arg Gln 180 185 190 Leu Ala His Tyr Cys Ala Ser Gln Ser Arg Val Phe His Tyr Ala Cys 195 200 205 Leu Gly Val Ser Arg Ala Ala Asn Thr Gln Ala Leu Trp Glu Glu Ala 210 215 220 Glu Arg Leu Asn Val Thr Leu Val Glu Asp Leu Asp Phe Arg Arg Asp 225 230 235 Ala Leu Ser Ala Leu Asp Ser Val Leu Thr Gln Ala Asp Arg Val Tyr 245 250 255 Leu Thr Val Asp Leu Asp Val Leu Pro Ala Ala Glu Met Pro Ala Val 260 265 270 Ser Ala Pro Ala Ala Leu Gly Ile Pro Ala Leu Asp Leu Phe Pro Val 275 280 285 Ile Glu Arg Ile Cys Arg Ser Gly Lys Leu Gln Ala Ala Asp Leu Val 290 295 300 Glu Phe Asn Pro His Tyr Asp Arg Asp Gly Gln Gly Ala Lys Leu Ala 305 310 315 Ala Arq Leu Ala Trp Gln Ile Ala His Trp Trp Ala

<210> 7753 <211> 279 <212> PRT <213> Enterobacter cloacae

325

<400> 7753 Ala Arg Arg Thr Cys Thr Pro Asp Gly Arg Arg Asn Pro Leu Pro Ala 10 Val Asn Ser Ser Val Ser Ser Trp Pro Gly Arg Arg Ser Gly Ala Gly 20 25 Ser Arg Ser Leu Ile Ile Phe Phe Met Gly Leu Leu Asn Val Thr Glu 35 40 Arg Tyr Phe Val Thr Gly Thr Asp Thr Glu Val Gly Lys Thr Val Ala 55 50 Ser Ala Ala Leu Leu Gln Ala Ala Arg Leu Leu Gly Lys Thr Thr Ala 70 75 Gly Tyr Lys Pro Val Ala Ser Gly Ser Glu Met Thr Pro Glu Gly Leu 8.5 90 Arg Asn Thr Asp Ala Leu Ala Leu Gln Arg Asn Ser Ser Leu Ala Leu 105 110 100 Ala Tyr Ser Ala Val Asn Pro Tyr Thr Phe Ala Glu Pro Thr Ser Pro 115 120 His Ile Val Ser Ala Asp Glu Asp Arg Pro Ile Asp Phe Ser Val Leu 135 140

Ser Ser Gly Leu Arg Asp Leu Glu Thr Gln Ala Asp Trp Val Leu Val

155

```
Glu Gly Ala Gly Gly Trp Phe Thr Pro Leu Ser Asp Glu Gln Thr Phe
                               170
               165
                                                   175
 Ala Asp Trp Val Gln Ala Glu Gln Leu Ser Val Ile Leu Val Val Gly
            180
                             185
                                               190
 Val Lys Leu Gly Cys Ile Asn His Ala Met Leu Thr Ala Gln Ala Val
        195
              200
                               205
 Gln Gln Ala Gly Leu Arg Leu Ala Gly Trp Ile Ala Asn Asp Val Val 210 215 220
 Ala Pro Gly Lys Arg His Ala Glu Tyr Leu Ala Thr Leu Lys Arg Gly
 225
      230 235
 Leu Pro Ala Pro Phe Leu Gly Glu Ile Pro Trp Leu Ala Asp Gly Ala
            245 250 255
 Glu Gln Ala Glu Thr Gly Arg Tyr Leu Asp Leu Ser Ala Leu Cys Pro
         260
                265
 Ala Pro Ser Ser Ala Gln
       275
<210> 7754
 <211> 117
 <212> PRT
 <213> Enterobacter cloacae
<220>
<221>UNSURE
 <222>(19)
<220>
<221>UNSURE
<222>(43)
<220>
<221>UNSURE
 <222>(44)
 <400> 7754
 Asn Tyr Ser Pro Ala Ala Tyr Ser Val Ile Arg Ser Ser Pro Met Ser
                                10
 Lys Pro Xaa Lys Leu Asn Ser Ala Phe Arg Pro Ser Gly Asp Gln Pro
            20
                             25
                                                30
 Glu Ala Ile Arg Arg Leu Glu Lys Gly Leu Xaa Xaa Arg Leu Ala His
                         4.0
                                     4.5
 Gln Thr Leu Leu Gly Val Thr Gly Ser Gly Lys Thr Phe Thr Ile Ala
                      55
                                        60
 Asn Val Ile Ala Asp Leu Gln Arg Pro Thr Asn Val Leu Ala Pro Lys
                   70
                                     75
                                                      8.0
 Lys Thr Leu Ala Gly Pro Leu Tyr Gly Glu Met Lys Glu Phe Phe Pro
               8.5
                               90
 Glu Lys Pro Gly Gly Ile Phe Arg Leu Pro Leu Thr Thr Thr Asn
           100
                             105
 Pro Gly Ser Leu Pro
 <210> 7755
 <211> 276
 <212> PRT
 <213> Enterobacter cloacae
 <400> 7755
 Val Ile Pro Lys Asn Gly Leu Phe Leu Ile Ile Met Lys Phe Leu Ala
                                 1.0
 Gly Val Leu Gln Thr Ser Leu Cys Ala Ser Pro Pro His Ile Phe Lys
```

Glu Arg Lys Met Leu Ser Leu Arg Ala Val Asn Gln Phe Tyr Gly Ser 40 Gln His Thr Leu Trp Asn Val Asn Ile Asp Phe Pro Gln Gly Ile Cys 55 Thr Gly Ile Val Gly Leu Pro Gly Met Gly Lys Ser Thr Leu Met Asn 70 75 Cys Ile Thr Gly Lys Val Pro Val Glu Ser Gly Thr Ile Ile Trp His 85 90 Glu Ala Gly Ala Pro Pro Arg Asn Leu Leu Ser Pro Ala Ser Ala Phe 100 105 Thr Ala Pro Pro Thr Ile Gly Tyr Val Pro Gln Asp Arg Arg Ile Phe 115 120 125 Ser Gln Leu Thr Val Asp Glu Asn Leu His Ile Ala Met Arg Ala Thr 130 135 140 Gly Lys Pro Asp Pro Thr Ser Lys Ser Asp Val Tyr Ala Leu Phe Pro 150 155 160 Glu Leu Tyr Pro Leu Arg Gln Ser Arg Ala Ser Ser Leu Ser Pro Asp 165 170 175 Asp Gln Tyr Gln Leu Ala Leu Ala Ser Ala Leu Val Asn Arg Pro Arg 180 185 190 Val Leu Ile Leu Asp Glu Pro Met His Gly Ala Gly His Gly Phe Ala 195 200 205 Arg Arg Leu Gly Gln Leu Leu Val Arg Leu Asn Arg Glu Leu Gly Met 210 215 220 Thr Val Leu Leu Ala Glu Gln Gln Leu Ser Phe Ile Arg Arg Val Ala 225 230 235 240 Asp Arg Phe Cys Met Leu Tyr Arg Gly Arg Asn Val Ala Gln Gly His 245 250 255 Val Asn Glu Leu Asp Asp Asp Leu Ile Ala His Trp Met Ala Arg Asp 265 Ile Arg Arg

<210> 7756

275

<211> 166 <212> PRT

<213> Enterobacter cloacae

<400> 7756 Val Ser Asn Glu Glu Asn Arg Met Lys Ile Ile Ser Lys Asp Leu Arg 10 Asp Gly Glu Lys Leu Pro Glu Arg His Val Phe Asn Gly Met Gly Tyr 20 25 Gln Gly Asp Asn Ile Ser Pro His Leu Ala Trp Asp Asp Val Pro Ala 3.5 4.0 45 Gly Thr Lys Ser Phe Val Val Thr Cys Tyr Asp Pro Asp Ala Pro Thr 55 60 Gly Ser Gly Trp Trp His Trp Ile Val Ala Asn Leu Pro Ala Asp Thr 7.0 75 Arg Val Leu Pro Gln Gly Ser Gly Ser Asp Leu Val Ala Leu Pro Asp 85 90 Gly Ala Ile Gln Thr Arg Thr Asp Phe Gly Lys Ala Gly Tyr Gly Gly 105 100 Ala Ala Pro Pro Lys Gly Glu Thr His Arg Tyr Ile Phe Thr Val His 120 Ala Leu Asp Val Asp Lys Ile Glu Val Asp Glu Gly Ala Ser Gly Ala 140 135 Met Val Gly Phe Asn Val His Phe His Ser Leu Gly Ser Ala Ser Ile 155 160 Thr Ala Met Tyr Ser

<210> 7758 <211> 450 <212> PRT

<213> Enterobacter cloacae

```
<210> 7757
<211> 379
<212> PRT
<213> Enterobacter cloacae
<400> 7757
Ser Glu Glu Leu His Pro Cys Ala Leu Phe Leu Gly Asp Gly Ser Gln
                    10
Cys Ser Thr Val Asp Ala Phe Phe Ile Asn Leu Pro Lys Gln Pro Asp
      20
                      25
Phe Val Val Gly Pro Ala Gly Ala Gln Gly Val Thr His Thr Ser Ile
     35
         40
                        4.5
Gln Ala Ala Val Asp Ala Ala Ile Thr Lys His Ser Ala Ser Arg Gln
50 55
                    60
Tyr Ile Ala Ile Leu Pro Gly Glu Tyr Glu Gly Thr Val Tyr Val Pro
65 70 75
Ala Ala Pro Gly Ser Ile Thr Leu Tyr Gly Leu Gly Glu Lys Ala Val
          85 90 95
Asp Val Lys Ile Gly Leu Ala Ile Asp Ser Glu Ile Asp Ser Thr Thr
 100 105 110
Trp Arg His Leu Val Asn Pro Ala Gly Lys Tyr Met Pro Gly Lys Pro
115 120 125
Ala Trp Tyr Met Phe Asp Asn Cys Gln Arg Lys Arg Ala Ala Thr Ile
130 135 140
Gly Val Met Cys Ser Ala Val Phe Trp Ser Gln Asn Asn Gly Leu Gln
145 150 155
Leu Gln Asn Leu Thr Ile Gln Asn Thr Leu Gly Asp Ser Val Asp Ala
    165 170 175
Gly Asn His Gln Ala Val Ala Leu Arg Ser Asp Gly Asp Lys Val Gln
   180 185 190
Ile Asn Asn Val Asn Ile Leu Gly Arg Gln Asn Thr Phe Phe Val Thr
195 200 205
Asn Ser Gly Val Gln Asn Thr Leu Gln Asn Asn Arg Leu Thr Arg Thr
210 215 220
Leu Val Thr Asn Ser Tyr Ile Glu Gly Asp Val Asp Met Val Ser Gly
225
             230 235 240
Arg Gly Ala Val Val Phe Asp Asn Thr Asp Phe Arg Val Val Asn Ser
          245
                         250
Arg Thr Gln Glu Gly Tyr Val Phe Ala Pro Ala Thr Gln Ser Asn
                      265
Leu Phe Tyr Gly Phe Leu Ala Val Asn Ser Arg Phe Thr Ala Ala Gly
     275
                   280
                       285
Asp Gly Val Ala Gln Leu Gly Arg Ser Leu Asp Val Asp Ser Ala Thr
                295
                              300
Asn Gly Gln Val Val Ile Arg Asp Ser Val Ile Asn Glu Gly Phe Asn
             310
                            315
Met Ala Lys Pro Trp Ala Asp Ala Ala Ile Ser Lys Arg Pro Phe Ser
           325
                         330 335
Gly Asn Thr Gly Thr Val Asp Asp Lys Asp Asn Val Gln Arg Asn Leu
       340 345 350
Asn Asp Ala Asn Phe Asn Arg Met Trp Glu Tyr Asn Asn Arg Gly Leu
 355 360
                               365
Gly Ser Lys Val Val Ala Glu Pro Lys Gln
  370
                375
```

```
<400> 7758
Leu Ser Val Arq Phe Ile Leu Val Asn Leu Lys Leu Phe Lys Met Val
Tyr Lys Ser Ile Met Thr Gln Asp Asp Leu Ala Phe Asp Lys Gln His
      20
                      25
                                     3.0
Ile Trp His Pro Tyr Thr Ser Thr Thr Arg Pro Leu Pro Val Tyr Pro
    35
                   40
                                  45
Val Ala Ser Ala His Gly Cys Glu Leu His Leu Ala Ser Gly Glu Arg
 5.0
      55
                               60
Leu Val Asp Gly Met Ser Ser Trp Trp Ala Ala Ile His Gly Tyr Asn
        70 75
His Pro Arg Leu Asn Ala Ala Met Lys Ala Gln Ile Asp Gln Met Ser
         85 90 95
His Val Met Phe Gly Gly Ile Thr His Gln Pro Ala Val Asp Leu Cys
        100 105 110
Arg Arg Leu Val Ala Met Thr Pro Glu Ser Leu Glu Cys Val Phe Leu
 115 120 125
Ala Asp Ser Gly Ser Val Ala Val Glu Val Ala Met Lys Met Ala Leu
 130 135 140
Gln Tyr Trp His Ala Lys Gly Glu Thr Arg Gln Arg Phe Leu Thr Phe
145 150 155 160
Arg Asn Gly Tyr His Gly Asp Thr Phe Gly Ala Met Ser Val Cys Asp
         165 170 175
Pro Asp Asn Ser Met His Ser Leu Trp Lys Gly Tyr Leu Pro Glu Asn
180 185 190
Leu Phe Ala Pro Ala Pro Gln Ser Arg Phe Asp Gly Glu Trp Asp Glu
195 200 205
Met Asp Met Val Gly Phe Ala Arg Leu Met Ala Ala His Arg His Glu
210 215
                               220
Ile Ala Ala Val Ile Leu Glu Pro Ile Val Gln Gly Ala Gly Gly Met
225 230 235
Arg Ile Tyr His Pro Glu Trp Leu Lys Arg Ile Arg Lys Met Cys Asp
          245 250 255
Arg Glu Gly Ile Leu Leu Ile Ala Asp Glu Ile Ala Thr Gly Phe Gly
        260 265
Arg Thr Gly Lys Leu Phe Ala Cys Glu His Ala Gly Ile Ala Pro Asp
                   280 285
Ile Leu Cys Leu Gly Lys Ala Leu Thr Gly Gly Thr Met Thr Leu Ser
               295 300
Ala Thr Leu Thr Thr Arg Gln Val Ala Asp Thr Ile Ser Asp Gly Asp
             310
                            315
Ala Gly Cys Phe Met His Gly Pro Thr Phe Met Gly Asn Pro Leu Ala
           325
                         330 335
Cys Ala Val Ala Ser Glu Ser Leu Ala Ile Leu Glu Ser Gly Ala Trp
                      345
        340
                                     350
Gln Thr Gln Val Ala Ala Ile Glu Ala Gln Leu Lys Gln Gln Leu Ser
     355
                   360
                                  365
Ala Ala Ala Glu Ala Glu Tyr Val Ala Asp Val Arg Val Leu Gly Ala
  370
                 375
                               380
Ile Gly Val Ile Glu Thr Lys His Pro Val Asn Met Ala Ala Leu Gln
             390
                             395 400
Arg Phe Phe Val Asp Gln Gly Val Trp Val Arg Pro Phe Gly Lys Leu
          405
                         410
Ile Tyr Leu Met Pro Pro Tyr Ser Ile Ser Ala Asp Gln Leu Arg Lys
           425
                          430
        420
Leu Thr Gly Ala Val Val Glu Ala Val Asn Thr Ser Ala His Phe Ala
     435
                   440
                                  445
```

```
<211> 167
<212> PRT
<213> Enterobacter cloacae
<400> 7759
Tyr Lys Lys Ala Gly Tyr Phe Val Tyr Pro Asp Lys Thr Cys Ile Pro
                         10
Arg Ser Ile Thr Leu Asn Ile Ser Arg Ile Ser Arg Leu Ala Leu Ala
        20
                       25
                                      3.0
Leu Ala Phe Gly Val Thr Leu Ser Ala Cys Ser Ser Thr Pro Pro Asp
35
                    4.0
                         4.5
Gln Gln Pro Ser Glu Gln Val Ala Pro Gly Thr Ala Ser Arg Pro Ile
5.0
           55
                                60
Leu Ser Ala Ala Glu Ala Lys Asn Phe Thr Arg Ala His Tyr Phe Ser
    70 75
Ala Met Asp Pro Asn Ala Ala Pro Trp Thr Leu Phe Leu Leu Thr Cys
        85
                          90
                                          9.5
Arg Asn Ser Gln Thr Ser Leu Ser Ala Arg Pro Gly Arg Arg Ala Leu
       100 105 110
His Thr Pro Leu Phe Arg Gln Pro Leu Met Pro Gln Ser Pro Asn Thr
115 120 125
Ala His Leu Val Ser Thr Leu Pro Ser Cys Arg Val Asn Thr Lys Glu
130 135 140
```

Pro Phe Met Phe Arg Arg His Arg Glu Ala Leu His Phe Thr Ala Trp

155

<211> 301 <212> PRT <213> Enterobacter cloacae

145 150

Ala Lys Lys Arg Ser Thr 165

<210> 7760

<210> 7759

400- 3360

<400> 7760 Ile Val Val Arg Asp Phe Ala Gly Phe Arg Ser Arg Cys Thr Ile Pro Thr Asp Leu Lys Phe Asn Ile Asn Pro Glu Glu Lys Met Thr Ser Arg 20 25 30 Val Ile Ala Leu Asp Leu Asp Gly Thr Leu Leu Thr Pro Gln Lys Thr 3.5 40 Leu Leu Pro Ser Ser Leu Glu Ala Leu Lys Arg Ala Gln Glu Ala Gly 5.5 60 Tyr Gln Leu Leu Ile Val Thr Gly Arg His His Val Ala Ile His Pro 7.0 7.5 8.0 Phe Tyr Gln Ala Leu Gly Leu Asp Thr Pro Ala Ile Cys Cys Asn Gly 85 90 Thr Tyr Leu Tyr Asp Tyr Gln Ala Lys Lys Val Leu Ala Ser Asp Pro 100 105 110 Leu Pro Val Thr Gln Ala Leu Gln Leu Ile Asp Leu Leu Asp Glu His 115 120 125 Ala Ile His Gly Leu Met Tyr Val Asp Asn Ala Met Val Tyr Glu Arg 135 140 Pro Thr Gly His Val Ile Arg Thr Ser Asn Trp Ala Leu Ser Leu Pro 150 155 160 Glu Ala Gln Arg Pro Val Phe Thr Gln Val Ser Ser Leu Arg Gln Ala 165 170 175 Ala Glu Asp Val Glu Ala Ile Trp Lys Phe Ala Leu Thr Asp Glu Asp 190 180 185 Thr Ala Lys Leu Asn Thr Phe Ala Lys Leu Val Glu His Thr Leu Gly 195 200

```
Leu Glu Cys Glu Trp Ser Trp His Asp Gln Val Asp Ile Ala Arg Lys
                   215
 210
Gly Asn Ser Lys Gly Arg Arg Leu Thr Gln Phe Val Glu Ser Gln Gly
225
               230
                              235
Gly Ser Met Gln Asp Val Ile Ala Phe Gly Asp Asn Tyr Asn Asp Ile
             245
                                250
                                                   255
Ser Met Leu Glu Ala Ala Gly Thr Gly Val Ala Met Gly Asn Ala Asp
         260 265
Asp Ala Val Lys Ala Arg Ala Asp Val Val Ile Gly Asp Asn Thr Thr
      275 280
Asp Ser Ile Ala Gln Tyr Ile Tyr Thr His Leu Leu
                      295
<210> 7761
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 7761
Trp Glu Ala Cys Ser Thr Ala Gly Glu Lys Leu Gly Val Ala Trp Leu
                                10
Ala Ser Pro Ala Leu Ala Gln Glu Ala Pro Ala Ala Gly Pro Ile Glu
           20
                            25
                                                30
Ala Gln Thr Pro Pro Val Asp Ala Glu Pro Asn Asp Val Val Thr
       35
                        4.0
                                            4.5
Gly Ser Arg Ile Pro Gln Pro Asn Leu Glu Gly Ala Ser Pro Val Thr
                     5.5
Val Val Asn Ser Gln Asp Leu Lys Leu Gln Gly Thr Thr Arg Val Glu
                  70
                                    75
Asp Leu Leu Asn Ser Leu Pro Gln Val Phe Ala Gly Gln Ala Ser Thr
              8.5
                                 90
Leu Ser Asn Gly Ala Asp Gly Thr Ala Thr Val Asp Leu Arg Gly Leu
          100
                             105
Gly Pro Thr Arg Thr Leu Val Leu Val Asn Gly Arg Arg Leu Met Pro
       115
                         120
Gly Asp Pro Thr Thr Ser Ala Ala Asp Leu Asn Ser Ile Pro Ala Ala
 130
                     135
Leu Ile Lys Arg Val Glu Val Leu Thr Gly Gly Ala Ser Ser Thr Tyr
                                  155
                  150
145
Gly Ala Asp Ala Val Ala Gly Val Val Asp Leu Met Ser Ser Leu Arg
              165
Gly Arg Pro Ile Pro Pro Tyr Thr Pro
           180
<210> 7762
<211> 86
<212> PRT
<213> Enterobacter cloacae
<400> 7762
Phe Asp Phe Trp Arg Ile Asp Met Ser Arg Val Cys Gln Val Thr Gly
                                 10
Lys Arg Pro Val Thr Gly Asn Asn Arg Ser His Ala Leu Asn Ala Thr
                             2.5
                                                3.0
           20
Lys Arg Arg Phe Leu Pro Asn Leu His Ser His Arg Phe Trp Val Glu
       35
                         40
Ser Glu Lys Arg Phe Val Thr Leu Arg Val Ser Ala Lys Gly Met Arg
                      55
                                        60
Val Ile Asp Lys Lys Gly Ile Asp Thr Val Leu Ser Glu Leu Arg Ala
Arg Gly Glu Lys Tyr
```

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<210> 7763
<211> 259
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(259)
<400> 7763
Glu Ser Glu Lys Met Phe Lys Ile Thr Val Cys Leu Leu Thr Phe Asn
          5
                             1.0
Ser Glu Arg Thr Leu His Asp Val Ile Pro Pro Leu Leu Lys Ile Ala
          20
                                             30
                           25
Asp Glu Phe Val Val Val Asp Ser Gly Ser Thr Asp Ala Thr Ile Tyr
      35
                       40
                                         4.5
Ile Cys Gln Ser Tyr Gly Leu Ser Ala Ile Phe Lys Lys Tyr Ser Trp
 50 55
                               60
His Gly Glu Gln Met Asn His Ala Val Ser His Ala His Asn Asp Trp
       70
                            7.5
Val Leu Cys Met Asp Ser Asp Glu Ile Leu Asp Gln Glu Thr Val Asp
            8.5
                               90
Ala Ile Leu Lys Leu Lys Met Gly Asp Glu Pro Glu Pro Asp Met Ala
          100
                           105
                                             110
Trp Arg Ile Cys Arg His Trp Phe Val Leu Gly Glu Asn Val Arg Thr
                        120
Ile Tyr Pro Val Ser Ser Pro Asp Tyr Pro Val Arg Leu Phe Asn Arg
                    135
                                     140
Thr Gln Ser Arg Phe Asn Asn Arg Pro Val Asp Asp Gln Val Glu Gly
                150
                                   155
Phe Leu His Ser Glu Arg Ile Pro Gly Tyr Val Arg His Asp Thr Phe
             165
                               170
Tyr Ser Leu His Glu Leu Phe Asn Lys Leu Asn Gly Tyr Ser Thr Arg
          180 185
                                             190
Leu Val Gln Tyr Gln Thr Ile Arg Pro Ser Leu Gly Arg Gly Ala Ile
                        200 205
Ser Ala Ile Gly Ala Phe Phe Lys Trp Tyr Leu Phe Ser Gly Ala Trp
                    215
                                      220
Arg Gln Gly Lys Val Gly Val Val Thr Gly Phe Tyr Ala Thr Ala Tyr
                230
                      235
Ser Phe Leu Lys Tyr Phe Lys Ala Trp Tyr Gln Asn Arg Glu Lys Lys
              245
                               250
Asp Ser Xaa
<210> 7764
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 7764
Arg Gly Asn Lys Ser Trp Leu Lys Val Phe Ala Lys Lys Ile Lys Leu
                               10
Val Ser Ser Ala Gly Thr Gly His Phe Tyr Thr Thr Thr Lys Asn Lys
          20
                            25
Arg Thr Lys Pro Glu Lys Leu Glu Leu Lys Lys Phe Asp Pro Val Val
      35
                       40
Arg Gln His Val Leu Tyr Lys Glu Ala Lys Ile Lys
                     55
```

```
<210> 7765
<211> 292
<212> PRT
<213> Enterobacter cloacae
<400> 7765
Ser Pro Cys Ile Glu Lys Pro Arg Asn Cys Gly Val Phe Cys Ile Leu
His Leu Asn Gly Gly Thr Met Pro Glu Leu Pro Glu Val Glu Thr Ser
          20
                              25
                                                  30
Arg Arg Gly Ile Glu Pro His Leu Val Gly Ala Thr Ile Leu His Ala
       35
                         40
                                             4.5
Val Val Arg Asn Gly Arg Leu Arg Trp Pro Val Ser Asp Glu Ile His
                       55
                                          60
Ala Leu Ser Asp Lys Pro Val Leu Ser Val Gln Arg Arg Ala Lys Tyr
                  7.0
                                   75
Leu Leu Glu Leu Pro Asp Gly Trp Ile Ile Ile His Leu Gly Met
               8.5
                                  90
Ser Gly Ser Leu Arg Ile Leu Thr Glu Glu Leu Pro Ala Glu Lys His
          100
                            105
Asp His Val Asp Leu Val Met Ser Asn Gly Lys Val Leu Arg Tyr Thr
                           120
                                               125
Asp Pro Arg Arg Phe Gly Ala Trp Leu Trp Thr Lys Glu Leu Glu Gly
 130
                1.35
                                          140
His Asn Val Leu Ala His Leu Gly Pro Glu Pro Leu Ser Glu Ala Phe
                   150
                                      155
Asn Ala Asp Tyr Leu Lys Glu Lys Cys Ala Lys Lys Lys Thr Pro Ile
               165
                                  170
                                                      175
Lys Pro Trp Leu Met Asp Asn Lys Leu Val Val Gly Val Gly Asn Ile
           180
                            185
                                                  190
Tyr Ala Ser Glu Ser Leu Phe Ala Ala Gly Ile His Pro Asp Arg Leu
       195
                          200
                                              205
Ala Ser Ser Leu Ser Ala Gln Glu Cys Glu Leu Leu Val Arg Val Ile
  210
                      215
                                          220
Lys Ala Val Leu Leu Arg Ser Ile Glu Gln Gly Gly Thr Thr Leu Lys
                  230
                                      235
225
Asp Phe Leu Gln Ser Asp Gly Lys Pro Gly Tyr Phe Ala Gln Glu Leu
               245
                                  250
Gln Val Tyr Gly Arg Lys Gly Glu Pro Cys Arg Ala Cys Gly Thr Pro
                              265
                                    270
           260
Ile Ile Ala Thr Lys His Ala Gln Arg Ala Thr Phe Tyr Cys Arg Gln
                           280
                                               285
Cys Gln Lys
   290
<210> 7766
<211> 465
<212> PRT
<213> Enterobacter cloacae
<400> 7766
Ser Met Ser Arg Gly Ile Ser Arg Thr Leu Ile Ser Leu Ser Tyr His
His Asn Ala Gln Ala Ser Ala Ile His Arg Tyr Ala Ala Gly Val Arg
           20
                               25
                                                   30
Val Ile Tyr Ala Ala Lys Thr Arg Arg Asp Thr Ala Ser Ser Arg His
                           40
                                              45
Glu Leu Leu Val Trp Val Ile Cys Ala Lys Ile Cys Arg Val Trp Arg
Ile Ala Met Arg Gly Asp Phe Tyr Lys Gln Leu Asn Ser Asp Leu Glu
```

```
Thr Ala Arg Ala Glu Gly Leu Phe Lys Glu Glu Arg Ile Ile Thr Ser
          8.5
                         90
Ala Gln Gln Ala Asp Ile Thr Val Ala Asp Gly Ser His Val Ile Asn
      100
            105
                                     110
Phe Cys Ala Asn Asn Tyr Leu Gly Leu Ala Asn His Pro Glu Leu Ile
    115 120 125
Ala Ala Ala Lys Asn Gly Met Asp Thr His Gly Phe Gly Met Ala Ser
 130 135 140
Val Arg Phe Ile Cys Gly Thr Gln Asp Ser His Lys Gln Leu Glu Gln
145 150 155 160
Lys Leu Ala Asn Phe Leu Gly Met Glu Asp Ala Ile Leu Tyr Ser Ser
     165 170 175
Cys Phe Asp Ala Asn Gly Gly Leu Phe Glu Thr Leu Leu Gly Ala Glu
   180 185 190
Asp Ala Ile Ile Ser Asp Ala Leu Asn His Ala Ser Ile Ile Asp Gly
 195 200 205
Val Arg Leu Cys Lys Ala Lys Arg Phe Arg Tyr Ala Asn Asn Asp Met
210 215 220
Val Glu Leu Glu Ala Arg Leu Lys Glu Ala Arg Glu Ala Gly Ala Arg
225 230 235 240
His Val Leu Ile Ala Thr Asp Gly Val Phe Ser Met Asp Gly Val Ile
          245 250 255
Ala Asn Leu Lys Gly Val Cys Asp Leu Ala Asp Lys Tyr Asp Ala Leu
 260 265 270
Val Met Val Asp Asp Ser His Ala Val Gly Phe Val Gly Glu Asn Gly
275 280 285
Arg Gly Ser His Glu Tyr Cys Asp Val Met Gly Arg Val Asp Ile Ile
290 295 300
Thr Gly Thr Leu Gly Lys Ala Leu Gly Gly Ala Ser Gly Gly Tyr Thr
305 310 315
Ala Ala Arg Lys Glu Val Val Glu Trp Leu Arg Gln Arg Ser Arg Pro
         325 330 335
Tyr Leu Phe Ser Asn Ser Leu Ala Pro Ala Ile Val Ala Ala Ser Ile
 340 345 350
Lys Val Leu Glu Met Val Glu Ser Gly Ala Glu Leu Arg Glu Arg Leu
  355 360 365
Trp Ala Asn Ala Arg Leu Phe Arg Glu Lys Met Ser Ala Ala Gly Phe
 370 375 380
Thr Leu Ala Gly Ala Asp His Ala Ile Ile Pro Val Met Leu Gly Asp
385 390 395
Ala Val Val Ala Gln Gln Phe Ala Arg Glu Leu Gln Lys Glu Gly Ile
          405 410 415
Tyr Val Thr Gly Phe Phe Phe Pro Val Val Pro Lys Gly Gln Ala Arg
      420 425 430
Ile Arg Thr Gln Met Ser Ala Ala His Ser Pro Glu Gln Ile Glu Arg
                   440
Ala Val Glu Ala Phe Thr Arg Ile Gly Lys Gln Leu Gly Val Ile Ala
                 455
  450
```

<210> 7767 <211> 346 <212> PRT <213> Enterobacter cloacae

<400> 7767 Gly Arg Val Met Lys Ala Leu Ser Lys Leu Lys Ala Glu Glu Gly Ile Trp Met Thr Asp Val Pro Glu Pro Glu Val Gly His Asn Asp Leu Leu

```
Ile Lys Ile Arg Lys Thr Ala Ile Cys Gly Thr Asp Val His Ile Tyr
                     40
Asn Trp Asp Gln Trp Ser Gln Lys Thr Ile Pro Val Pro Met Val Val
                   55
Gly His Glu Tyr Val Gly Glu Val Val Gly Ile Gly Gln Glu Val Lys
              70
Gly Phe Asn Ile Gly Asp Arg Val Ser Gly Glu Gly His Ile Thr Cys
           85
                           90
Gly His Cys Arg Asn Cys Arg Gly Gly Arg Thr His Leu Cys Arg Asn
                 105
       100
                             110
Thr Val Gly Val Gly Val Asn Arg Pro Gly Cys Phe Ala Glu Tyr Leu
     115 120 125
Val Ile Pro Ala Phe Asn Ala Phe Lys Ile Pro Asp Asn Ile Ser Asp
       135 140
Asp Leu Ala Ser Ile Phe Asp Pro Phe Gly Asn Ala Val His Thr Ala
145 150 155
Leu Ser Phe Asp Leu Val Gly Glu Asp Val Leu Val Ser Gly Ala Gly
           165 170
Pro Ile Gly Ile Met Ala Ala Ala Val Ala Lys His Val Gly Ala Arg
        180 185 190
Asn Val Val Ile Thr Asp Val Asn Glu Tyr Arg Leu Ser Leu Ala Arg
                     200 205
Lys Met Gly Val Thr Arg Ala Val Asp Val Ser Lys Glu Ser Leu Thr
                 215 220
Asp Val Met Glu Glu Leu Gly Met Thr Glu Gly Phe Asp Val Gly Leu
              230 235
Glu Met Ser Gly Ala Pro Pro Ala Phe Arg Thr Met Leu Asp Thr Met 245 250 255
Asn His Gly Gly Arg Ile Ala Met Leu Gly Ile Pro Pro Ser Asp Met
             265 270
Ser Ile Asp Trp Asn Lys Val Ile Phe Lys Gly Leu Phe Ile Lys Gly
      275 280 285
Ile Tyr Gly Arg Glu Met Phe Glu Thr Trp Tyr Lys Met Ala Ala Leu
      295 300
Ile Gln Ser Gly Leu Asp Leu Ser Pro Ile Ile Thr His Arg Phe Ser
             310 315
Ile Asp Glu Phe Gln Gln Gly Phe Asp Ala Met Arg Ser Gly Gln Ser
Gly Lys Val Ile Leu Ser Trp Asp Lys
```

<210> 7768 <211> 379 <212> PRT

<213> Enterobacter cloacae

<400> 7768

Pro Ala Arg Arg Leu Arg Gln Ala Val Gln Asp Arg Cys Arg Arg 1.0 Arg Asn Gly Ile Tyr Gly Leu Ala Glu Pro Arg Arg Ile Ser Met Lys 20 25 3.0 Ile Leu Val Ile Gly Pro Ser Trp Val Gly Asp Met Met Ser Gln 35 4.0 45 Ser Leu Tyr Arg Thr Leu Lys Ala Arg Tyr Pro Gln Ala Ile Ile Asp 55 60 Val Met Ala Pro Ala Trp Cys Arg Pro Leu Leu Ser Arg Met Pro Glu 70 7.5 Val Asn Glu Ala Ile Pro Met Pro Leu Gly His Gly Ala Leu Glu Ile 90 85 Gly Glu Arg Arg Lys Leu Gly His Ser Leu Arg Glu Lys Arg Tyr Asp

```
100
                         105
Arg Ala Tyr Val Leu Pro Asn Ser Phe Lys Ser Ala Leu Val Pro Phe
                  120
                             125
Phe Ala Gly Ile Pro His Arg Thr Gly Trp Arg Gly Glu Met Arg Tyr
          135
                          140
Gly Leu Leu Asn Asp Ala Arg Val Leu Asp Lys Glu Ala Trp Pro Leu
        150 155
Met Val Glu Arg Tyr Val Ala Leu Ala Tyr Asp Lys Gly Val Met Arg
         165 170 175
Ser Ala Lys Asp Leu Pro Gln Pro Leu Leu Trp Pro Gln Leu Gln Val
        180 185 190
Ser Asp Gly Glu Lys Ser His Thr Cys Asn Ala Phe Gly Ile Ser Ser
     195
          200 205
Glu Arg Pro Met Ile Gly Phe Cys Pro Gly Ala Glu Phe Gly Pro Ala
  210
      215 220
Lys Arg Trp Pro His Tyr His Tyr Ala Glu Leu Ala Lys Gln Leu Ile
      230 235 240
Asp Glu Gly Tyr Gln Ile Val Leu Phe Gly Ser Ala Lys Asp His Glu
            245 250 255
Ala Gly Asn Glu Ile Leu Ala Thr Leu Ser Thr Glu Gln Gln Ala Trp
       260 265 270
Cys Arg Asn Leu Ala Gly Glu Thr Gln Leu Glu Gln Ala Val Ile Leu
     275 280
Ile Ala Ala Cys Lys Ala Val Val Thr Asn Asp Ser Gly Leu Met His
 290 295 300
Val Ala Ala Ala Leu Asp Arg Pro Leu Val Ala Leu Tyr Gly Pro Ser
    310 315
Ser Pro Asp Phe Thr Pro Pro Leu Ser His Lys Ala Arg Val Ile Arg
          325 330
Leu Ile Thr Gly Tyr His Lys Val Arg Lys Gly Asp Ala Ala Glu Gly
        340 345
Tyr His Gln Ser Leu Ile Asp Ile Thr Pro Gln Arg Val Leu Glu Glu
   355 360
Leu Asn Ala Leu Leu Leu Ser Glu Glu Gly
                   375
<210> 7769
<211> 329
<212> PRT
<213> Enterobacter cloacae
<400> 7769
Arg Met Arg Val Leu Ile Val Lys Thr Ser Ser Met Gly Asp Val Leu
                            10
                                            15
His Thr Leu Pro Ser Leu Thr Asp Ala Met Arg Ala Ile Pro Gly Ile
       20
                         25
Arg Phe Asp Trp Val Val Glu Glu Gly Phe Ala Gln Ile Pro Thr Trp
                     40
His Glu Ala Val Asp Arg Val Ile Pro Val Ala Ile Arg Arg Trp Arg
                  55
                                  60
Lys Ala Trp Phe Ser Ala Pro Ile Lys Ala Glu Arg Lys Ala Phe Arg
               7.0
                               75
Glu Ala Val Gln Ala Arg Arg Tyr Asp Ala Ile Val Asp Ala Gln Gly
            8.5
                            90
Leu Val Lys Ser Ala Ala Leu Val Thr Arg Leu Ala His Gly Val Lys
         100
                         105
                                        110
His Gly Met Asp Trp Gln Thr Ala Arg Glu Pro Leu Ala Ser Leu Phe
```

Tyr Asn Arg Arg His His Ile Ala Lys Gln Gln His Ala Val Glu Arg

Thr Arg Glu Leu Phe Ala Lys Ser Leu Gly Tyr Ala Lys Pro Glu Ala

135

125

```
155
Gln Gly Asp Tyr Ala Ile Ala Gln His Phe Leu Arg Glu Thr Glu Glu
          165
                   170
                                  175
His Ala Glu Pro Tyr Leu Val Phe Leu His Ala Thr Thr Arg Asp Asp
        180
              185 190
Lys His Trp Pro Glu Thr His Trp Arg Arg Leu Ile Glu Leu Met Gln
  195 200 205
Pro Cys Gly Ile His Ile Lys Leu Pro Trp Gly Ala Glu His Glu Arg
 210 215 220
Gln Arg Ala Glu Arg Leu Ala Ala Gly Phe Ser His Val Glu Val Leu
225 230 235 240
Pro Lys Leu Thr Leu Ala Gln Val Ala Ala Gln Leu Ala Gly Ala Asn
       245 250 255
Ala Val Val Ser Val Asp Thr Gly Leu Ser His Leu Thr Ala Ala Leu
       260 265 270
Asp Arg Pro Asn Ile Thr Ile Phe Gly Pro Thr Asp Pro Gly Leu Ile
     275 280 285
Gly Gly Tyr Gly Lys Asn Gln His Gln Met Val Ser Pro Thr Gln Gln
 290 295 300
Thr Lys Asp Ile Ser Ala Asp Ala Ile Phe Ser Phe Leu Gln Gly Ser
305 310
His Arg Leu Ser Asn Arg Asp Ile
            325
<210> 7770
<211> 371
<212> PRT
<213> Enterobacter cloacae
<400> 7770
Pro Met Ser Tyr Val Phe Leu Leu Ile Leu Leu Phe Pro Val Lys Leu
                           10
Ile Arg Lys Leu Phe Arg Lys Asp Thr Gly Lys Asn Leu Val Ile Gln
                      25
Thr Ala Lys Ile Gly Asp Phe Ile Asn Ala Thr Pro Leu Leu Ala Trp
35
         4.0
Leu Gln Lys Ser Asp Val Leu Ile Ser Arg Ser Val Gly Ala Leu Ala
                5.5
                        60
Lys His Asp Glu Thr Ile Glu Gln Ile Tyr Phe Ile Glu Gln His Lys
            70
                             75
Arg Asn Leu Trp Arg Lys Leu Cys Phe Ala Cys Arg Ile Met Asn Arg
           85
                           90
Tyr Asp Asn Val Tyr Leu Leu Gln Pro Asn Ser Val Asn Leu Phe Phe
        100 105
                                       110
Ala Ala Val Cys Asn Ala Lys Asn Lys Gln Phe Leu Ser Ile Tyr Thr
     115 120
                                   125
Arg Arg Trp Tyr His Gly Ile Phe Tyr Leu Ala Ala Asp Gly Thr Val
   130
                 135
                                 140
Glu His Gly Lys Lys Thr Leu Ser Val Ala Asn Tyr Leu Lys Leu Ala
              150
                              155
Asp Arg Ser Leu Thr Trp Gln Asp Ser Pro Lys His Ala Thr Lys Pro
      165
                           170
                               175
Leu Phe Lys Pro Thr Trp Pro Ala Ile Leu Asp Lys Pro Asp Val
                       185 190
        180
Ile Arg Ile Gly Ile Ser Ile Ala Ala Gly Asn Lys Ala Lys Thr Val
                     200
      195
Pro Pro Val Ile Trp Lys Arg Ile Val Asp Gln Leu Ala Asp Leu Pro
                215
                                 220
Cys Glu Phe Tyr Val Phe Gly Ala Pro Asn Glu Gln Ser Trp Met Asp
               230
```

Asp Ile Thr Arg Leu Tyr Gly Glu Ile Pro Asn Phe Ile Asn Leu Ile

```
245
                              250
Gly Lys Ile Ser Leu Glu Glu Leu Pro Trp Ala Ile Ser Lys Met Asp
          260
                          265
Cys Tyr Ile Ala Ser Asp Ser Gly Asn Val Tyr Ile Ala Asp Ala Val
                 280
                                     285
Gly Val Pro Val Val Leu Leu Phe Gly Pro Cys Cys His Tyr Glu Gln
           295
                           300
Arg Pro Leu Gly Asn Val Met Leu Ile Gly Asn Asp Asp Asn Ile Cys
305 310 315
Ser Tyr Val Phe Glu Thr Arg Tyr Tyr Phe Pro Gln Glu Arg Glu Ala
          325 330 335
Leu Phe Ser Val Thr Asp Ser Ala Leu His Asp Leu Gln Gln Phe Val
       340 345 350
Arg Thr Leu Pro Lys Ala Arg Ser Leu Ala Ser Ala Thr Asp Ala Gln
                       360
Glv Asn
  370
<210> 7771
<211> 362
<212> PRT
<213> Enterobacter cloacae
<400> 7771
Tyr Asn Ala Asp Lys Met Met Asn Asn Leu Pro Asp Thr Pro Asp
                             10
Leu Arg Ile Leu Leu Ile Lys Leu Arg His His Gly Asp Met Leu Leu
                          25
Thr Thr Pro Val Ile Asn Ser Leu Arg Gln Lys Trp Pro Glu Ala Gln
                       4.0
Ile Asp Val Leu Leu Tyr Glu Glu Thr Arg Asp Met Leu Ala Ala His
                 55
                              60
Pro Ala Ile Gly Thr Ile Tyr Gly Ile Asp Arg Lys Trp Lys Gln Leu
                7.0
                                75
Gly Thr Leu Lys His Leu Gln Lys Glu Trp Gln Leu Leu Arg Ala Leu
                             90
Arg Ala Gln His Tyr His Leu Val Ile Asn Leu Ala Asp Gln Trp Arg
         100 105
                                          110
Ser Ala Ile Val Thr Arg Phe Thr Gly Ala Pro Val Arg Leu Gly Phe
      115 120
                                       125
Ala Phe Asn Lys Arg Lys Asn Ala Phe Trp Arg Phe Cys His Ser Glu
                 135
                                    140
Leu Val Ser Val Ala Ser His Gln Ser Leu His Thr Val Glu Gln Asn
          150
                                155
Leu Ser Ile Leu Ser Ala Leu Pro Val Met Ala Asn Pro Thr Val Thr
             165
                              170 175
Met Ala Tyr Ser Ala Asp Asp Trp Arg His Ala His Gln Lys Leu Thr
          180
                         185
                                          190
Gln Lys Gly Val Gly Asp Arg Tyr Ile Val Ile Gln Pro Thr Ser Arg
      195 200
                                       205
Trp Phe Phe Lys Cys Trp Asp Glu Gly Lys Met Ala Gln Thr Ile Ala
                   215
                                    220
Ala Leu Gln Gln Asp Gly His Thr Ile Val Leu Thr Ala Gly Pro Asp
                230
                                 235
Lys Lys Glu Leu Ala Met Ile Asp Arg Ile Leu Ala Ala Ser Pro Gln
             245
                              250
Thr Gly Val Val Ser Leu Ala Gly Gln Leu Thr Leu Arg Gln Leu Ala
         260
                          265
                                           270
Ser Leu Ile Asp His Ala Ile Leu Phe Ile Gly Val Asp Ser Val Pro
      275
                       280
```

Met His Met Ala Ala Ala Leu Gln Thr Pro Cys Val Ala Leu Phe Gly

```
295
Pro Ser Lys Leu Thr Phe Trp Ser Pro Trp Gln Val Asn Gly Glu Val
          310
                      315
Ile Trp Ala Gly Asn Tyr Gly Pro Leu Pro Asn Pro Asp Ala Ile Asp
        325 330
Thr Lys Thr Thr Glu Arg Tyr Leu Asp Ala Ile Pro Val Asp Ala Val
       340
            345 350
Val Ser Ala Ala Arg Arg Tyr Leu Gln
<210> 7772
<211> 349
<212> PRT
<213> Enterobacter cloacae
<400> 7772
Arg His Leu Pro Ala Ile His Cys Phe Gly Arg Gln Pro Lys Ile Ile
                 10
Arg Phe His Met Gln Asn Ser Ala Pro Leu Leu Ser Val Val Val Ala
 20 25
Val Tyr Asn Gly Glu Ala Phe Leu Asp Gln Phe Phe Thr Cys Leu Val
35 40
Asn Gln His Ile Asp Ser Met Glu Val Ile Ile Val Asn Asp Gly Ser
50 55
Thr Asp Arg Ser Met Gln Ile Val Glu Lys Trp Arg Glu Lys Leu Pro
              70
                            75
Gln Met Gln Val Ile Glu Gln Pro Asn Gln Gly Val Ser Ile Ala Arg
           85
                          90
Asn Thr Gly Leu Ala Val Ala Thr Gly Gln Tyr Leu Ser Phe Pro Asp
      100 105 110
Ile Asp Asp Val Phe Lys Pro Gly Met Tyr Gln Arg Leu Leu Asp Met
115 120 125
Ala Val Thr Gln Asn Leu Asp Val Ala Thr Cys Asn Gly Asn Tyr Val
130 135
                               140
Trp Glu Asn Asn Lys Lys Pro Ser Arg Pro Ile Phe Pro Glu Val Lys
145 150 155 160
Leu Ala Ser Thr Gly Val Met Asn Gly Ala Val Trp Leu Lys Lys Ala
         165 170 175
Leu Asp Ser Arg Lys Phe Leu His Val Thr Trp Leu Asn Ile Tyr Arg
180 185 190
His Asp Phe Ile Arg Gln His Gly Phe Arg Phe Glu Pro Gly Leu Arg
     195 200 205
His Gln Asp Ile Pro Trp Thr Thr Glu Val Leu Leu Ala Ala Glu Arg
 210 215
                                220
Val Gln Tyr Thr Ser Glu Arg Phe Tyr Asp Tyr Tyr Ile His Ser Ala
              230 235
Ser Val Ser His Thr Pro Asp Asn Asp Asp Thr Leu Ile Arg Ser Ala
            245
                           250
Arg His Tyr Met Lys Ile Leu Lys Met Leu Asp Ala Ile Asn Gln Arg
            265
Tyr Pro Asp Lys Val Lys Asn Ile Pro Ala Cys His Trp Gln Ile Ala
     275
                    280
                                    285
Lys Glu Gly Leu Gly Ile Ile His Thr Phe Asp Asn Met Lys Asp Glu
                 295
                                 300
Ala Lys Lys Ala Met Ile Ile Lys Glu Phe Phe Asp Thr Gly Ile Trp
              310
                              315
                                          320
Lys Leu Ile Trp Lys Ser Ala Lys Ser Pro Arg Leu Arg Trp Arg Leu
           325 330
                                          335
Gly Arg Arg Tyr Phe Arg Leu Lys Arg Tyr Leu Ala
        340
                        345
```

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<210> 7773
<211> 437
<212> PRT
<213> Enterobacter cloacae
<400> 7773
Asn Phe Pro Ala Glu Thr Lys Lys Thr Asp Asn Arg Leu Glu Leu Leu
                          10
Tyr Thr Ala Leu Leu Tyr Ile Ile Gln Pro Leu Val Trp Leu Arg Leu
      20
                        25
Leu Leu Arg Ser Arg Lys Ala Pro Ala Tyr Arg Lys Arg Trp Ala Glu
   35
               40
Arg Tyr Gly Tyr Cys Arg Asn Lys Val Ala Pro Asp Gly Ile Leu Leu
             55
                      60
His Ser Val Ser Val Gly Glu Thr Leu Ala Ala Ile Pro Leu Val Arg
65 70 75 80
Ala Leu Arg His Arg Tyr Pro Ser Leu Pro Ile Thr Val Thr Thr Met
                90
           85
Thr Pro Thr Gly Ser Glu Arg Val Met Ser Ala Phe Gly Lys Asp Val
   100 105
His His Val Tyr Leu Pro Tyr Asp Leu Pro Cys Ala Met Asn Arg Phe
115 120 125
Leu Asn Thr Val Arg Pro Lys Leu Val Ile Val Met Glu Thr Glu Leu
130 135 140
Trp Pro Asn Met Ile Ser Ala Leu His Ala Arg Lys Ile Pro Leu Val
145 150 155 160
Ile Ala Asn Ala Arg Leu Ser Glu Arg Ser Ala Lys Gly Tyr Gly Lys 165 \\ 170 \\ 175
Leu Gly Lys Phe Met Arg Arg Leu Leu Ser Lys Ile Thr Leu Ile Ala
       180 185 190
Ala Gln Asn Glu Glu Asp Ala Ala Arg Phe Ile Ala Leu Gly Leu Lys
195 200 205
Arg Asn Gln Leu Ala Val Thr Gly Ser Leu Lys Phe Asp Ile Ser Val
210 215 220
Thr Pro Glu Leu Ala Ala Arg Ala Val Thr Leu Arg Arg Gln Trp Ala
225 230 235
Pro Arg Arg Gln Val Trp Ile Ala Thr Ser Thr His Asp Gly Glu Glu
           245
                          250 255
Ala Ile Ile Leu Gln Ala His Arg Gln Leu Leu Glu Lys Phe Pro Asp
        260 265 270
Leu Leu Leu Ile Leu Val Pro Arg His Pro Glu Arg Phe Lys Asp Ala
     275 280 285
Arg Glu Met Val Gln Lys Gly Gly Phe Ser Phe Thr Leu Arg Ser Ser
                295
                                 300
Gly Glu Ile Pro Ser Gly Ser Thr Gln Val Val Ile Gly Asp Thr Met
              310
                              315
Gly Glu Leu Met Leu Leu Tyr Gly Ile Ala Asp Leu Ala Phe Val Gly
       325
                           330 335
Gly Ser Leu Val Glu Arg Gly Gly His Asn Pro Leu Glu Pro Ala Ala
        340
                       345
                                      350
His Ala Ile Pro Val Leu Met Gly Pro His Thr Phe Asn Phe Lys Asp
     355
                    360
                                   365
Ile Cys Ala Lys Leu Gln Gln Ala Asp Gly Leu Ile Thr Val Thr Asp
  370 375
                                 380
Ala Asp Ser Val Val Lys Glu Val Ser Thr Leu Leu Thr Asp Glu Asp
              390
                              395 400
Tyr Arg Leu Trp Tyr Gly Arg His Ala Val Glu Val Leu His Gln Asn
           405 410
Gln Gly Ala Leu Thr Arg Leu Leu Gln Leu Leu Gln Pro Tyr Leu Pro
```

430

420

Gln Arg Ser His

<210> 7774 <211> 407

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<212> PRT
<213> Enterobacter cloacae
<400> 7774
His Thr Asp Ser Asp Met Pro Gln Lys Arg Lys Ile Leu Leu Leu Asp
1
                     10
Thr Gly Lys Glu Trp Gly Gly Gly Thr Asn Ser Met Leu Glu Leu Leu
        20
             25
                                      3.0
Lys Arg Ile Asn Arg Glu Lys Phe Asp Ile Thr Cys Cys Phe Tyr Ser
 35 40
                                  4.5
Asp Tyr Ser Arg Ala Glu Gly Glu Thr Ile Gly Gln Val Leu Asn Ser
 50 55
                               60
Ile Gly Ile Pro Leu Leu Val Ile Pro Gln Arg Lys Gln Pro Ala Trp
     70
                    7.5
Ala Lys Leu Leu Lys Glu Ala Gly Arg Gly Leu Leu Phe Phe Ser Arg
85 90 95
Ser Ala Arg Lys Ala Phe Thr Arg His Ile Asp Thr Leu Trp Arg Ile
 100 105 110
Arg Pro Asn Val Ser Lys Ile Glu Thr Ile Phe Arg Glu Gly Gly Phe
115 120 125
Asp Thr Leu Tyr Met Asn Asn Gin Pro Gly Ser Asn Glu Glu Gly Tyr
130 135 140
Leu Ala Gly Ala Asn Leu His Ala Arg Ile Ile Gln His Cys Arg Ile
145 150 155
Glu Pro Val Leu Thr Pro Pro Leu Val Lys Leu Val Asn Thr His Ala
          165 170 175
Thr Lys Ile Ile Ala Val Ser His Gly Val Glu Arg Val Leu Leu Gln
        180
                     185
                                    190
His Gly Val Arg Pro Ala Leu Cys Thr Thr Val Asn Asn Ala Ile Asp
195 200 205
Ile His Gln Pro Leu Pro Asp Arg Arg Ala Met Arg Gln Arg Leu Asn
 210 215
                                220
Ile Asp Asp Asp Thr Phe Val Phe Gly Ser Val Gly Ser Leu Ile Pro
225 230 235
Arg Lys Ala Asn His His Thr Leu Glu Ala Leu Ala Gln Phe Asn Gln
           245
                          250 255
Arg His Pro Gln Ala Lys Trp Lys Met Val Leu Val Gly Glu Gly Ala
        260 265
                                      270
Glu Arg Gly Ala Leu Thr Ala Gln Ala Asp Ala Leu Gly Ile Ala Glu
     275 280 285
His Val Ile Phe Thr Gly Phe Glr Asn Thr Pro Phe Asp Tyr Leu Ala
  290
                 295
                                300
Thr Phe Asp Ala Phe Ile Leu Ala Ser Lys Ser Glu Gly Leu Pro Arg
305 310
                             315
Val Val Leu Glu Ala Met Leu Leu Asn Ile Pro Val Ile Gly Ser Lys
           325 330
Val Thr Gly Thr Ala Glu Leu Ile Asp His Glu Ser Thr Gly Leu Leu
                                      350
        340
                       345
Phe Pro Trp Ser Asp Val Ser Gln Leu Ala Gln His Leu Asp Asn Ile
     355
                    360
                                   365
Trp Gln Asp Pro Ala Leu Arg Ala Arg Leu Ala Ala Ala His Gln
                 375 380
Asn Val Cys Asn Met Tyr Ala Ile Glu Ser Tyr Val Asn Gly Val Glu
      390
                             395
Ala Val Leu Gly Ala Gln
```

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<210> 7775
<211> 325
<212> PRT
<213> Enterobacter cloacae
<400> 7775
Arg Ser Gly Tyr Ser Pro Thr His Thr Ser Lys Val Thr Val Met Ile
                            1.0
Ile Val Thr Gly Gly Ala Gly Phe Ile Gly Ser Asn Ile Val Lys Ala
       20
                        25
                                         3.0
Leu Asn Asp Lys Gly Ile Thr Asp Ile Leu Val Val Asp Asn Leu Lys
 35
                   4.0
                                     4.5
Asp Gly Thr Lys Phe Val Asn Leu Val Asp Leu Asn Ile Ala Asp Tyr
5.0
      55
                       60
Met Asp Lys Glu Asp Phe Leu Ile Gln Ile Met Ala Gly Glu Glu Phe
               70 75
Gly Glu Ile Glu Ala Ile Phe His Glu Gly Ala Cys Ser Ser Thr Thr
            8.5
                            90
Glu Trp Asp Gly Lys Tyr Met Met Asp Asn Asn Tyr Gln Tyr Ser Lys
        100
             105 110
Glu Leu Leu His Tyr Cys Leu Glu Arg Glu Ile Pro Phe Leu Tyr Ala
115 120 125
Ser Ser Ala Ala Thr Tyr Gly Gly Arg Thr Ser Asp Phe Ile Glu Ser
                135
                                  140
Arg Glu Tyr Glu Gln Pro Leu Asn Val Tyr Gly Tyr Ser Lys Phe Leu
               150
                               155
Phe Asp Glu Tyr Val Arg Gln Ile Leu Pro Glu Ala Asn Ser Gln Ile
                           170
          165
                                             175
Val Gly Phe Arg Tyr Phe Asn Val Tyr Gly Pro Arg Glu Gly His Lys
    180 185 190
Gly Ser Met Ala Ser Val Ala Phe His Leu Asn Thr Gln Leu Asn Asn
   195
                     200
                                    205
Gly Glu Ser Pro Lys Leu Phe Glu Gly Ser Asp Gly Phe Lys Arg Asp
210 215
                                   220
Phe Val Tyr Val Gly Asp Val Ala Ala Val Asn Leu Trp Phe Leu Glu
              230
                              235
Asn Gly Val Ser Gly Ile Phe Asn Leu Gly Thr Gly Arg Ala Glu Ser
            245 250 255
Phe Gln Ala Val Ala Asp Ala Thr Leu Ala Tyr His Lys Lys Gly Ser
         260
                       265
                                          270
Ile Glu Tyr Ile Pro Phe Pro Asp Lys Leu Lys Gly Arg Tyr Gln Ala
     275
                      280
Phe Thr Gln Ala Asp Leu Thr Asn Leu Arg Ala Ala Gly Tyr Asp Lys
                295
                                  300
Pro Phe Lys Thr Val Ala Glu Gly Val Thr Glu Tyr Met Ala Trp Leu
               310
                                315
                                                320
Asn Arg Asp Ala
<210> 7776
<211> 406
<212> PRT
<213> Enterobacter cloacae
<400> 7776
Gly Ile Met Glu Lys Ile Lys Pro Arg Leu Tyr Gln Leu Thr Ile Ala
                            10
Leu Ser Leu Ile Ser Leu Ile Leu Ala Leu Val Ser Ser Gly Lys Gln
      20
                         25
                                          30
Arg Glu Phe Phe Tyr Ile Ala Ile Tyr Val Ser Ile Ile Gly Leu Ala
      35
                      4.0
```

```
Phe Glu Tyr Lys Lys Ile Thr Leu Arg Pro Phe Thr Ile Ala Leu Pro
Ile Leu Leu Ile Gly Leu Leu Asn Leu Gly Trp Tyr Leu Leu Tyr Glu
               70
                               75
Tyr His Asn Glu Gly Leu Asn Leu Tyr Ser Asp Tyr Leu Gly Ala Ser
            85
                            90
Lys Lys Leu Ile Leu Ala Ser Val Leu Ile Phe Tyr Ile Asp Arg Phe
      100 105
                                      110
Lys Phe Tyr Ile Asp Lys Asp Thr Phe Arg Lys Phe Phe Phe Ala
 115 120 125
Thr Ala Leu Gly Phe Val Leu Ala Thr Gly Tyr Gly Leu Trp Gln Ala
 130 135 140
Ser Gln Gly Met Thr Arg Val Glu Met Ala Ile Asn Arg Ala Thr Val
145 150 155 160
Ser Ala Tyr Val Tyr Ser Val Leu Ser Leu Ala Phe Val Tyr Ser Leu 165 170 175
Tyr Leu Gln Gln Asn Val Lys Leu Tyr Val Val Ala Gly Phe Thr Ile
180 185 190
Leu Ile Ser Tyr Phe Val Ile Leu Leu Thr Gly Thr Arg Ala Ala Met
195 200 205
Gly Leu Tyr Leu Leu Leu Ala Ile Val Leu Thr Leu Tyr His Phe Arg
210 215 220
Lys Ile His Leu Lys Ser Ala Leu Ile Phe Leu Cys Ile Val Ala Gly
225 230 235
Val Val Ile Val Ser Tyr Lys Pro Leu Ile Ser Ser Lys Ile Lys Gln 245 250 255
Thr Gln Arg Glu Val Glu Arg Tyr Gln Gln Gly Phe Asp Arg Thr Ser
         260
                       265 270
Leu Gly Ala Arg Phe Ser Met Trp Thr Val Gly Ile Glu Asn Gly Leu
275 280
                                    285
Ala His Pro Leu Gly Gln Ser Leu Glu Gln Arg Glu Ala Trp Thr Arg
290 295
                                  300
Gln Tyr Ile Lys Asp Gly His Pro His Leu Gly Ser Ala Leu Glu Tyr
               310 315 320
Ile Lys Val His Leu His Asn Glu Phe Ile Glu Lys Tyr Ser Leu Gln
            325 330 335
Gly Ile Pro Gly Val Thr Val Met Leu Phe Phe Phe Val Ser Met Ile
        340 345 350
Ala Tyr Ala Leu Arg Asn Arg Asn Ala Leu Leu Leu Thr Ser Met Leu
     355 360 365
Leu Leu Leu Tyr Gly Leu Thr Asp Val Ile Leu Leu Ser Ser Glu
370 375 380
Ala Leu Ile Phe Phe Met Ile Leu Phe Ala Leu Ser Thr Pro Phe Ser
385 390
                               395
Gln Thr Lys Gln Gln
```

<210> 7777 <211> 384 <212> PRT

<213> Enterobacter cloacae

405

<400> 7777

Lys Thr Ile Lys Ser Ala Tyr Phe Ala Leu Ser Lys Ile Thr Gly Leu Ile Met Arg Ile Leu Met Ile Ile Asp Gly Leu Pro Gly Gly Gly Ala 25 30 Glu Lys Thr Val Leu Thr Leu Ser Ser Gly Leu Thr Glu Leu Gly His 35 Gln Val Thr Leu Phe Ser Leu Arg Lys Val Cys Asp Tyr Ala Ile Pro 50 50

```
Glu Gly Ile Asp Phe Gln Ile Val Gln Asp Thr Cys Lys Lys Pro Trp
Arg Lys Leu Thr Glu Ile Pro Arg Arg Ala Arg Leu Leu Asp Arg Ala
           8.5
                           90
Ile Glu Asn Ala Glu Arg Ser Gly Lys Phe Asp Val Val Phe Ser His
                       105
        100
Leu His Lys Thr Asp Arg Ile Val Ala His Ser Arg Val Leu Asp Arg
     115 120
Asp Lys Val Trp Phe Cys Val His Gly Met Phe Ser Phe Ser Tyr Leu
 130 135 140
Arg His Arg Ser Gly Leu Ser Arg Trp Phe Lys His Tyr Lys Ile Arg
145 150 155
His Thr Tyr Glu Asn Arg Asn Val Val Ala Val Ser Gly Ala Val Leu
       165 170 175
His Asp Leu Ser Gln Val Leu Ala Ile Pro Leu Arg Arg Lys Ala Val
       180 185 190
Ile His Asn Pro Phe Asp Ile Pro Glu Ile Gln Arg Leu Ala Glu Ala
                    200 205
Pro Phe Glu Met Gln Gly Gln Asp Tyr Ile Ile His Val Gly Arg Phe
                 215 220
 210
His Glu His Lys Arg His Asp Arg Leu Leu Arg Ala Phe Ala Leu Ser
225 230 235
Lys Ile Asp Ala Ser Leu Val Leu Met Gly Lys Gly Ser Asp Ala Lys
           245 250 255
Ile Asn Gln Leu Lys Gln Leu Ala Ala Lys Leu Gly Ile Glu Asn Lys
        260 265 270
Ile Val Phe Arg Pro Phe Glu Thr Asn Pro Tyr Pro Trp Ile Lys Gly
   275 280 285
Ala Arg Leu Leu Val Leu Ser Ser Asp Cys Glu Gly Phe Gly Asn Val
 290
               295
                                300
Leu Val Glu Ser Ile Ile Cys Gln Thr Pro Pro Val Ser Thr Asn Cys
305 310 315 320
Pro Gly Gly Pro Ala Glu Ile Leu Thr Gly Pro Leu Ala Arg Gly Leu
                          330 335
            325
Thr Ala Leu Thr Asp Glu Ser Leu Ala Lys Thr Leu Ala Glu Leu Tyr
                       345 350
        340
Ala Ser Pro Pro Val Val Asp Arg Glu Thr Ile Ala Ser Phe Gly Ile
 355
                    360 365
Asn Ala Ile Cys Gln Gln Tyr Ile Ala Leu Val Asp Asn Gln Lys
                 375
  370
```

```
<210> 7778
<211> 192
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<212> PRT <213> Enterobacter cloacae

<400> 7778

Met Pro Leu Met Asn Ser Pro Leu Lys Met Thr Leu Phe Gln Ser Met 15 1.0 Asp Ile Ser Asp Gly Gly Ile Pro Ser Ile Ala Ile Arg Pro Pro Trp 20 25 Phe Met Val Ser Ser Met Val Arg Asn Ala Gly Gly Ala Pro Asp Ile 40 35 Ser Arg Pro Thr Ser Lys Pro Ser Val Met Pro Ser Ser Ser Ile Thr 55 60 Ser Val Arg Leu Ser Phe Glu Thr Ser Thr Ala Arg Val Thr Pro Ile 75 70 Leu Arg Ala Ser Asp Arg Arg Tyr Ser Phe Thr Ser Val Ile Thr Thr 8.5 90 Leu Arg Ala Pro Thr Cys Phe Ala Thr Ala Ala Ala Ile Ile Pro Met 100 105 110

<212> PRT

Gly Pro Ala Pro Glu Thr Ser Thr Ser Ser Pro Thr Arg Ser Lys Glu 125 120 115 Ser Ala Val Cys Thr Ala Leu Pro Asn Gly Ser Lys Met Glu Ala Arg 135 140 Ser Ser Glu Ile Leu Ser Gly Ile Leu Asn Ala Leu Asn Ala Gly Ile 145 150 155 160 Thr Arg Tyr Ser Ala Lys Gln Pro Gly Arg Phe Thr Pro Thr Pro Thr 165 170 175 Val Leu Arg His Arg Trp Val Arg Pro Pro Arg Gln Leu Arg Gln 185 <210> 7779 <211> 310 <212> PRT <213> Enterobacter cloacae <400> 7779 Arg Tyr Arg Arg Ser Arg Lys Leu Ile Phe Met Ala Phe Leu Ser Val Ile Ile Ala Ala His Asn Ala Glu Ala Thr Leu His Ala Thr Leu Ser 30 25 20 Ser Leu Leu Ala Ala Ile Gly Gln Asp Thr Glu Val Ile Ile Phe Asn 40 45 Asp Asn Ser Glu Asp Ala Thr Gln Ala Ile Ile Glu Glu Trp Ser Pro 55 Lys Phe Pro Gln Ile Ile Thr Arg Thr Val Asn Phe Arg Asn Val Gly 7.0 75 Arg Val Arg Asn Ser Ala Val Ala Leu Ala Ser Gly Glu Tyr Ile Thr 8.5 90 Met Leu Asp Ser Asp Asp Cys Leu Lys Pro Gly Ser Leu Gly Asp Ala 105 110 100 Ile Ala Phe Leu Lys Ala Gln Arg Pro Asp Met Leu Leu Thr Arg Leu 115 120 Leu Glu Ile Arg Asp Pro Arg Lys Met Thr Ser Asp Trp Gln Gly Phe 135 Asn Pro Val Pro Leu Pro Arg Asn Glu Ala Val Ala Arg Phe Leu Arg 150 155 160 145 His Lys Asp Phe Gln Ala His Leu Ile Gly Gln Phe Ile His Arg Ser 165 170 175 Leu Tyr Glu Ser Asn Pro Ile Pro Pro Met Leu Cys Tyr Glu Asp Phe 185 180 Ala Val Phe Pro Gly Met Leu Met Gln Ser Asn Lys Ile Val Tyr Gln 200 205 195 Arg Gln Gly His Tyr Tyr Tyr Ile Lys Arg Arg Asp Ser Leu Ser Ser 215 220 210 Thr Leu Asp Ala Ser Lys Ile Ser Thr Leu Val Glu Cys Thr Leu Gln 230 235 Met Glu Arg Thr Phe Pro Ser Ser Tyr Lys His Leu Val Asn Cys His 250 255 245 Trp Phe Asp Ile Tyr Ser Asn His Arg Ser Cys Leu Thr Asp Gln Gln 265 270 260 Leu Gln Leu Val Lys Gln Arg Val Lys Ala Met Tyr Thr Leu Ser Phe 280 285 275 Phe Leu Ser Thr Asp Val Arg Phe Ser Tyr Lys Lys Arg Val Ile Glu 300 290 295 Ala Leu Trp Lys Lys <210> 7780 <211> 387

<213> Enterobacter cloacae

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<400> 7780
Cys Cys Arg Leu Arg Arg Lys Glu Ile Pro Ala Met Lys Leu His Arg
                                   1.0
Leu Ala Ile Val Arg Gln Lys Tyr Arg Pro Asp Gly Gly Ala Glu Arg
                              25
           20
Phe Val Ser Arg Ala Leu Thr Ala Leu Ser Asn Gln Asn Leu Glu Leu
                                               4.5
                        40
Asn Val Ile Thr Arg Glu Trp Gln Gly Glu Lys Gln Asp Asp Trp His
                      55
                                          60
Ile His Ile Cys Asp Pro Arg Lys Trp Gly Arg Ile Ser Arg Glu Arg
                   7.0
                                       75
Gly Phe Ala His Ala Ala Arg Ala Leu Trp Gln Gln Gln Phe Asp
                                  90
               85
Ile Val Gln Ser His Glu Arg Ile Pro Gly Cys Asp Ile Tyr Arg Ala
                               105
           100
Gly Asp Gly Val His Arg Arg Trp Leu Leu Gln Arg Thr Arg Ile Leu
                           120
                                               125
        115
Pro Ala Trp Arg Ala Lys Leu Leu Met His Asp Arg Tyr His Arg Tyr
                       135
   130
                                           140
Val Met Asn Ala Glu Arg Glu Met Tyr Gln Ala Pro Glu Leu Lys Ala
                   150
                                       155
Val Ile Cys Asn Ala Glu Met Ile Lys Arg Glu Ile Val Glu Asp Phe
                                   170
                165
Asp Ile Asp Ala Lys Lys Ile His Val Ile Tyr Asn Ser Ile Asp Ser
                                185
            180
Ser Arg Phe Val Pro Ala Glu Glu Arg Gln Arg Ala Val Leu Arg Gln
                           200
                                               205
        195
Gln Phe Gly Leu Pro Ala Asp Ala Val Ile Phe Cys Phe Val Gly Ser
                                            220
Gly Phe Glu Arg Lys Gly Leu Ala Ser Ala Ile Arg Ala Ile Ala Gly
                                       235
225
                    230
Thr Ser Ala Trp Leu Val Val Gly Gln Asp Lys Ala Glu Ser Arg
                                    250
                                                       255
                245
Tyr Arg Asp Leu Ala Arg Ser Leu Gly Cys Glu Gly Gln Ile Arg Phe
                                265
            260
Leu Glv Met Gln Lys Glu Thr Leu Pro Phe Tyr Gln Leu Ser Asp Gly
                            280
                                                285
Leu Leu Leu Pro Thr Leu Tyr Asp Pro Pne Pro Asn Val Ile Leu Glu
                                           300
    290
                        295
Ala Met Ala Cys Gly Leu Pro Val Ile Thr Ser Glu Ser Cys Gly Gly
                                        315
                    310
Ser Glu Phe Ile Glu Gln Gly Gln Asn Gly Phe Tyr Cys Asp Ala Leu
                                    330
Asp Ile His Thr Leu Lys Glu Ala Val Met Ser Ile Pro Ser Leu Glu
                                                    350
                                345
            340
Lys Asn Asn Asn Met Gly Leu Ala Ala Arg Glu Arg Val Arg Glu Ala
                                                365
                            360
Thr Pro Glu Lys Leu Ser Ser Gln Leu Ile Ser Leu Tyr Gln Lys Leu
                                            380
    370
Leu Asp
385
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<210> 7781 <211> 283 <212> PRT <213> Enterobacter cloacae

<400> 7781

Ser Pro Ala Ser Glu Pro Gly Arg Thr Asp Pro Ser Ala Ala Thr Ser

```
Ala Thr Leu Ser Ala Ala Ala Glu Pro Leu Met Ser Thr Arg Leu Ser
      20
                        25
Val Val Met Ile Ala Lys Asn Ala Ala Asp Leu Leu Pro Asp Cys Leu
   35
                40
Ala Ser Val Ala Trp Ala Asp Glu Ile Val Ile Leu Asp Ser Gly Ser
               55
Thr Asp Asn Thr Ala Asp Val Ala Arg Ala Ala Gly Ala Lys Val Phe
                   75
      70
Thr Asp Thr Asp Trp Gln Gly Tyr Gly Ile Gln Arg Gln Arg Ala Gln
               90
          8.5
Gly Tyr Ala Thr Gly Asp Tyr Val Leu Met Ile Asp Thr Asp Glu Arg
        100 105 110
Val Thr Pro Glu Leu Arg Gln Ala Ile Gln Thr Val Leu Ala Ala Pro
     115 120 125
Gin Pro Gly Ala Val Tyr Ser Ile Ala Arg Arg Asn Tyr Phe Leu Gly
                135 140
Arg Phe Met Arg His Ser Gly Trp Tyr Pro Asp Arg Val Met Arg Leu
      150 155
Tyr Ala Arg Glu Arg Tyr Gln Tyr Asn Asp Asn Leu Val His Glu Ser
                 170
           165
Leu Ala Cys Asp Asn Ala Gln Val Ile Pro Leu Thr Gly Asp Leu Leu
        180
             185
His Leu Thr Cys Arg Asp Phe Ala Ser Phe Gln Arg Lys Gln Leu Asn
      195
           200 205
Tyr Ala Thr Ala Trp Ala Gln Glu Arg His Ala Arg Gly Lys Lys Ala
210
                215
                       220
Thr Leu Thr Gly Ile Phe Thr His Thr Leu Gly Ala Phe Leu Lys Thr
               230
                             235
Leu Leu Leu Arg Gly Gly Val Leu Asp Gly Lys Gln Gly Trp Leu Leu
           245 250
Ala Val Val Asn Ala Gln Tyr Thr Phe Asn Lys Tyr Thr Glu Leu Trp
             265
         260
Ala Leu Asn Arg Gly Tyr Ser Glu Lys Thr
```

<210> 7782 <211> 161 <212> PRT

<213> Enterobacter cloacae

<400> 7782 Ala Met Ser Thr Lys Ala Ile Tyr Pro Gly Thr Phe Asp Pro Ile Thr 1.0 Asn Gly His Ile Asp Ile Ile Thr Arg Ala Ala Cys Met Phe Asp Lys 25 Val Ile Met Thr Ile Ser Ala Ser Pro Ser Lys Lys Pro Met Phe Asp 40 35 Leu Asn Glu Arg Val Gln Leu Ala Thr Asp Ala Ile Ser His Leu Ser 60 55 Asn Val Glu Val Val Gly Phe Ser Asp Leu Met Ala Asn Phe Ala Arg 75 Asp Arg His Ala Asn Ile Leu Ile Arg Gly Leu Arg Ala Val Ala Asp 90 8.5 Phe Glu Tyr Glu Met Gln Leu Ala His Met Asn Arg His Leu Met Pro 105 100 Glu Leu Glu Ser Val Phe Leu Met Pro Ser Lys Glu Trp Ser Phe Ile 125 120 115 Ser Ser Ser Leu Val Lys Glu Val Ala Arg His His Gly Asp Val Thr 135 140

His Phe Leu Pro Val Asn Val His Gln Ala Leu Met Glu Lys Leu Lys

155

160

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<210> 7783
<211> 134
<212> PRT
<213> Enterobacter cloacae
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<400> 7783 Ser Val Asn Arg Gln Arg Gly Met Ser Ser Leu Ala Leu Val Leu Leu 10 Leu Leu Val Leu Gly Thr Leu Ile Leu Thr Gly Leu Asn Gln Gln Leu 2.0 25 3.0 Gln Thr Phe Ser Thr Leu Val Ser Gly Glu Ser Leu Ser Val Arg Gln 35 40 45 Gln Ala Ala Val Gln Ser Ala Leu Glu Trp Gly Arg Val Gin Glu Trp 60 50 55 Ala Leu Gln Pro Glu Val Gln Cys Lys Gln Thr Gln Arg Leu Arg Val 70 7.5 Cys Val Arg Leu Phe Gly Glu Arg Val Leu Leu Ile Ala Gly Asn Asp 8.5 90 Asp Leu Leu Trp Gln Gly Gly Asp Ile Ala Glu Gly Gln Ile Arg 105 110 100

100 105 105 110 110 Phe Ser Ala HIs Gly Trp Ser Asp Phe Cys Pro Leu Lys Glu Ser Thr 115 120 125

Leu Cys Gln Leu Pro

130

100

1.2

TU

1.5

10

1.13

: 3

14

6

e de

13

<210> 7784

<211> 969 <212> PRT

<213> Enterobacter cloacae

195

<400> 7784

Cys Ser Arg Asp Lys Glu Val Val Met Pro Gly Ser Thr Leu Phe Lys 1.0 Ala Phe Val Leu Phe Ile Ala Leu Trp Ala Pro Val Thr Gln Ala Asp 25 30 Ser Gly Trp Gln Pro Val Lys Glu Thr Ile Arg Lys Ser Asp Lys Asp 45 35 40 Thr Arg Gln Tyr Gln Ala Ile Arg Leu Asp Asn Gly Met Thr Val Leu 55 50 Leu Val Ser Asp Pro Gln Ala Val Lys Ser Leu Ser Ala Leu Val Val 75 7.0 Pro Val Gly Ser Leu Glu Asp Pro Asp Ala His Pro Gly Leu Ala His 90 Tyr Leu Glu His Met Thr Leu Met Gly Ser Lys Lys Tyr Pro Gln Pro 100 105 Asp Ser Leu Ser Glu Phe Leu Lys Met His Gly Gly Ser His Asn Ala 120 125 115 Ser Thr Ala Pro Tyr Arg Thr Ala Phe Tyr Leu Glu Val Glu Asn Asp 130 135 140 Ala Leu Asp Gly Ala Val Asp Arg Leu Ala Asp Ala Ile Ala Ala Pro 150 155 Leu Leu Asp Lys Lys Tyr Ala Asp Arg Glu Arg Asn Ala Val Asn Ala 165 170 Glu Leu Thr Met Ala Arg Thr Arg Asp Gly Met Arg Met Ala Gln Val 180 185 190 Ser Ala Glu Thr Ile Asn Pro Ala His Pro Gly Ser Arg Phe Ser Gly

200

Gly Asn Leu Glu Thr Leu Ser Asp Lys Pro Gly Ser Pro Val Leu Asp 215 220 Ala Leu His Ala Phe Arg Glu Lys Tyr Tyr Ser Ala Asn Leu Met Lys 230 235 Ala Val Ile Tyr Ser Asn Lys Pro Leu Pro Thr Leu Ala Asn Met Ala 245 250 255 Ala Gln Thr Tyr Gly Arg Val Pro Asn Lys Asn Ile Asp Leu Pro Gln 260 265 270 Ile Asn Val Pro Val Val Thr Asp Ala Gln Lys Gly Ile Val Ile His 275 280 285 Tyr Val Pro Ala Leu Pro Arg Lys Val Leu Arg Val Glu Phe Arg Ile 290 295 300 Asp Asn Asn Thr Ala Gln Phe Arg Ser Lys Thr Asp Glu Leu Val Thr 305 310 315 320 Tyr Leu Ile Gly Asn Arg Ser Pro Gly Thr Leu Ser Asp Trp Leu Gln 325 330 335 Lys Gln Gly Leu Val Glu Gly Ile Arg Ala Asp Ser Asp Pro Val Val 340 345 350 Asn Gly Asn Ser Gly Val Leu Ala Ile Ser Ala Thr Leu Thr Asp Lys 355 360 Gly Leu Ala His Arg Asn Asp Val Val Ala Ala Ile Phe Ser Tyr Leu 370 375 380 Ser Leu Leu Arg Asp Lys Gly Val Asp Lys Arg Tyr Phe Asp Glu Leu 390 395 Ala His Val Leu Asp Leu Asp Phe Arg Tyr Pro Ser Ile Thr Arg Asp 410 415 405 Met Asp Tvr Val Glu Trp Leu Ala Asp Thr Met Ile Arg Val Pro Val 420 425 430 Glu His Thr Leu Asp Ala Val Asn Ile Ala Asp Gln Phe Asp Ala Gly 440 445 435 Ala Leu Lys Ala Arg Leu Ala Met Met Thr Pro Gln Asn Ala Arg Val 455 460 Trp Tyr Ile Ser Pro Asn Glu Pro His Asn Lys Met Ala Tyr Phe Val 470 475 Asp Ala Pro Tyr Gln Val Glu Lys Ile Ser Glu Gln Thr Phe Ala Gly 485 490 495 Trp Gln Lys Lys Ala Gly Glu Ile Ala Leu Lys Leu Pro Glu Leu Asn 500 505 510 Pro Tyr Ile Pro Asp Asp Pne Ser Leu Ile Lys Pro Ala Lys Ala Tyr 525 515 520 Pro His Pro Glu Leu Ile Val Asp Glu Pro Thr Leu Arg Val Val Tyr 535 540 530 Thr Pro Ser Arg Tyr Phe Ala Asp Glu Pro Lys Ala Asp Val Ser Val 550 555 Val Leu Arg Asn Pro Lys Ala Met Asp Ser Ala Arg Asn Gln Val Leu 565 570 Phe Ala Leu Asn Asp Tyr Leu Ala Gly Ile Ala Leu Asp Gln Leu Ser 585 590 580 Asn Gln Ala Ala Val Gly Gly Ile Ser Phe Ser Thr Asn Ala Asn Asn 600 605 595 Gly Leu Met Val Asn Ala Asn Gly Tyr Thr Gln Arg Leu Pro Gln Leu 615 620 610 Phe Gln Ala Leu Leu Asp Gly Tyr Phe Ser Tyr Thr Pro Thr Glu Glu 630 635 Gln Leu Glu Gln Ala Lys Ser Trp Tyr Ala Gln Met Met Asp Ser Ala 645 650 655 Glu Lys Gly Lys Ala Tyr Asp Gln Ala Ile Met Pro Ala Gln Met Leu 665 670 660 Ser Gln Ile Pro Tyr Phe Gln Arg Glu Asp Arg Arg Ala Ile Leu Pro 685 680 Ser Val Thr Leu Lys Glu Val Leu Ala Tyr Arg Asp Ala Leu Lys Thr

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695
Asn Thr Arg Pro Glu Phe Leu Val Val Gly Asn Met Ser Glu Asp Gln
                             715
         710
Ala Lys Thr Leu Ala Gln Asn Val Arg Ala Gln Leu Gly Ser Lys Gly
           725
                          730
Asp Glu Trp Cys Arg Asn Gln Asp Val Leu Val Glu Lys Lys Gln Asn
        740
                       745
Val Ile Phe Glu Lys Ala Gly Ser Ser Thr Asp Ser Ala Leu Ala Ala
   755 760
                           765
Val Phe Val Pro Val Gly Tyr Asp Glu Phe Thr Ser Ser Ala Gln Ser
                 775 780
Ala Val Leu Gly Gln Ile Ile Gln Pro Trp Phe Tyr Asn Gln Leu Arg
                             795
      790
Thr Glu Glu Gln Leu Gly Tyr Ala Val Phe Ala Phe Ser Met Asn Val
          805 810 815
Gly Arg Gln Trp Gly Leu Gly Phe Leu Leu Gln Ser Ser Asp Lys Gln
        820 825 830
Pro Ala Tyr Leu Trp Gln Arg Tyr Gln Ala Phe Phe Pro Gln Ala Glu
     835 840 845
Ala Lys Leu Arg Ala Met Lys Pro Glu Glu Phe Ala Gln Ile Gln Gln
 850 855 860
Ala Val Ile Ala Gln Val Met Gln Pro Pro Gln Thr Leu Gly Glu Glu
865 870 875
Ala Ser Gln Leu Ser Lys Asp Phe Asp Arg Gly Asn Met Lys Phe Asp
          885 890 895
Ser Arg Asp Lys Ile Val Ala Glu Ile Lys Gln Leu Thr Pro Gln Lys
            905 910
        900
Val Ala Asp Phe Phe His Gln Ala Val Val Lys Pro Gln Gly Met Ala
                    920 925
Ile Leu Ser Gln Val Ser Gly Ser Gln Asn Gly Lys Thr Asp Tyr Val
              935 940
 930
Lys Ser Lys Glu Trp Thr Val Trp Lys Ser Val Ser Ala Leu Gln Gln
945 950
                           955
Thr Met Pro Trp Ser Lys Lys Glu
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<210> 7785 <211> 446 <212> PRT

<213> Enterobacter cloacae

965

<400> 7785 Met Thr Val Tyr Ala Ser Phe Val Lys Val Phe Gly Gln Phe Gly Arg 10 Phe Val His Gln Ser Asp Phe Leu Leu Gly Arg Ser Met Ser Gly Ser 2.5 Asn Ser Ala Ile Ser Arg Arg Arg Leu Leu Lys Gly Ala Gly Ala Met 35 40 Trp Leu Leu Ser Val Ser Gln Val Gly Leu Ala Ala Thr Ser Gln Val 55 Val Ala Val Arg Val Trp Pro Ser Ser Thr Tyr Thr Arg Val Thr Val 70 7.5 Glu Ser Asn Arg Val Leu Lys Tyr Lys Gln Phe Ala Leu Ser Asn Pro 90 85 Glu Arg Val Val Val Asp Leu Glu Gly Val Asn Leu Asn Ser Val Leu 105 110 100 Lys Gly Met Ala Ala Gln Ile Arg Gly Asp Asp Pro Phe Ile Lys Ser 120 125 115 Ala Arg Val Gly Gln Phe Asp Pro Gln Thr Val Arg Met Val Phe Glu 140 135 Leu Lys Gln Asn Val Lys Pro Gln Leu Phe Ala Leu Ala Pro Val Ala

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155
Ala Phe Lys Glu Arg Leu Val Met Asp Leu Tyr Pro Ala Asn Ala Thr
                         170
          165
Asp Ile Gln Asp Pro Leu Leu Ala Leu Leu Glu Asp Tyr Asn Lys Gly
       180
                      185
                                    190
Asp Leu Asp Ser Gln Val Pro Pro Ala Gln Ser Gly Pro Lys Pro Gly
   195 200
                                  205
Lys Ala Gly Arg Asp Arg Pro Ile Val Ile Met Leu Asp Pro Gly His
 210 215
                          220
Gly Gly Glu Asp Ser Gly Ala Val Gly Lys Tyr Arg Thr Arg Glu Lys
     230 235
Asp Val Val Leu Gln Ile Ala Arg Arg Leu Lys Ala Leu Ile Asp Lys
         245 250
                                      255
Glu Gly Asn Met Arg Ala Tyr Met Thr Arg Asn Glu Asp Val Phe Ile
        260 265 270
Pro Leu Lys Val Arg Val Ala Lys Ala Gln Lys Gln Arg Ala Asp Leu
 275 280 285
Phe Val Ser Ile His Ala Asp Ala Phe Thr Ser Arg Gln Pro Ser Gly
 290 295 300
Ser Ser Val Phe Ala Leu Ser Thr Lys Gly Ala Thr Ser Thr Ala Ala
305 310 315
Arg Tyr Leu Ala Asp Thr Gln Asn Ala Ser Asp Leu Ile Gly Gly Val
      325 330 335
Ser Lys Ser Gly Asp Arg Tyr Val Asp His Thr Met Phe Asp Met Val
   340 345 350
Gln Ser Leu Thr Ile Thr Asp Ser Leu Lys Phe Gly Lys Ala Val Leu
355 360 365
Gly Lys Leu Gly Arg Val Asn Lys Leu His Lys Asn Ser Val Glu Gln
370 375 380
Ala Gly Phe Ala Val Leu Lys Ala Pro Asp Ile Pro Ser Ile Leu Val
   390 395 400
Glu Thr Ala Phe Ile Ser Asn Val Glu Glu Glu Arg Lys Leu Lys Thr
         405 410 415
Ala Lys Phe Gln Gln Glu Val Ala Glu Ser Ile Leu Ala Gly Ile Arg
     420 425 430
Ala Tyr Phe Ser Asp Gly Glu Thr Leu Ala Arg Arg Gly
```

<210> 7786 <211> 293

<212> PRT

<213> Enterobacter cloacae

<400> 7786 Gln Met Asn Ser Gly Tyr Leu His Phe Pro Glu Phe Asp Pro Val Ile 10 Phe Ser Ile Gly Pro Val Ala Leu His Trp Tyr Gly Leu Met Tyr Leu 20 25 Val Gly Phe Val Phe Ala Met Trp Leu Ala Gly Arg Arg Ala Ser Arg 40 Pro Gly Ser Gly Trp Thr Lys Asn Glu Val Glu Asn Leu Leu Tyr Ala 50 55 Gly Phe Leu Gly Val Phe Leu Gly Gly Arg Ile Gly Tyr Val Leu Phe 70 75 Tyr Asn Phe Pro Val Phe Leu Asn Asp Pro Leu Tyr Leu Phe Arg Val 85 90 Trp Asp Gly Gly Met Ser Phe His Gly Gly Leu Ile Gly Val Ile Leu 100 105 110 Val Met Val Ile Phe Ala Arg Arg Thr Lys Arg Asn Phe Phe Gln Val 115 120 Ala Asp Phe Ile Ala Pro Leu Ile Pro Phe Gly Leu Gly Ala Gly Arg

```
135
Leu Gly Asn Phe Ile Asn Gly Glu Leu Trp Gly Arg Val Asp Pro Ser
                               155
145
             150
Val Pro Phe Thr Met Leu Phe Pro Gly Ser Arg Ala Glu Asp Ile Ala
          165
                            170
Leu Leu Pro Ser His Pro Glu Trp Gln Ser Ile Phe Asp Thr Tyr Gly
      180
                        185
                                         190
Val Leu Pro Arg His Met Ser Gln Leu Tyr Glu Leu Ala Leu Glu Gly
 195 200
                                     205
Val Val Leu Phe Ile Ile Leu Asn Leu Tyr Ile Arg Lys Pro Arg Pro
 210 215
                                   220
Met Gly Ala Val Ser Gly Leu Phe Leu Ile Gly Tyr Gly Ala Phe Arg
                             235
225 230
Ile Ile Val Glu Phe Phe Arg Gln Pro Asp Ala Gln Phe Thr Gly Glu
          245 250 255
Trp Val Gln Tyr Ile Ser Met Gly Gln Ile Leu Ser Ile Pro Met Ile
       260 265 270
Val Ala Gly Ala Ile Met Met Ile Trp Ala Tyr Arg Arg Arg Pro Gln
    275 280
Gln Gln Leu Ser
   290
<210> 7787
<211> 267
<212> PRT
<213> Enterobacter cloacae
<400> 7787
Gly Ile Met Lys Gln Tyr Leu Glu Leu Met Lys Lys Val Leu Asp Glu
                    10
Gly Thr Pro Lys Asn Asp Arg Thr Gly Thr Gly Thr Leu Ser Ile Phe
       20
                         25
                                         30
Gly His Gln Met Arg Phe Asn Leu Gln Glu Gly Phe Pro Leu Val Thr
                4.0
                                      45
Thr Lys Arg Cys His Leu Arg Ser Ile Ile His Glu Leu Leu Trp Phe
 50 55
                                  60
Leu Gln Gly Asp Thr Asn Val Ala Tyr Leu His Glu Asn Asn Val Ser
               7.0
                             75
65
Ile Trp Asp Glu Trp Ala Asp Glu Asn Gly Asp Leu Gly Pro Val Tyr
            85 90 95
Gly Lys Gln Trp Arg Ala Trp Pro Thr Pro Asp Gly Arg His Ile Asp
         100 105
                                         110
Gln Ile Thr Thr Val Ile Asn Gln Leu Lys Asn Asp Pro Asp Ser Arg
      115 120 125
Arg Ile Ile Val Ser Ala Trp Asn Val Gly Glu Leu Asp Lys Met Ala
                   135 140
Leu Ala Pro Cys His Ala Phe Phe Gln Phe Tyr Val Ala Asp Gly Lys
                150 155
Leu Ser Cys Gln Leu Tyr Gln Arg Ser Cys Asp Val Phe Leu Gly Leu
165 170 175
Pro Phe Asn Ile Ala Ser Tyr Ala Leu Leu Val His Met Met Ala Gln
         180 185 190
Gln Cys Asp Leu Glu Val Gly Asp Phe Val Trp Thr Gly Gly Asp Thr
      195
                     200
                                      205
His Leu Tyr Ser Asn His Met Glu Gln Thr His Leu Gln Leu Thr Arg
                   215
                                   220
   210
Glu Pro Arg Ala Leu Pro Lys Leu Val Ile Lys Arg Lys Pro Asp Ser
             230 235 240
Ile Phe Asp Tyr Arg Phe Asp Asp Phe Glu Ile Glu Gly Tyr Asp Pro
             245
                   2.50
His Pro Gly Ile Lys Ala Pro Val Ala Ile
```

<210> 7788 <211> 193 <212> PRT <213> Enterobacter cloacae

<400> 7788

Cys Arg Arg Arg Cys Met Pro Val Asn Arg Lys Gly Phe Ser Leu 10 Leu Glu Val Leu Ile Ala Met Thr Ile Ser Ser Ile Leu Leu Ser 20 25 Thr Ser Arg Phe Leu Pro Gly Leu Gln Arg Gly Val Leu Leu Gln Ser 4.0 Gly Gln Gln Glu Leu Glu Asp Glu Val Trp Gln Arg Leu Phe Ala Val 5.5 60 Gly Lys Gln Phe Gln Arg Ala Gly Tyr Cys Ala Gly His Cys Gln Gly 7.0 75 Gln Gly Met Ile Ile Gly Arg Gln Gly Arg Cys Ala Ile Val Gln Trp 8.5 90 95 Asp Ala Asn Ser Asn Gly Gln Trp Asp Ser Thr Ala Ser Glu Asn Asp 105 110 100 Ser Thr Gly Phe Arg Leu Glu Ser Gly Ser Leu Glu Thr Leu Arg Gly 120 125 115 Ala Thr Ser Cys Asp Gly Lys Gly Trp Asp Lys Leu Thr Asp Pro Asp 140 135 130 Arg Val Leu Ile Glu Gln Phe Met Val Thr Lys Thr Asp Arg Ala Gly 150 155 Phe Ala Pro Val Ile Ser Ile Glu Leu Arg Ala Arg Arg Lys Gly Glu 165 170 175 Leu Thr Ala Pro Phe Ser Ala Arg His Thr Val Thr Gly Phe Asn Leu

185

<210> 7789 <211> 617 <212> PRT

<213> Enterobacter cloacae

180

<400> 7789

Pro Val Cys Ser Lys His Gly Gly Asp Gly Met Thr Met Gln Asp Leu 10 Leu Leu Asp Ala Val Glu Gln Arg Val Leu Arg Gln Leu Asp Val Gln 20 Phe Ala Met Met Ile Ala Ala Asp Gln Pro Ala Val Met Leu Ala Ala 45 40 Ala Leu Leu Ser Lys Asp Ala Gly Glu Gly His Val Cys Leu Pro Leu 60 Ser Arg Leu Val Val Asp Glu Lys Met Pro Pro Val Leu Gln Ser Cys 75 70 Phe Ala Leu Leu Gly Asp Lys Val Asp Trp Gln Lys Ile Leu Arg Glu 85 90 Ser Ser Ala Val Gly Pro Gly Asp Asn Gln Ala Pro Leu Ile Leu Thr 110 100 105 Gly Glu Arg Leu Tyr Leu Asn Arg Leu Trp Arg Asn Glu Leu Thr Val 115 125 Ala Arg Phe Phe Ser Glu Thr Asn Ala Pro Leu Pro Cys Asp Glu Ala 135 140 130 Gln Leu Arg Gln Thr Leu Asp Arg Leu Phe Asp Ser Gly Glu Asp Thr 155

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Asp Trp Gln Lys Val Ala Ala Ala Val Ala Leu Thr Arg Arg Ile Ser
                         170
         165
Val Ile Ser Gly Gly Pro Gly Thr Gly Lys Thr Thr Thr Val Ala Lys
      180
                      185
Leu Leu Ala Ala Leu Ile Gln Leu Ser Gly Glu Gln Arg Cys Arg Ile
 195 200
                                  205
Arg Leu Ala Ala Pro Thr Gly Lys Ala Ala Ala Arg Leu Thr Glu Ser
 210 215 220
Leu Gly Gly Ala Met Gln Gln Leu Pro Leu Thr Gln Glu Gln Leu Ala
225 230 235 240
Leu Phe Pro Gly Glu Ala Ser Thr Leu His Arg Leu Leu Gly Ala Gln
     245 250 255
Pro Gly Ser Gln Arg Leu Arg Tyr His Ala Gly Asn Pro Leu His Leu
      260 265 270
Asp Val Leu Val Val Asp Glu Ala Ser Met Ile Asp Leu Thr Met Met
     275 280 285
Ser Arg Leu Ile Asp Ala Leu Pro Pro His Ala Arg Val Val Phe Leu
 290 295
                               300
Gly Asp Arg Asp Gln Leu Ala Ser Val Glu Ala Gly Ala Val Leu Gly
     310 315
Asp Ile Cys Thr Tyr Ala Ser Tyr Gly Tyr Thr Ala Ala Arg Ala Gln
      325 330 335
Glu Leu Ala Arg Leu Thr Gly Cys Ser Leu Glu Pro Asp His Thr Pro
                      345 350
        340
Ile Ala Gly Ala Leu Arg Asp Ser Leu Cys Leu Leu Gln Lys Ser Tyr
                   360 365
 355
Arg Phe Gly Ser Asp Ser Gly Ile Gly Gln Leu Ala Ala Ala Val Asn
                               380
  370
        375
Arg Gly Asp Arg His Ala Thr Arg Thr Val Phe Asp Gly Thr Phe Thr
     390 395
385
Asp Ile Glu Lys Lys Ser Leu Gln Ser Gly Glu Glu Tyr Gln Ala Met
          405 410 415
Leu Glu Glu Ala Leu Gln Gly Tyr Gln His Phe Leu Ser Cys Val Gln
                      425 430
        420
Gln Cys Ser Gln Pro Gly Gln Val Ile Ala Ala Phe Gly Glu Tyr Gln
    435
                    440 445
Leu Leu Cys Ala Leu Arg Glu Gly Pro Phe Gly Val Thr Gly Leu Asn
                 455 460
Asp Arg Leu Glu Gln Leu Leu Val Gln Lys Arg Lys Ile Asn Arg Gln
     470 475
465
Leu His Ser Arg Trp Tyr Glu Gly Arg Pro Val Met Ile Ser Arg Asn
                         490 495
           485
Asp Ser Ala Leu Gly Leu Phe Asn Gly Asp Ile Gly Ile Ala Leu Asp
            505 510
        500
Arg Gly Asn Gly Leu Arg Val Trp Phe Gln Leu Pro Asp Gly Ser Val
         520
                                  525
Lys Ser Val Gln Pro Ser Arg Leu Pro Glu His Glu Thr Ala Trp Ala
                 535
                               540
Met Thr Val His Lys Ser Gln Gly Ser Glu Phe Asn His Ala Ala Leu
              550
                            555
Ile Leu Pro Thr Gln Leu Ser Pro Val Val Thr Arg Glu Leu Val Tyr
           565
                          570 575
Thr Ala Ile Thr Arg Ala Arg Gln Arg Leu Ser Leu Tyr Ala Asp Glu
        580 585 590
Arg Val Leu Ser Gln Ala Ile Ala Thr Arg Thr Glu Arg Arg Ser Gly
   595
                  600
Leu Ser Ala Ile Phe Glu Ser Val
```

<210> 7790 <211> 120

<212> PRT <213> Enterobacter cloacae <400> 7790 Arg Gly Ser Phe Arg Pro Arg Gly Glu Asp Leu Ala Ser Thr Arg Asn 1.0 Trp Leu Arg Tyr Lys Leu Pro Lys Arg Leu Val Arg Trp Asp Thr Lys 20 25 Pro Val Cys Ile Gly Gln Lys Gln Lys Trp Phe Leu Leu Gln Leu Val 35 4.0 Gly Asn Asp Ser Asp Ile Asn Met Gln Thr Ser Ser Thr Pro Glu Phe 55 60 Asp Gly Trp Arg Trp Val Ser Tyr Trp Tyr Pro Val Arg Gln Val Val 70 7.5 Ser Phe Lys Arg Asp Val Tyr Arg Arg Val Met Lys Glu Phe Ala Ser 8.5 90 95 Val Val Met Gln Leu Gln Glu Thr Pro Pro Lys Pro Gln Ser Ala Pro 105 100 Ala Trp Arg Arg Lys Arg Gly 115 <210> 7791 <211> 753 <212> PRT <213> Enterobacter cloacae <400> 7791 Ala Thr Gln Ile Met Leu Thr Arg Leu Arg Glu Ile Val Glu Lys Val 10 Ala Ser Ala Pro Arg Leu Asn Glu Ala Leu Asn Ile Leu Val Thr Asp 2.0 25 Ile Cys Leu Ala Met Glu Thr Glu Val Cys Ser Val Tyr Leu Ala Asp 35 4.0 4.5 His Asp Arg Arg Cys Tyr Tyr Leu Met Ala Thr Arg Gly Leu Lys Lys 55 Pro Arg Gly Arg Thr Val Thr Leu Ala Phe Asp Glu Gly Ile Val Gly 75 80 7.0 Leu Val Gly Arg Leu Ala Glu Pro Ile Asn Leu Ala Asp Ala Gln Lys 85 90 His Pro Ser Phe Lys Tyr Ile Pro Ser Val Lys Glu Glu Arg Phe Arg 105 100 Ala Phe Leu Gly Val Pro Ile Ile Gln Arg Arg Gln Leu Leu Gly Val 120 125 115 Leu Val Val Gln Gln Arg Glu Leu Arg Gln Tyr Asp Glu Ser Glu Glu 135 140 130 Ser Phe Leu Val Thr Leu Ala Thr Gln Met Ala Ala Ile Leu Ser Gln 150 155 Ser Gln Leu Ala Ala Leu Phe Gly Gln Tyr Arg His Thr Arg Ile Arg 165 170 175 Ala Leu Pro Ala Ser Pro Gly Val Ala Ile Ala Glu Gly Trp Met Asp 190 185 180 Ala Thr Leu Pro Leu Met Glu Gln Val Tyr Glu Ala Ser Thr Leu Asp 200 205 195 Glu Ala Leu Glu Arg Glu Arg Leu Thr Ala Ala Leu Glu Glu Ala Ala

215 Asn Glu Phe Arg Arg Tyr Ser Lys Arg Phe Ala Ala Gly Ala Gln Lys

Glu Thr Ala Ala Ile Phe Asp Leu Tyr Ser His Leu Leu Ser Asp Ala

Arg Leu Arg Arg Glu Leu Phe Ala Glu Val Asp Lys Gly Ser Val Ala

265

230

245

260

220

255

```
Glu Trp Ala Val Lys Lys Val Ile Glu Lys Phe Ala Glu Gln Phe Ala
                 280
     275
Val Leu Thr Asp Gly Tyr Leu Lys Glu Arg Ala Gly Asp Leu Arg Ala
 290
                295
Leu Gly Gln Arg Leu Leu Phe His Leu Asp Asp Thr Ile Gln Gly Ala
                            315
    310
Asn Ala Trp Pro Asn Arg Phe Val Leu Val Ala Asp Glu Leu Ser Ala
           325
                         330
Thr Thr Leu Ala Glu Leu Pro Gln Asp Arg Leu Ala Gly Val Val Val
            345
        340
Arg Asp Gly Ala Ala Asn Ser His Ala Ala Ile Met Val Arg Ala Leu
                   360
     355
                                  365
Gly Ile Pro Thr Val Met Gly Ala Asp Ile Gln Pro Ser Val Leu His
                               380
      375
Arg Arg Thr Leu Val Val Asp Gly Tyr Arg Gly Glu Leu Leu Val Asp
385 390
                            395 400
Pro Glu Pro Val Leu Leu Gln Glu Tyr Gln Arg Leu Ile Ser Glu Glu
     405 410 415
Asn Glu Leu Ser Lys Leu Ala Glu Asp Asp Val Asn Leu Pro Ala Gln
 420 425 430
Leu Lys Ser Gly Glu Arg Val Lys Val Met Leu Asn Ala Gly Leu Ser
435 440 445
Pro Glu His Glu Glu Lys Leu Gly Ser Arg Ile Asp Gly Ile Gly Leu
450 455 460
Tyr Arg Thr Glu Ile Pro Phe Met Leu Gln Ser Gly Phe Pro Ser Glu
465 470 475 480
Glu Glu Gln Val Ala Gln Tyr Gln Gly Met Leu Gln Met Phe Asn Asp
     485 490 495
Lys Pro Val Thr Leu Arg Thr Leu Asp Val Gly Ala Asp Lys Gln Leu
 500 505 510
Pro Tyr Met Pro Ile Ser Glu Glu Asn Pro Cys Leu Gly Trp Arg Gly
 515 520 525
Ile Arg Ile Thr Leu Asp Gln Pro Glu Ile Phe Leu Ile Gln Val Arg
 530 535 540
Ala Met Leu Arg Ala Asn Ala Ala Thr Gly Asn Leu Ser Ile Leu Leu
545 550 555 560
Pro Met Val Thr Ser Ile Asp Glu Ile Asp Glu Ala Arg Arg Leu Ile
           565 570 575
Glu Arg Ala Gly Arg Glu Val Glu Glu Met Ile Gly Tyr Ala Ile Pro
        580
                       585
Lys Pro Arg Ile Gly Val Met Leu Glu Val Pro Ser Met Val Phe Met
                    600
Leu Pro Gln Leu Ala Thr Arg Val Asp Phe Ile Ser Val Gly Thr Asn
                 615
                               620
Asp Leu Thr Gln Tyr Ile Leu Ala Val Asp Arg Asn Asn Thr Arg Val
              630 635
Ala Ser Ile Tyr Asp Ser Leu His Pro Ala Met Leu Arg Ala Leu Ala
           645
                         650 655
Met Ile Ala Arg Glu Ala Glu Gln His Asn Ile Asp Leu Arg Leu Cys
        660
                       665
Gly Glu Met Ala Gly Asp Pro Met Cys Val Ala Ile Leu Ile Gly Leu
                    680
                                   685
Gly Phe Arg His Leu Ser Met Asn Gly Arg Ser Val Ala Arg Val Lys
                 695
                                700
Tyr Leu Leu Arg His Ile Glu Gln Asp Glu Ala Arg Glu Leu Ala Ala
              710
                             715
Arg Ser Leu Glu Ala Gln Leu Ala Ala Glu Val Arg His Gln Val Ala
           725
                          7.30
Ala Phe Met Glu Arg Arg Gly Met Gly Gly Leu Ile Arg Gly Gly Arg
        740
                       745
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<210> 7792
<211> 172
<212> PRT
<213> Enterobacter cloacae
<400> 7792
Ser Ser Gly Leu Thr Leu Ala Pro Phe Leu Leu Phe Leu His Thr Pro
                        10
Ala Met Lys Asn Glu Gln Gly Phe Thr Leu Ile Glu Thr Leu Ile Ala
    20 25
                                            3.0
Val Ser Leu Ala Val Ile Leu Ser Ala Thr Gly Leu Tyr Gly Trp Asp
     35 40 45
Ser Trp Gln Gln Arg Gln Arg Leu Trp Gln Thr Ala Cys Gln Val Arg
  50
        5.5
                          60
Asp Tyr Leu Val Phe Leu Arg Asn Asp Ala Asn Arg His Asn Ser Glu
                7.0
                                  7.5
His Arg Ile Ala Leu Tyr Asn Asp Gly Glu Lys Asn Cys Leu Thr Ser
            85
                              90 95
Ser Ala Val Thr Gly Cys Asp Ser Gly Gly Pro Phe Val Met Lys Pro
         100 105
Met Trp Pro Gly Val Thr Ile Ser Asp Ile Thr Pro Ala Leu Gly Phe
115
                       120
Tyr Gly Leu Arg Asp Thr Ala Trp Ala Gly His Ile Arg Val Gln Ser
 130 135
                         140
Arg Ala Gly Gly Trp Trp Val Ile Val Ser Asn Gly Gly Arg Ile Arg
145 150 155
Leu Cys Asn Ala Ala Gly Glu Gly Ala Cys Gln
             165
<210> 7793
<211> 112
<212> PRT
<213> Enterobacter cloacae
<400> 7793
Gly Lys Tyr Ala Met Ser Val Tor Leu Ser Arg Glo Lys Gly Phe Ser
                              10
Met Val Glu Val Leu Leu Ala Met Met Leu Leu Val Val Val Val Thr
          20
                           25
                                             30
Ala Leu Ser Gly Tyr His Arg Ala Leu Ala Ala Arg Tyr Ala Ala Leu
                       40
                                        45
Ser Gln Tyr Arg Gln Leu Trp His His Ala Trp Asn Gln Ser Gln Ile
                    5.5
Ser Thr Leu Thr Leu Pro Pro Gly Trp Gln Val Ser Arg Gly Gln Thr
                                 75
                 70
                                                    8.0
Thr Gln Ser Gly Cys Val Ser Ile Thr Val Thr Leu Ile Ser Pro Met
             85
                               90
Gly Arg Gln Gly Ala Leu Thr Arg Leu His Cys Pro Val Ser Arg
                            105
          100
<210> 7794
<211> 1129
<212> PRT
<213> Enterobacter cloacae
<400> 7794
Ser Gly Ala Phe Met Leu Arg Val Tyr His Ser Asn Arg Leu Asp Val
Leu Glu Ala Leu Met Glu Tyr Ile Val Glu Gln Glu Arg Leu Asp Asp
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Pro Phe Glu Pro Glu Met Val Leu Val Gln Ser Thr Gly Met Ala Gln 40 45 Trp Leu Gln Met Ser Leu Ser Gln Lys Phe Gly Ile Ala Ala Asn Ile 55 Asp Phe Pro Leu Pro Ala Ser Phe Ile Trp Glu Met Phe Val Arg Val 7.0 75 Leu Pro Asp Ile Pro Glu Gln Ser Ala Phe Asn Lys Gln Ser Met Ala 8.5 90 Trp Lys Leu Met Thr Leu Leu Pro Asp Met Leu Ala Arg Asp Glu Phe 100 105 110 Ala Met Leu Arg His Tyr Leu Asn Asp Asp Thr Asp Lys Arg Lys Leu 115 120 125 Phe Gln Leu Ala Ser Arg Thr Ala Asp Leu Tyr Asp Gln Tyr Leu Val 130 135 140 Tyr Arg Ala Asp Trp Leu Ile Arg Trp Glu Ala Gly Glu Leu Val Asp 145 150 155 160 Gly Leu Pro Glu Ala Gln Ile Trp Gln Ala Pro Leu Trp Lys Ala Leu 165 170 175 Val Glu His Thr Gly Lys Leu Gly Gln Pro Lys Trp His Arg Ala Asn 180 185 190 Leu Tyr Asp Arg Phe Ile Ser Ile Leu Glu Asn Ser Ala Glu Arg Pro 195 200 205 Ala Arg Leu Pro Ser Arg Val Phe Ile Cys Gly Ile Ser Ala Leu Pro 210 215 220 Pro Val Tyr Leu Asn Ala Leu Lys Ala Leu Gly Lys His Thr Asp Ile 225 230 235 240 His Ile Leu Phe Thr Asn Pro Cys Arg His Tyr Trp Gly Asp Ile Gln 245 250 255 Asp Pro Arg Trp Leu Ser Arg Leu Val Thr Arg Gln Arg Lys Arg Leu 260 265 270 Phe Glu Glu Arg Ala Val Pro Leu Phe Lys Asp Ser Glu Asn Ala Ala 275 280 285 Gln Leu Phe Asp Glu Glu Gly Ile Gln Asn Leu Pro Asn Pro Leu Leu 295 300 Ala Ser Trp Gly Lys Leu Gly Arg Asp Tyr Ile Tyr Leu Leu Ser Asp 310 315 Ile Thr Ser Ser Gly Glu Gly Asp Val Asp Ala Phe Ala Asp Ile Thr 325 330 335 Pro Asp Ser Leu Leu His Asn Ile Gln Leu Asp Ile Leu Asp Leu Glu 340 345 350 Asn Arg Ala Val Ala Gly Ile Thr Ala Glu Glu Phe Ala Arg Ser Asp 355 360 365 Lys Lys Arg Lys Leu Asp Pro Asp Asp Arg Ser 1le Ala Ile His Val 370 375 380 Cys His Ser Pro Gln Arg Glu Val Glu Ile Leu His Asp Arg Leu Leu 385 390 395 400 Ala Met Leu Gln Asp Asp Pro Thr Leu Thr Pro Arg Asp Ile Val Val 405 410 415 Met Val Ala Asp 11e Asp Ser Tyr Ser Pro Phe 11e Gln Ala Val Phe 425 430 420 Gly Ser Ala Thr Gly Asp Arg Tyr Leu Pro Tyr Ala Ile Ser Asp Arg 435 440 445 Arg Ala Arg Gln Ser His Pro Ala Leu Gln Ala Phe Ile Ser Leu Leu 455 460 450 Ser Leu Pro Asp Ser Arg Phe Ile Ser Glu Asp Val Leu Ala Leu Leu 465 470 475 480 Asp Val Pro Val Leu Ala Ala Arg Phe Asn Ile Asn Glu Glu Gly Leu 485 490 Arg Tyr Leu Arg Gln Trp Val Asn Glu Ser Gly Val Arg Trp Gly Ile 500 505

Asp Asp Asp Asn Val Gln Glu Phe Glu Leu Pro Ala Thr Gly Gln His 515 520 Thr Trp Gln Phe Gly Leu Thr Arg Met Leu Leu Gly Tyr Ala Met Glu 535 540 Ser Ile His Gly Glu Trp Asn Asp Val Leu Pro Tyr Asp Glu Ser Ser 555 545 550 Gly Leu Ile Ala Glu Leu Val Gly His Leu Ala Thr Leu Leu Met Gln 565 570 575 Leu Asn Arg Trp Arg Arg Ala Leu Met Gln Pro Arg Leu Leu Glu Glu 580 585 590 Trp Leu Pro Val Cys Arg Glu Met Leu Asn Asp Phe Phe Leu Pro Asp 595 600 605 Ser Glu Thr Glu Ala Ala Met Ala Leu Ile Glu Lys Gln Trp Gln Ala 610 615 620 Ile Val Asp Glu Gly Val Asn Ser His Tyr His Glu Ala Val Pro Leu 630 635 Ser Leu Leu Arg Asp Glu Leu Thr Gln Arg Leu Asp Gln Glu Arg Ile 645 650 655 Ser Gln Arg Phe Leu Ala Gly Pro Val Asn Ile Cys Thr Leu Met Pro 660 665 670 Met Arg Ser Ile Pro Phe Lys Val Val Cys Leu Leu Gly Met Asn Asp 675 680 685 Gly Ile Tyr Pro Arg Ala Leu Pro Pro Leu Gly Phe Asp Leu Met Ser 690 695 700 Ala Gln Pro Lys Arg Gly Asp Arg Ser Arg Arg Asp Asp Asp Arg Tyr $705 \hspace{1cm} 710 \hspace{1cm} 715 \hspace{1cm} 720 \hspace{1cm}$ Leu Phe Leu Glu Ala Leu Met Ser Ala Gln Ser Arg Leu Tyr Ile Ser 725 730 735 Tyr Ile Gly Arg Ser Ile Gln Asp Asn Ser Glu Arg Phe Pro Ser Val 740 745 750 Leu Val Gln Glu Leu Val Asp Tyr Ile Gly Gln Ser His Tyr Leu Pro 755 760 765 Gly Asp Glu Ala Cys Asn Cys Asp Glu Ser Glu Arg Arg Val Ile Ala 770 775 780 His Ile Thr Cys His His Ser Arg Met Pro Phe Asp Pro Val Asn Tyr 785 790 795 800 Val Pro Asp Glu Leu Gln Ser Tyr Ala Arg Glu Trp Leu Pro Ala Ala 805 810 815 Lys Lys Ala Gly Thr Pro Gln Thr Asp Phe Ile Gln Ala Leu Glu Pro 820 825 830 Arg Ala Ile Asp Thr Leu Thr Phe Glu Gln Leu Gln Arg Phe Trp Ala 835 840 845 His Pro Val Arg Ala Phe Phe Gln Gln Arg Leu Gln Val Asn Phe Arg 850 855 860 Ser Glu Glu Ser Glu Ile Pro Asp Ala Glu Pro Phe Ile Leu Asp Gly 870 875 Leu Glu Arg Phe Lys Leu Asn Ser Gln Leu Leu Asn Ala Leu Val Asp 885 890 895 Glu Glu Asp Ala Ser Lys Leu Phe Arg Arg Tyr Arg Ala Ser Gly Leu 905 910 Leu Pro Tyr Gly Ala Phe Gly Glu Ile Val Trp Asp Ala Gln Cys Glu 915 920 925 Glu Met Arg Ala Leu Ala Asp Arg Val Ile Ala Cys Arg Gln Pro Ala 935 940 Ser Ser Ile Glu Ile Asp Leu Asp Cys Asn Gly Met His Leu Ser Gly 950 955 960 Trp Leu Thr His Val Gln Ser Asp Gly Leu Leu Arg Trp Arg Pro Ser 965 970 Met Leu Ser Val Ser His Gly Leu Gln Leu Trp Leu Glu His Leu Val 985 Tyr Ser Ala Ser Gly His Glu Gly Glu Ser Arg Leu Phe Val Arg Lys

1000 Asp Gly Glu Trp Arg Phe Pro Arg Met Glu Pro Glu Gln Ala Leu Met 1020 1015 Tyr Leu Ser Leu Tyr Ile Glu Gly Tyr Arg Gln Gly Met Asn Lys Pro 1030 1035 Leu Leu Leu Pro Glu Ser Gly Gly Ala Trp Ile Lys Ala Cys Tyr 1045 1050 1055 Asp Ala Gln Asn Asp Ala Met Leu Thr Asp Glu Ala Ser Leu Gln Lys 1060 1065 1070 Ala Arg Ser Lys Phe Leu Gln Ala Tyr Glu Gly Asn Met Met Val Arg 1075 1080 1085 Gly Glu Gly Asp Asp Val Trp Tyr Gln Arg Leu Trp Arg Thr Leu Glu 1090 1095 1100 Pro Glu Tyr Phe Asp Ile Ile Thr Gln Glu Ala Gln Arg Tyr Leu Leu 1105 1110 1115 Pro Leu Tyr Lys Phe Asn Gln Ser 1125 <210> 7795

<211> 1183 <212> PRT <213> Enterobacter cloacae

<400> 7795 Glu Arg Met Thr His Thr Ala Glu Pro Leu Asp Pro Leu Ser Leu Pro 1.0 Leu Gln Gly Glu Arg Leu Ile Glu Ala Ser Ala Gly Thr Gly Lys Thr 20 25 Tyr Thr Ile Ala Ala Leu Tyr Leu Arg Leu Leu Gly Leu Gly Gly 35 40 4.5 Asn Ala Ala Phe Ser Arg Pro Leu Ser Val Glu Glu Leu Leu Val Val 55 Thr Phe Thr Glu Ala Ala Thr Ala Glu Leu Arg Gly Arg Ile Arg Ser 65 70 75 Asn Ile His Glu Leu Arg Ile Ala Cys Leu Arg Gln Thr Thr Asp Asn 85 90 95 Pro Leu Tyr Ala Ser Leu Leu Asp Glu Ile Ala Asp Lys Gln Gln Ala 100 105 110 Ala Gln Trp Leu Leu Ala Glu Arg Gln Met Asp Glu Ala Ser Val 115 120 125 Phe Thr Ile His Gly Phe Cys Gln Arg Met Leu Ser Leu Asn Ala Phe 130 135 140 Glu Ser Gly Met Leu Phe Glu Gln Gln Leu Ile Glu Asp Glu Ser Glu 145 150 155 160 Leu Arg Tyr Gln Ala Cys Ala Asp Phe Trp Arg Arg His Cys Tyr Pro 165 170 175 Leu Gln Arg Asp Ile Ala Glu Ala Val His Ala Leu Trp Lys Gly Pro 180 185 190 Glu Glu Leu Leu Arg Ala Ile Asp Arg Tyr Leu Gln Gly Glu Ala Pro 195 200 205 Val Ile Lys Ser Pro Pro Pro Ala Asp Glu Thr Leu Ala Ser Arg His 210 215 220 Glu Lys Ile Val Ala Lys Ile Ala Ala Leu Lys Gln Lys Trp Asn Glu 225 230 235 Ser Val Gly Glu Ile Asp Ala Ile Ile Glu Asn Ser Gly Ile Asp Arg 245 250 255 Arg Lys Phe Asn Arg Gly Asn Gln Gly Lys Trp Ile Glu Lys Ile Ser 265 270 260 Ala Trp Ala Gln Glu Glu Thr Arg Gly Tyr Gln Leu Pro Asp Ala Leu 275 280 285 Glu Lys Phe Ser Gln Arg Phe Leu Thr Glu Arg Thr Lys Ala Asp Gly

```
295
Ile Val Pro Glu His Pro Leu Phe Val Ala Ile Glu Ala Leu Leu Ala
       310
                          315
Glu Pro Leu Thr Leu Asn Asp Leu Met Ile Thr Arg Ala Met Thr Glu
        325 330
Ile Arg Gln Ala Val Ala Arg Glu Lys Arg Arg Arg Gly Glu Leu Gly
  340 345 350
Phe Asp Asp Met Leu Ser Arg Leu Asp Glu Ala Leu Ser Ser Glu Asn
355 360 365
Gly Glu Ala Leu Ala Ser Ala Ile Arg Thr Arg Phe Pro Val Ala Met
 370 375 380
Ile Asp Glu Phe Gln Asp Thr Asp Pro Gln Gln Tyr Arg Ile Phe Arg
385 390 395 400
Arg Ile Trp Arg Gln Gln Pro Asp Thr Ala Leu Leu Leu Ile Gly Asp
       405 410 415
Pro Lys Gln Ala Ile Tyr Ala Phe Arg Gly Ala Asp Ile Phe Thr Tyr
   420 425 430
Met Lys Ala Arg Ser Glu Val Val Ala His Tyr Thr Leu Asp Thr Asn
435 440 445
Trp Arg Ser Ala Pro Gly Met Val Glu Ser Val Asn Ala Leu Phe Ser
450 455 460
Arg Met Glu Thr Ala Phe Met Phe Lys Glu Ile Pro Phe Leu Pro Val
   470 475 480
Lys Ser Ala Pro Lys Asn Ala Ser Leu Arg Phe Glu Val Ser Gly Ala
        485 490 495
Glu Gln Pro Ala Met Thr Phe Trp Leu Leu Glu Glu Glu Gly Tyr Gly
   500 505 510
Val Ala Asp Tyr Gln Ala Ala Met Ala Gln His Cys Ala Ala Gln Ile
515 520 525
Arg Asp Trp Leu Ser Ala Gly Asn Arg Gly Glu Ala Leu Leu Trp Lys
530
     535 540
Gly Glu Gln Ala Asn Pro Val Lys Ala Ser Asp Ile Thr Val Leu Val
545 550 555 560
Arg Ser Arg Gln Glu Ala Ala Leu Ile Arg Asp Ala Leu Thr Leu Leu
        565 57Ó 575
Asp Ile Pro Ser Val Tyr Leu Ser Asn Arg Asp Ser Val Phe Asp Thr
           585 590
       580
Leu Glu Ala Gln Glu Met Leu Trp Leu Leu Gln Ala Val Leu Ala Pro
                600 605
    595
Glu Arg Glu Asn Thr Leu Arg Ser Ala Leu Ala Ser Ser Met Leu Gly
 610 615 620
Leu Asn Ala Arg Asp Ile Asp Glu Leu Asn His Asp Glu Asn Ala Trp
     630 635
Asp Ala Val Val Glu Glu Phe Val His Tyr Arg Glu Arg Trp Gln Lys
          645
                        650
Arg Gly Val Met Ala Met Leu Arg Glu Leu Met Thr Arg Arg Gln Ile
      660 665 670
Ala Glu Asn Met Leu Ala Ser Ser Gly Gly Glu Arg Arg Leu Thr Asp
675 680 685
Ile Leu His Ile Ser Glu Leu Leu Gln Glu Ala Gly Thr Gln Leu Glu
                695 700
 690
Ser Glu His Ala Leu Val Arg Trp Leu Ala Gln Gln Ile Ala Asp Pro
705 710 715
Asn Ser Asn Ala Ser Ser Gln Gln Met Arg Leu Glu Ser Asp Lys His
         725 730
                                      735
Leu Val Gln Ile Val Thr Ile His Lys Ser Lys Gly Leu Glu Tyr Pro
     740
                   745 750
Leu Val Trp Leu Pro Phe Ile Ala Asn Tyr Arg Val Gln Asp Gln Ala
     755 760
Tyr Tyr His Asp Arg Glu Thr Phe Asp Ala Val Leu Asp Leu Ser Lys
                              780
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Ala Glu Thr Ser Val Glu Leu Ala Glu Ala Glu Arg Leu Ala Glu Asp
     790
                            795
Leu Arg Leu Leu Tyr Val Ala Leu Thr Arg Ser Val Trp His Cys Ser
         805 810
Leu Gly Val Ala Pro Val Phe Arg Arg Arg Gly Glu Lys Thr Gly Glu
        820 825 830
Ser Asp Phe His Leu Ser Ala Leu Gly Arg Leu Ile Gln His Gly Glu
    835 840 845
Pro Lys Asp Ala Ala Gly Leu Arg Leu Cys Ile Glu Ser Leu Cys Gly
 850 855 860
Asp Asp Ile Ala Leu His Ile Pro Ser Leu Pro Asp Asn Ser Arg Trp
865 870 875 880
Glu Met Ala Gln Glu Pro Val Thr Asp Leu Asn Ala Arg Gln Ile Thr
      885 890 895
Arg Val Leu Ala Asp Asp Trp Arg Val Thr Ser Tyr Ser Gly Leu Gln 900 \hspace{1.5cm} 905 \hspace{1.5cm} 910 \hspace{1.5cm}
Gln His Gly Gln Ser Ile Ala Gln Asp Leu Met Pro Lys Leu Asp Val
     915 920 925
Asp Ala Ala Gly Val Gly Asp Val Pro Val Glu Pro Thr Leu Thr Pro
 930 935 940
His Gln Phe Pro Arg Gly Ala Ser Pro Gly Thr Phe Leu His Ser Leu
945 950 955
Phe Glu Glu Leu Asp Phe Thr Gln Pro Val Ser Glu Glu Trp Val Leu
           965 970 975
Lys Met Leu Gln Ser Gly Gly Tyr Asp Ala His Trp Gln Pro Val Leu
                       985 990
        980
Thr Asp Trp Ile Asn Ala Ile Leu Gln Ala Pro Leu Thr Ala Gln Gly
                    1000 1005
Phe Ser Leu Arg Gln Leu Thr Ala Lys Asn Lys Gln Val Glu Met Glu
1010 1015 1020
Phe Tyr Leu Pro Val Ala Gly Pro Leu Lys Ala Asp Ala Leu Asp Ala
              1030 1035 1040
Leu Ile Arg Gln Tyr Asp Pro Leu Ser Ala Gly Cys Pro Pro Leu Asn
     1045
                          1050 1055
Phe Arg Gln Val Gln Gly Met Leu Lys Gly Phe Ile Asp Leu Val Phe
        1060 1065 1070
Arg His Glu Gly Arg Tyr Tyr Leu Leu Asp Tyr Lys Ser Asn Trp Leu
     1075 1080 1085
Gly Glu Asn Ser Ala Ala Tyr Thr Gln Gln Ala Met Ala Ala Ala Met
  1090 1095
                                1100
Gln Met His Arg Tyr Asp Leu Gln Tyr Gln Leu Tyr Thr Leu Ala Leu
              1110 1115 1120
His Arg Tyr Leu Arg His Arg Ile Ala Asp Tyr Arg Tyr Asp Asp His
           1125
                          1130 1135
Phe Gly Gly Val Ile Tyr Leu Phe Leu Arg Gly Val Asp Ala Ala Asp
         1140 1145 1150
Pro Arg Ser Gly Ile Phe Ser Thr Arg Pro Asp Ala Glu Leu Ile Asn
     1155 1160 1165
Lys Met Asp Asn Leu Phe Ala Ala Asn Thr Glu Glu Met Ala
                 1175
                                1180
  1170
<210> 7796
<211> 451
<212> PRT
<213> Enterobacter cloacae
<400> 7796
Thr Phe Thr Lys Gly Cys Ile Met Val Lys Glu Arg Arg Thr Glu Leu
                          10
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Val Gln Gly Phe Arg His Ser Val Pro Tyr Ile Asn Thr His Arg Gly 25

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Lys Thr Phe Val Ile Met Leu Gly Gly Glu Ala Ile Glu His Glu Asn
Phe Ser Ser Ile Val Asn Asp Ile Gly Leu Leu His Ser Leu Gly Ile
                                 60
Arg Leu Val Val Val Tyr Gly Ala Arg Pro Gln Ile Glu Ala Asn Leu
              70
                              7.5
Ala Ala His His His Glu Pro Ile Tyr His Lys His Thr Arg Val Thr
        85 90
Asp Ala Lys Thr Leu Glu Leu Val Lys Gln Ala Ala Gly Leu Leu Gln
        100 105 110
Leu Asp Ile Thr Ala Arg Leu Ser Met Ser Leu Asn Asn Thr Pro Leu
                         125
 115 120
Gln Gly Ala His Ile Asn Val Val Ser Gly Asn Phe Ile Ile Ala Gln
 130 135 140
Pro Leu Gly Val Asp Asp Gly Val Asp Tyr Cys His Ser Gly Arg Ile 145 $150$
Arg Arg Ile Asp Glu Asp Ala Ile His Arg Gln Leu Asp Asn Gly Ala
         165 170 175
Ile Val Leu Met Gly Pro Val Ala Val Ser Val Thr Gly Glu Ser Phe
        180 185 190
Asn Leu Thr Ser Glu Glu Ile Ala Thr Gln Leu Ala Ile Lys Leu Lys
 195 200 205
Ala Glu Lys Met Ile Gly Phe Cys Ser Ser Gln Gly Val Val Asn Asp
210 215 220
Glu Gly Val Ile Val Pro Glu Leu Phe Pro Asn Glu Ala Gln Ala Arg
225 230 235 240
Val Glu Ala Leu Glu Ala Glu Gly Asp Tyr Tyr Ser Gly Thr Val Arg
           245 250 255
Phe Leu Arg Gly Ala Val Lys Ala Cys Arg Ser Gly Val Arg Arg Ser
        260 265 270
His Leu Ile Ser Tyr Gln Glu Asp Gly Ala Leu Leu Gln Glu Leu Phe
275
                     280
                         285
Ser Arg Asp Gly Ile Gly Thr Gln Ile Val Met Glu Ser Ala Glu Gln
                  295
                                 300
Ile Arg Arg Ala Thr Ile Asn Asp Ile Gly Gly Ile Leu Glu Leu Ile
305 310
                              315
Arg Pro Leu Glu Gln Gln Gly Ile Leu Val Arg Arg Ser Arg Glu Gln
            325 330 335
Leu Glu Met Glu Ile Asp Lys Phe Thr Ile Ile Gln Arg Asp Asn Leu
         340 345
                                       350
Thr Ile Ala Cys Ala Ala Leu Tyr Pro Phe Pro Glu Glu Gln Ile Gly
      355
                     360
                                    365
Glu Met Ala Cys Val Ala Val His Pro Asp Tyr Arg Ser Ser Ser Arg
                  375
                                 380
Gly Glu Leu Leu Glu Arg Val Ala Ala Gln Ala Arg Gln Met Gly
385
              390
                              395
Leu Ser Lys Leu Phe Val Leu Thr Thr Arg Ser Ile His Trp Phe Gln
                           410
            405
Glu Arq Gly Phe Thr Pro Val Asp Ile Asp Ser Leu Pro Glu Ser Lys
                       425 430
         420
Lys Glu Met Tyr Asn Tyr Gln Arg Arg Ser Lys Val Leu Met Ala Asp
                    440
Leu Glv
 450
<210> 7797
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<210> 7/9

<212> PRT <213> Enterobacter cloacae <221>UNSURE <222>(18)

<400> 7797 Ser Ser Asp Gly Asp Leu Arg Tyr Leu Ser Phe Ile Pro Leu Thr Glu 10 Leu Xaa Met Gln Tyr Pro Ile Asn Glu Met Phe Gln Thr Leu Gln Gly 20 25 Glu Gly Tyr Phe Thr Gly Val Pro Ala Ile Phe Ile Arg Leu Gln Gly 4.0 4.5 Cys Pro Val Gly Cys Ala Trp Cys Asp Thr Lys His Thr Trp Asp Lys 55 60 Leu Ala Asp Arg Glu Val Ser Leu Phe Ser Ile Leu Ala Lys Thr Lys 70 75 80 Glu Ser Asp Lys Trp Gly Ala Gly Ser Ala Glu Asp Leu Leu Ala Ile 85 90 95 Ile Gly Arg Gln Gly Trp Thr Ala Arg His Val Val Ile Thr Gly Gly 100 105 Glu Pro Cys Ile His Asp Leu Met Pro Leu Thr Glu Leu Leu Glu Lys 115 120 125 Asn Gly Tyr Ser Cys Gln Ile Glu Thr Ser Gly Thr His Glu Val Arg 130 135 140 Cys Ser His Ser Thr Trp Val Thr Val Ser Pro Lys Val Asn Met Arg 150 155 Gly Gly Tyr Asp Val Leu Ser Gln Ala Leu Glu Arg Ala Asp Glu Ile 165 170 175 Lys His Pro Val Gly Arg Val Arg Asp Ile Glu Ala Leu Asp Glu Leu 185 190 Leu Ala Thr Leu Thr Asp Glu Lys Gln Arg Val Ile Ala Leu Gln Pro 195 200 205 Ile Ser Gln Lys Asp Asp Ala Thr Arg Leu Cys Ile Glu Thr Cys Ile 210 215 220 Ala Arg Asn Trp Arg Leu Ser Met Gln Thr His Lys Tyr Leu Asn Ile

<210> 7798 <211> 584 <212> PRT

<213> Enterobacter cloacae

230

<400> 7798

225

Ala

Ala Ala Arg Arg Ala Pro Leu Ser Ala Arg Cys Leu Leu Met Ser Glu 10 Lys His Pro Gly Pro Leu Val Val Glu Gly Lys Leu Ser Asp Ala Glu 25 30 Arg Met Lys Val Glu Ser Asn Tyr Leu Arg Gly Thr Ile Ala Glu Asp 40 3.5 4.5 Leu Asn Asp Gly Leu Thr Gly Gly Phe Lys Gly Asp Asn Phe Leu Leu 60 Ile Arg Phe His Gly Met Tyr Gln Gln Asp Asp Arg Asp Ile Arg Ala 7.0 75 80 Glu Arg Ala Glu Gln Lys Leu Glu Pro Arg His Ala Met Leu Leu Arg 85 90 Cys Arg Leu Pro Gly Gly Ile Ile Thr Thr Lys Gln Trp Gln Ala Ile 105 100 Asp Lys Phe Ala His Asp Asn Thr Ile Tyr Gly Ser Ile Arg Leu Thr 120 Asn Arg Gln Thr Phe Gln Phe His Gly Ile Leu Lys Lys Asn Val Lys 135 140

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Pro Val His Gln Met Leu His Ser Val Gly Leu Asp Ala Leu Ala Thr
     150
Ala Asn Asp Met Asn Arg Asn Val Leu Cys Thr Ser Asn Pro Tyr Glu
               170
        165
Ser Glu Leu His Ala Glu Ala Tyr Glu Trp Ala Lys Lys Ile Ser Glu
       180 185
                                    190
His Leu Leu Pro Arg Thr Arg Ala Tyr Ala Glu Ile Trp Leu Asp Gln
  195 200
                       205
Glu Lys Val Ala Thr Thr Asp Glu Glu Pro Ile Leu Gly Gln Thr Tyr
 210 215 220
Leu Pro Arg Lys Phe Lys Thr Thr Val Val Ile Pro Pro Gln Asn Asp
225 230 235 240
Ile Asp Leu His Ala Asn Asp Met Asn Phe Val Ala Ile Ala Glu Asn
     245 250 255
Gly Lys Leu Val Gly Phe Asn Leu Leu Val Gly Gly Leu Ser Ile
     260 265 270
Glu His Gly Asn Lys Lys Thr Tyr Ala Arg Thr Ala Ser Glu Phe Gly
    275 280 285
Phe Leu Pro Leu Glu His Thr Leu Ala Val Ala Glu Ala Val Val Thr
290 295 300
Thr Gln Arg Asp Trp Gly Asn Arg Thr Asp Arg Lys Asn Ala Lys Thr
305 310
                          315
Lys Tyr Thr Leu Glu Arg Val Gly Val Glu Thr Phe Lys Glu Glu Val
          325 330 335
Glu Arg Arg Ala Gly Ile Lys Phe Glu Pro Ile Arg Pro Tyr Glu Phe
       340 345 350
Thr Gly Arg Gly Asp Arg Ile Gly Trp Val Lys Gly Ile Asp Asn Lys
355
                   360
                                 365
Trp His Leu Thr Leu Phe Ile Glu Asn Gly Arg Ile Leu Asp Tyr Pro
 370 375
                              380
Gly Arg Pro Leu Lys Thr Gly Leu Leu Glu Ile Ala Lys Ile His Lys
            390 395 400
Gly Glu Phe Arg Ile Thr Ala Asn Gln Asn Leu Ile Val Ala Ser Val
          405
                         410 415
Pro Glu Ser Glu Lys Ala Arg Ile Glu Glu Leu Ala Arg Glu His Gly
       420
                      425 430
Leu Met Asn Ala Val Ser Val Gln Arg Glu Asn Ser Met Ala Cys Val
                   440 445
    435
Ser Phe Pro Thr Cys Pro Leu Ala Met Ala Glu Ala Glu Arg Phe Leu
 450 455
                               460
Pro Ser Phe Thr Asp Lys Val Glu Ala Ile Leu Glu Lys His Gly Ile
465 470
                            475
Pro Asp Glu His Ile Val Met Arg Val Thr Gly Cys Pro Asn Gly Cys
     485 490 495
Gly Arg Ala Met Leu Ala Glu Leu Gly Leu Val Gly Lys Ala Pro Gly
        500 505 510
Arg Tyr Asn Leu His Leu Gly Gly Asn Arg Ile Gly Thr Arg Ile Pro
                   520
                                  525
Arg Met Phe Arg Glu Asn Ile Thr Glu Pro Glu Ile Leu Asp Ser Leu
 530 535
                               540
Asp Val Leu Ile Gly Arg Trp Ala Lys Glu Arg Glu Ala Gly Glu Gly
545
             550 555
Phe Gly Asp Phe Thr Val Arg Ala Gly Ile Ile Arg Pro Val Leu Asp
     565
              570
Pro Ala Arg Asp Phe Trp Glu
        580
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<210> 7799

<211> 250

<212> PRT

<213> Enterobacter cloacae

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<400> 7799
Pro Arg Glu Val Ile Met Ser Val Leu Asp Leu Asn Ala Leu Asn Ala
Leu Pro Lys Val Glu Arg Ile Leu Ala Leu Ala Glu Thr Asn Ala Gln
        20
                         25
Leu Glu Lys Leu Asp Ala Glu Gly Arg Val Ala Trp Ala Leu Glu Asn
      35
Leu Pro Gly Asp Tyr Val Leu Ser Ser Ser Phe Gly Ile Gln Ala Ala
                  55
Val Ser Leu His Leu Val Asn Gln Ile Arg Pro Asp Ile Pro Val Ile
               7.0
                               7.5
Leu Thr Asp Thr Gly Tyr Leu Phe Pro Glu Thr Tyr Gln Phe Ile Asp
          85
                90
Glu Leu Thr Asp Lys Leu Arg Leu Asn Leu Lys Val Tyr Arg Ala Thr
    100 105 110
Glu Ser Ala Ala Trp Gln Glu Ala Arg Tyr Gly Lys Leu Trp Glu Gln
 115 120
Gly Val Glu Gly Ile Glu Lys Tyr Asn Glu Ile Asn Lys Val Glu Pro
130 135
                                  140
Met Asn Arg Ala Leu Lys Glu Leu Asn Ala Gln Thr Trp Phe Ala Gly
145 150 155
Leu Arg Arg Glu Gln Ser Gly Ser Arg Ala Thr Leu Pro Val Leu Ala
          165 170
Val Gln Arg Gly Val Phe Lys Val Leu Pro Ile Ile Asp Trp Asp Asn
         180 185 190
Arg Thr Val Tyr Gln Tyr Leu Gln Lys His Gly Leu Lys Tyr His Pro
    195 200
                                   205
Leu Trp Asp Gln Gly Tyr Leu Ser Val Gly Asp Thr His Thr Thr Arg
                215 220
Lys Trp Glu Pro Gly Met Ala Glu Glu Glu Thr Arg Phe Phe Gly Leu
225 230
Lys Arg Glu Cys Gly Leu His Glu Gly
            245
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<210> 7800 <211> 125 <212> PRT

<213> Enterobacter cloacae

<400> 7800 Asn Pro Ala Val Glu Ser Ser Gly Lys Leu Trp Asp Asp Asp Ala Val 10 Phe Ser Gly Gly Arg Met Gly Lys Leu Thr Leu Leu Leu Leu Ala Leu 25 Leu Val Trp Leu Gln Tyr Ser Leu Trp Phe Gly Lys Asn Gly Leu His 3.5 4.0 Asp Tyr Ser Arg Val Ser Asp Asp Val Ala Ala Gln Gln Ala Thr Asn 50 55 Ala Lys Leu Lys Ala Arg Asn Asp Gln Leu Phe Ala Glu Ile Asp Asp 70 75 Leu Asn Gly Gly Gln Glu Ala Ile Glu Glu Arg Ala Arg Asn Glu Leu 90 8.5 Ser Met Thr Lys Pro Gly Glu Thr Phe Tyr Arg Leu Val Pro Asp Ala 1.05 100 Ser Lys Arg Asn Gln Gly Ser Ala Gln Asn Asn Arg 120

<210> 7801 <211> 186 <212> PRT

<213> Enterobacter cloacae

```
<400> 7801
Tyr Lys Ser Asp Ala Pro Gly Arg Leu Thr Ala Arg Gly Ile Leu Ser
Tyr Pro Tyr Asp Pro Ser Gly Glu Gly Ile Met Arg Ile Gly His Gly
        2.0
                         25
Phe Asp Val His Ala Phe Gly Gly Val Gly Pro Ile Ile Gly Gly
     35
                     4.0
Val Arg Ile Pro Tyr Glu Lys Gly Leu Leu Ala His Ser Asp Gly Asp
                                   60
Val Ala Leu His Ala Leu Thr Asp Ala Leu Leu Gly Ala Ala Ala Leu
             7.0
                       7.5
Gly Asp Ile Gly Lys Leu Phe Pro Asp Thr Asp Pro Ala Phe Lys Gly
                       90
            85
Ala Asp Ser Arg Glu Leu Leu Arg Glu Ala Trp Arg Arg Ile Gln Ala
        100 105 110
Lys Gly Tyr Thr Leu Gly Asn Val Asp Val Thr Ile Ile Ala Gln Ala
          120 125
Pro Lys Met Leu Pro His Ile Pro Gln Met Arg Val Phe Ile Ala Glu
          135 140
Asp Leu Gly Cys His Met Asp Asp Val Asn Val Lys Ala Thr Thr Thr
          150 155 160
Glu Lys Leu Gly Phe Thr Gly Arg Gly Glu Gly Ile Ala Cys Glu Ala
            165 170
Val Ala Leu Leu Val Lys Ala Ala Lys
         180
```

<210> 7802 <211> 281 <212> PRT

<213> Enterobacter cloacae

<400> 7802 Pro Ser Ser Tyr Ala Ser Gly Cys Arg Gln Val Ala Leu Pro Pro Val 10 Leu Ser Gly Asn Leu Ser Thr Arg Arg Val Ile Met Arg Ile Leu Leu 25 Ser Asn Asp Asp Gly Ile His Ala Pro Gly Ile Gln Thr Leu Ala Lys 40 45 His Leu Arg Glu Phe Ala Asp Val Gln Val Val Ala Pro Asp Arg Asn 55 Arg Ser Gly Ala Ser Asn Ser Leu Thr Leu Glu Ser Ser Leu Arg Thr 70 75 Phe Thr Phe Glu Asn Gly Asp Ile Ala Val Gln Met Gly Thr Pro Thr 8.5 90 Asp Cys Val Phe Leu Gly Val Asn Ala Leu Met Arg Pro Arg Pro Asp 100 105 110 Val Val Val Ser Gly Ile Asn Ala Gly Pro Asn Leu Gly Asp Asp Val 115 120 125 Ile Tyr Ser Gly Thr Val Ala Ala Ala Met Glu Gly Arg His Leu Gly 130 135 140 Phe Pro Ala Leu Ala Val Ser Leu Asn Gly His Thr His Tyr Asp Thr 150 155 Ala Ala Ala Val Thr Cys Ser Ile Leu Arg Ala Leu Gly Arg Glu Pro 170 175 165 Leu Arg Thr Gly Arg Ile Leu Asn Ile Asn Val Pro Asp Leu Pro Leu 180 185 Asp Glu Ile Lys Gly Ile Arg Val Thr Arg Cys Gly Ser Arg His Pro 200 205 195 Ala Asp Gln Val Ile Pro Gln Gln Asp Pro Arg Gly Asn Thr Leu Tyr

```
215
Trp Ile Gly Pro Pro Gly Asp Lys Cys Asp Ala Gly Pro Asp Thr Asp
225
                230
                                       235
Phe Ala Ala Val Asp Glu Gly Tyr Val Ser Val Thr Pro Leu His Val
               245
                                   250
                                                  255
Asp Leu Thr Ala Tyr Ser Ala His Asp Val Val Ser Asp Trp Leu Asp
           260
                                265
Arg Val Gly Val Asn Ala Gln Trp
                            280
<210> 7803
<211> 67
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(29)
<220>
<221>UNSURE
<222>(53)
<220>
<221>UNSURE
<222>(67)
<400> 7803
Arg Gln Ile Pro Gly Cys Trp Lys Leu Ala Pro Val Gln Gly Ile Arg
                                   1.0
Pro Arg Ser Trp Pro Thr Leu Cys Thr Met Ser Val Xaa Val Glu Arg
           20
                                25
Ile Lys Gly Leu Gln Trp Gln Ala Arg Arg Arg Leu Lys Gln Leu Asp
        35
                           40
Leu His Lys Phe Xaa Leu Gln Pro Pro Arg Ala Trp Lys Asp His Ala
 50
Trp Val Xaa
65
<210> 7804
<211> 214
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(204)
<400> 7804
Arg Gly Ser Gly His Leu Trp Pro Ala Arg His His Tyr Gln Lys Arg
                                                        15
                                    10
Ser Gly Arg Asp Leu Ile Val Met Lys Thr Val Leu Asp Asn Leu Lys
                                                    30
            20
Gly Lys Leu Val Val Ser Cys Gln Ala Leu Glu Asn Glu Pro Leu His
        35
                            40
                                                45
Ser Pro Phe Ile Met Ser Arg Met Ala Leu Ala Ala Ala Gln Gly Gly
    50
                        55
Ala Ala Ala Ile Arg Ala Asn Ser Val Val Asp Ile Glu Ala Ile Lys
65
                                        75
                                                            80
Gly Leu Val Ser Leu Pro Val Ile Gly Ile Ile Lys Arg Asp Tyr Pro
                                                        95
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Asp Ser Glu Val Phe Ile Thr Ala Thr Leu Lys Glu Val Asp Glu Leu 105 110 Met Ala Val Ala Pro Glu Ile Val Ala Leu Asp Ala Thr Ala Arg Lys 120 115 Arg Pro Gly Gly Val Ser Leu Asp Met Leu Ile Ala Gln Ile Arg Thr 135 140 130 Arg Tyr Pro Ser Leu Leu Leu Met Ala Asp Ile Ala Thr Val Gln Glu 150 155 145 Ala Val Thr Ala Gln Ala Leu Gly Phe Asp Cys Val Gly Thr Thr Leu 165 170 175 Tyr Gly Tyr Thr Ala Glu Thr Ala Gly His Ser Leu Pro Glu Asn Asp 180 185 190 Cys Ala Phe Leu Lys Glu Leu Arg Ser Ala Val Xaa Ile Pro Gly Asp 195 200 205 Cys Arg Lys Val Thr 210

<210> 7805 <211> 604 <212> PRT <213> Enterobacter cloacae

<400> 7805 Arg Arg Met Thr Thr Gln Ala Pro Pro Ser Asn Leu Leu Pro Leu Asn 10 15 Pro Glu Gln Leu Ala Arg Leu Gln Ala Ala Thr Ser Asp Phe Ser Pro 25 Thr Gln Leu Ala Trp Val Ser Gly Tyr Phe Trp Gly Met Leu Asn Gln 4.0 Gln Pro Gly Ala Val Ala Gly Val Pro Pro Thr Ala Val Glu Ile Pro 55 Ala Ile Thr Leu Ile Ser Ala Ser Gln Thr Gly Asn Ala Arg Arg Val 70 75 80 Ala Glu Ala Leu Arg Asp Asp Leu Leu Ala Ala Lys Leu Asn Val Asn Leu Val Asn Ala Gly Asp Tyr Lys Phe Lys Gln Ile Ala Ser Glu Lys 105 110 100 Leu Leu Val Val Val Ala Ser Thr Gln Gly Glu Gly Glu Pro Ala Glu 120 125 115 Glu Ala Val Ala Leu His Lys Phe Leu Phe Ser Lys Lys Ala Pro Lys 130 135 140 Leu Glu Gly Thr Ala Phe Ala Val Phe Gly Leu Gly Asp Thr Ser Tyr 150 155 160 145 Glu Phe Phe Cys Gln Ser Gly Lys Asp Phe Asp Ser Lys Leu Ala Glu 165 170 175 Leu Gly Ala Glu Arg Leu Leu Asp Arg Val Asp Ala Asp Val Glu Tyr 180 185 190 Gln Ala Ala Ala Glu Trp Arg Ala Arg Ile Val Glu Val Leu Lys 195 200 205 Ala Arg Val Pro Lys Glu Thr Pro Ala Gln Ala Ala Val Thr Ala Ala 210 215 220 Gly Thr Val Asn Glu Ile His Thr Ser Pro Tyr Thr Lys Glu Ala Pro 230 225 235 Leu Thr Ala Ser Leu Ser Val Asn Gln Lys Ile Thr Gly Arg Asp Ser 245 250 255 Glu Lys Asp Val Arg His Ile Glu Ile Asp Leu Gly Asp Ser Gly Leu 270 260 265 Arg Tyr Gln Pro Gly Asp Ala Leu Gly Val Trp Tyr Gln Asn Asp Pro 280 285 Ala Leu Val Lys Glu Leu Val Glu Leu Leu Trp Leu Lys Gly Thr Glu 290 295 300

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Pro Val Gln Val Glu Gly Lys Thr Leu Pro Leu Ser Glu Ala Leu Gln
         310
                            315
Trp His Phe Glu Leu Thr Val Asn Thr Ala Asn Ile Val Glu Asn Tyr
          325 330
Ala Thr Leu Thr Arg Ser Glu Ser Leu Leu Pro Leu Val Gly Asp Lys
        340 345
                                      350
Ala Lys Leu Gln Gln Tyr Ala Ala Thr Thr Pro Ile Val Asp Met Val
    355 360 365
Arg Phe Ser Pro Ala Gln Leu Asp Ala Asp Ala Leu Ile Gly Leu Leu
 370 375 380
Arg Pro Leu Thr Pro Arg Leu Tyr Ser Ile Ala Ser Ser Gln Ala Glu
    390 395
Val Glu Asn Glu Val His Ile Thr Val Gly Val Val Arg Tyr Asp Ile
         405 410
                                         415
Glu Gly Arg Ala Arg Ala Gly Gly Ala Ser Gly Phe Leu Ala Asp Arg
        420 425 430
Val Glu Glu Gly Glu Val Arg Val Phe Ile Glu His Asn Asp Asn
         440
                                  445
     435
Phe Arg Leu Pro Ala Asn Pro Glu Thr Pro Val Ile Met Ile Gly Pro
               455 460
 450
Gly Thr Gly Ile Ala Pro Phe Arg Ala Phe Met Gln Gln Arg Ala Ala
              470 475 480
465
Asp Glu Ala Pro Gly Lys Asn Trp Leu Phe Phe Gly Asn Pro His Phe
           485
                          490 495
Thr Glu Asp Phe Leu Tyr Gln Val Glu Trp Gln Arg Tyr Val Lys Glu
        500
                       505
Gly Val Leu Tnr Arg Ile Asp Leu Ala Trp Ser Arg Asp Gln Lys Glu
                                   525
     515
                    520
Lys Val Tyr Val Gln Asp Lys Leu Arg Glu Gln Gly Ala Glu Leu Trp
 530 535
                                540
Arg Trp Ile Asn Asp Gly Ala His Ile Tyr Val Cys Gly Asp Ala Asn
              550
                             555
545
Arq Met Ala Lys Asp Val Glu Gln Ala Leu Leu Glu Val Ile Ala Glu
           565
                          570 575
Phe Gly Gly Met Asp Ala Glu Thr Ala Asp Glu Phe Leu Ser Glu Leu
        580
                    585
Arg Val Glu Arg Arg Tyr Gln Arg Asp Val Tyr
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<210> 7806 <211> 217 <212> PRT

<213> Enterobacter cloacae

<400> 7806 Ala Leu Pro Ala Leu Gly Arg Thr Arg Ser Ala Gly Arg Gln Val Met 10 1.5 Ala Ala His Asp Glu Asn Val Val Trp His Pro His Pro Val Thr Val 3.0 25 20 Ala Gln Arg Glu Gln Leu His Gly His Arg Gly Val Val Leu Trp Phe 45 35 40 Thr Gly Leu Ser Gly Ser Gly Lys Ser Thr Val Ala Gly Ala Leu Glu 55 60 Glu Ala Leu His Gln Gln Gly Val Ser Thr Tyr Leu Leu Asp Gly Asp 75 Asn Val Arg His Gly Leu Cys Ser Asp Leu Gly Phe Ser Asp Glu Asp 85 90 Arg Lys Glu Asn Ile Arg Arg Val Gly Glu Val Ala Ser Leu Met Ala 100 1.05 Asp Ala Gly Leu Val Val Leu Thr Ala Phe Ile Ser Pro His Arg Ala 120 125 115

```
Glu Arg Gln Met Val Arg Glu Arg Val Gly Gln Asn Arg Phe Ile Glu
                    135
 130
Val Phe Val Asp Thr Pro Leu Ala Ile Cys Glu Ala Arg Asp Leu Lys
             150
145
                                  155
Gly Leu Tyr Lys Lys Ala Arg Ala Gly Glu Leu Arg Asn Phe Thr Gly
            165 170
                                                175
Ile Asp Ser Val Tyr Glu Ala Pro Glu Ser Pro Glu Ile His Leu Glu
     180 185 190
Gly Gln Gln Leu Val Thr Asn Leu Val Ser Gln Leu Leu Asp Leu Leu
    195 200
Arg Arg Asp Asp Ile Ile Arg Ser
   210
<210> 7807
<211> 270
<212> PRT
<213> Enterobacter cloacae
<400> 7807
Leu Ser Arg Ala Lys Arg Phe Ile Ala Trp Phe Arg Met Arg Leu Asn
                               10
Ala Ile Arg Ala Pro His Lys Thr Ile Asp Asn Gln Ala Gln Asp Tyr
                           25
          20
Asp Met Ala Ala Thr Phe Ser Asp Val Cys Ala Val Val Pro Ala Ala
3.5
                        4.0
Gly Phe Gly Arg Arg Met Gln Thr Glu Cys Pro Lys Gln Tyr Leu Ser
50
                    55
                                60
Ile Gly Asp Lys Thr Ile Leu Glu His Ala Val Ala Ala Leu Leu Ala
                 70
                                75
His Ser Arg Val Lys Arg Val Val Ile Ala Ile Ser Pro Gly Asp Ala
              85
                               90
Leu Phe Ala Gln Leu Pro Leu Ala Asn His Pro Gln Ile Thr Val Val
                           105
                                          110
          100
Asp Gly Gly Ala Glu Arg Ala Asp Ser Val Leu Ala Gly Ile Gln Ala
                        120
                                       125
       115
Ala Gly Asn Ala Gln Trp Val Leu Val His Asp Ala Ala Arg Pro Cys
                     135
                                      140
   130
Leu His His Asp Asp Leu Ser Arg Leu Leu Ala Leu Ser Glu Thr Ser
                 150
                                   155
                                                    160
145
Asn Val Gly Gly Ile Leu Ala Ala Pro Val Arg Asp Thr Met Lys Arg
                               170
                                                 175
              165
Ala Glu Pro Gly Lys Pro Ala Ile Ala His Thr Val Glu Arg Val Asp
                            185
                                             190
          180
Leu Trp His Ala Leu Thr Pro Gln Phe Phe Pro Arg Glu Leu Leu His
                        200
       195
Asp Cys Leu Thr Arg Ala Leu Lys Glu Gly Ala Thr Ile Thr Asp Glu
                                       220
   210
                     215
Ala Ser Ala Leu Glu Tyr Cys Gly Phe His Pro Thr Leu Val Glu Gly
                                  235
                                                    240
225
Arg Ala Asp Asn Ile Lys Val Thr Arg Pro Glu Asp Leu Gln Leu Ala
              245
                               250
Glu Phe Tyr Leu Thr Arg Thr Thr Pro Gln Glu Lys Ala
          260
                            265
<210> 7808
<211> 91
<212> PRT
<213> Enterobacter cloacae
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<400> 7808

Glu Lys Glu Ala Leu Ala Asp Glu Asp Thr Leu Pro Gln Ser Glu Arg

<210> 7809 <211> 799 <212> PRT

<213> Enterobacter cloacae

<400> 7809 Gln Lys Arg Ala Gly His Tyr Leu Ser Leu Val Arg Gly Lys Met Ala 10 Gln Arg Gly Asp Glu Phe Trp Ile Glu Ile Gln Asp Ile Arg His Cys 20 2.5 Val Glu Asp Glu Gly Asp Thr Leu Thr Leu Leu Trp Met Leu Glu Gly 40 35 Arg Ala Glu Leu Asn Thr Asp Ala Gly Arg Asp Thr Leu Glu Ala Asn 55 50 60 Thr Leu Ala Ile Ile Asn Arg His Arg Arg Trp Gln Phe Thr Ser Glu 75 7.0 Thr Ala Asn Val Thr Leu Arg Val Thr Leu Ser Gly Arg Trp Val Val 8.5 90 Gln Leu Cys Asn Asp Phe Phe Ala His Asp Tyr Ala Val Pro Ala Glu 100 105 Ala Gly Gly Val Trp Pro Gln Cys Asp Ala Leu Arg Asp Leu Leu Arg 120 115 Gln Leu Leu Val Val Thr Leu Ile Asn Asp Pro His Arg Tyr Arg Leu 135 140 130 Glu Ala Tyr Arg Trp Leu Ser Glu Ile Leu Leu Leu Thr Ser Arg 150 155 Phe Gln Gln Pro Ala Arg Met Leu Ser Arg Glu Leu Ser Ser Ala His 170 165 Ser Lys Arg Ile Ala Arg Val Ile Glu Arg Ile Asn Ala Ser Tyr Ser 180 185 190 Arg Arg Ile Thr Leu Ala Glu Ile Ala Ala Ser Glu Tyr Val Ser Glu 200 205 Ala Trp Leu Ser Arg Leu Phe Arg Lys Glu Val Gly Ile Ser Phe Met 220 210 215 Gln Tyr Ile Thr Arg Leu Arg Leu Glu Lys Ala Ala Asn Ala Leu Arg 230 235 Leu Thr Asn Arg Pro Leu His Gln Ile Ala Leu Glu Gln Gly Phe Ala 245 250 Ser Thr Arg Met Met Ser Asp Arg Phe Arg Arg Val His Asn Met Ser 270 265 Pro Gly Glu Phe Arg Lys Ala Arg Arg Gln His Pro Glu Ala Ala Arg 280 285 Val Arg Ala Asp Arg Arg Glu Gln Arg Tyr Pro Val Ala Val Asp Lys 300 290 295 Leu Phe Ser Leu Leu Asn Glu Pro Val Ala Arg Gly Trp Gly Ala Ser 315 310 Pro Leu Val Val His Pro Gln Gln Glu Gln Arg Leu Asp Leu Glu Gln 325 330 Leu Asn Pro Leu Ser Ala Ser Leu Arg Arg Met Arg Val Val Ile Thr

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340
                       345
Leu Arg Glu Leu Asp Asp Leu Leu Arg Glu Asp Val Arg Gln Asn Leu
   355
                   360
                                  365
Glu Ala Ile Asn Glu Ala Ile Pro Ile Glu Gly Ile Asp Ile Ala Glu
      375
                               380
Pro Phe Leu Ser Ser Arg Leu Phe Ala Thr Gly Trp Asp Asp Pro Gln
   390 395
Met Ala Gly Tyr Ala Cys Trp Tyr Asn Leu His Gln Leu Phe Thr Trp
         405 410 415
Leu Ala Lys Lys Gln Trp Tnr Val Leu Leu His Thr Gly Val Thr Thr
     420 425 430
Arg Arg Asp Leu Leu Thr Arg Phe Leu Gln Gln Ser Val Asn His Phe
  435 440 445
Ala Pro Glu Ile Thr Ala Gly Trp His Phe Val Met His Trp Ser Thr
 450 455 460
Gln Ala Ser Glu Glu Thr Arg Glu Gln Val Trp Leu Ala Gln Gln Lys
465 470 475 480
Ala Ile Arg Thr Tyr Leu Pro Gln Ala Lys Phe Gly Leu Trp His Arg
      485 490 495
Phe Ala Pro Val Ser Ala Gly Val Ser Asp Asp Thr Leu Phe Ser Ser
  500 505 510
Ala Ile Leu Met Gln Ala Asp Phe Leu Ala Cys Ser Ala Asp Ala Asn
   515 520 525
Glu Leu Leu Asp Pro Ala Gln Leu Glu Val Thr Pro Leu Ser Ser Thr
530 535 540
Glu Asn Tyr Pro Ile Leu Lys Val Arg Gln Ile Leu Ala Ala Leu Arg
545 550
                 555 560
Leu Arg Lys Cys Ser Leu Pro Val Trp Leu Leu Ser Trp Asn Thr Leu
         565 570 575
Thr Gly Asn Thr Arg Ala Thr Asn Gly Trp Phe Phe Arg Gly Ala Leu
                    585
Leu Met Gln Asn Leu Leu Gly Leu Ser Glu Gln Val Trp Leu Ala Gly
595 600
Phe Trp Leu Asn Ser Gly Leu Gln Gly Glu Ala Arg Ala Asn Asn Thr
610 615 620
Ile Asp Thr Ser Ser Leu Ala Leu Gln Tyr Asn His Gly Leu Pro Arg
                 635
625 630
Pro Val Tyr Trp Val Leu Trp Leu Trp Gln Arg Leu Arg Gly Glu Val
           645
                         650 655
Leu Val Asn Asp Lys Arg Val Leu Leu Thr Arg His Arg Asn Gly Tyr
      660 665
Gln Leu Leu Leu Arg Asn Val Val Phe Asn Pro Leu Leu Ser Ser
                    680
                        685
     675
Glu Glu Ala Phe Ile Gln Arg Phe Arg Gln Gln Tyr His Leu His Leu
                 695
Lys Gly Met Arg Gly Lys Trp Arg Ile Lys Cys His Leu Phe Asp Gln
              710 715
705
His Asn Gly Ala Leu Tyr Pro Leu Leu Glu Gly Val Gly Ser Glu Ser
               730
Gly Pro Asp Glu Glu Met Trp Arg Trp Ile Ala His Lys Ala Arg Pro
        740 745 750
Thr Leu Ser Val Arg Asp Glu Arg Leu Tyr Asp Gly Trp Gln Leu Ser 755 760 765
Glu Ser Leu Glu Ser Asn Ala Leu Val Leu Tyr Glu Phe Thr Pro Leu
                775
Val Pro His Glu Ala Glu Thr Glu Glu Ile His Ser Pro Arg
              790
<210> 7810
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<210> 781 <211> 481 <212> PRT

<213> Enterobacter cloacae

<400> 7810 Leu Leu Ile Pro Ile Arg Asn Phe Ile Arg Ser Lys Pro Pro Pro Ile 10 Val Pro Leu Phe Val Val Val Ser Glu Leu Leu Pro Val Asp Tyr Leu 20 25 Pro Leu Phe Ala Ala Leu Lys Asp Arg Pro Val Leu Val Val Gly Thr 35 40 45 Gly Glu Ile Ala Asp Arg Lys Ile Ala Phe Leu Gln Arg Ala Gly Ala 50 55 60 Gln Val Gln Ile Val Ala Glu Ala Asp Phe Ala Glu Ser Gln Ile Asp 70 75 Ser Val Val Leu Val Ile Ala Ala Thr Glu Asp Arg Ala Leu Asn Ser 85 90 95 Arg Ile Ser Asp Ala Ala Gîn Ala Arg His Arg Leu Val Asn Val Val 100 105 110 Asp Asp Gln Pro Leu Cys Ser Phe Ile Phe Pro Ser Ile Val Asp Arg 115 120 125 Ser Pro Leu Leu Val Ala Ile Ser Ser Gly Gly Thr Ala Pro Val Leu 130 135 140 Ala Arg Val Leu Arg Glu Lys Ile Glu Ala Leu Leu Pro Thr Ser Leu 145 150 155 160 Gly Arg Met Ala Glu Lys Ala Ser Tyr Trp Arg Asn His Leu Lys Thr 165 170 175 Arg Leu Thr Ser Val Thr Glu Arg Arg Arg Phe Trp Glu Arg Val Phe 180 185 190 Arg Gly Arg Phe Ala Ser Leu Met Gln Ala Gly Asn Glu Thr Ala Ala 195 200 205 Gln Gln Ile Leu Glu Asp Glu Leu Asp Asn Pro Gly Ser Thr Gly Gly 210 215 220 Glu Ile Ile Leu Val Gly Ala Gly Pro Gly Asp Ala Gly Leu Leu Thr 225 230 235 240 Leu Arg Gly Leu Gln Val Leu Gln Asp Ala Asp Val Val Phe Tyr Asp 245 250 255 His Leu Val Thr Asp Gly Ile Arg Glu Leu Ile Arg Arg Asp Ala Glu 260 265 270 Gln Ile Cys Val Gly Lys Arg Ala Gly Glu His Ser Val Pro Gln His 275 280 285 Asp Thr Asn Gln Met Leu Ile Ala Ala Ala Lys Ala Gly Lys Thr Val 290 295 300 Val Arg Leu Lys Gly Gly Asp Pro Phe Ile Phe Gly Arg Gly Glu 305 310 315 Glu Leu Gln Ala Ala Ala Glu Ala Gly Val Pro Phe Gln Val Val Pro 325 330 Gly Ile Thr Ala Ala Ser Ala Val Thr Ala Tyr Ala Gly Ile Pro Leu 340 345 350 Thr His Arg Asp Tyr Ala Gln Ser Val Thr Phe Val Thr Gly His Tyr 355 360 365 Lys Ala Asp Ser Thr Pro Phe Asp Trp Ser His Leu Ala Gln Ser Arg 375 380 Gln Thr Leu Ala Ile Tyr Met Gly Thr Met Lys Ala Ala Asp Ile Ser 385 390 395 Glu Gln Leu Ile Gln His Gly Arg Asp Ala Ala Thr Pro Val Ala Val 410 405 Ile Ser Arg Gly Thr Arg Val Asp Gln His Val Ala Ile Gly Thr Leu 420 425 430 Gln Asp Leu Ala Thr Leu Ala Lys Asp Ala Pro Met Pro Ala Leu Ile 435 440 445 Val Val Gly Glu Val Val Gln Leu His Ser Thr Leu Ala Trp Phe Gln 450 455 460

His Thr Thr Asp Thr Glu Gly Phe Gly Ala Ser Val Ile Asn Leu Ala <210> 7811 <211> 306 <212> PRT <213> Enterobacter cloacae <400> 7811 Gly Thr Val Met Asp Gln Lys Arg Leu Thr His Leu Arg Gln Leu Glu Ala Glu Ser Ile His Ile Ile Arg Glu Val Ala Ala Glu Phe Ser Asn Pro Val Met Met Tyr Ser lle Gly Lys Asp Ser Ser Val Met Leu His 4.5 Leu Ala Arg Lys Ala Phe Tyr Pro Gly Thr Leu Pro Phe Pro Leu Leu His Val Asp Thr Gly Trp Lys Phe Arg Glu Met Tyr Glu Phe Arg Asp 7.5 Arg Thr Ala Lys Ala Tyr Gly Cys Glu Leu Leu Val His Lys Asn Pro Glu Gly Val Ala Met Gly Ile Asn Pro Phe Val His Gly Ser Ala Lys His Thr Asp Ile Met Lys Thr Glu Gly Leu Lys Gln Ala Leu Asn Lys Tyr Gly Phe Asp Ala Ala Phe Gly Gly Ala Arg Arg Asp Glu Glu Lys Ser Arg Ala Lys Glu Arg Ile Tyr Ser Phe Arg Asp Arg Phe His Arg Trp Asp Pro Lys Asn Gln Arg Pro Glu Leu Trp His Asn Tyr Asn Gly Gln Ile Asn Lys Gly Glu Ser Ile Arg Val Phe Pro Leu Ser Asn Trp Thr Glu Leu Asp Ile Trp Gln Tyr Ile Tyr Leu Glu Asn Ile Glu Ile Val Pro Leu Tyr Leu Ala Ala Glu Arg Pro Val Leu Glu Arg Asp Gly Met Leu Met Met Ile Asp Asp Asp Arg Ile Asp Leu Gln Pro Gly Glu Val Ile Lys Lys Gln Met Val Arg Phe Arg Thr Leu Gly Cys Trp Pro Leu Thr Gly Ala Val Glu Ser Ser Ala Gln Thr Leu Pro Glu Ile Ile Glu Glu Met Leu Val Ser Thr Thr Ser Glu Arg Gln Gly Arg Val Ile Asp Arg Asp Gln Ala Gly Ser Met Glu Leu Lys Lys Arg Gln Gly Tyr Phe <210> 7812 <211> 478 <212> PRT <213> Enterobacter cloacae <400> 7812

<4400> /812
Gly Ala Ala Met Asn Thr Thr Ile Ala Gln Gln Ile Ala Asp Glu Gly
1 5 10
Gly Val Glu Ala Tyr Leu His Ala Gln Gln Tyr Lys Ser Leu Leu Arg

25 Phe Leu Thr Cys Gly Ser Val Asp Asp Gly Lys Ser Thr Leu Ile Gly 40 Arg Leu Leu His Asp Thr Arg Gln Ile Tyr Glu Asp Gln Leu Ser Ser 55 Leu His Asn Asp Ser Lys Arg His Gly Thr Gln Gly Glu Lys Leu Asp 70 Leu Ala Leu Leu Val Asp Gly Leu Gln Ala Glu Arg Glu Gln Gly Ile 85 90 Thr Ile Asp Val Ala Tyr Arg Tyr Phe Ser Thr Glu Lys Arg Lys Phe 100 105 Ile Ile Ala Asp Thr Pro Gly His Glu Gln Tyr Thr Arg Asn Met Ala 115 120 125 Thr Gly Ala Ser Thr Cys Asp Leu Ala Ile Leu Leu Ile Asp Ala Arg 135 140 Lys Gly Val Leu Asp Gln Thr Arg Arg His Ser Phe Ile Ser Thr Leu 150 155 160 Leu Gly Ile Lys His Leu Val Val Ala Val Asn Lys Met Asp Leu Val 165 170 175 Asp Tyr Ser Glu Ala Arg Phe Asp Glu Ile Arg Gln Ser Tyr Leu Thr 180 185 190 Phe Ala Glu Gln Leu Pro Gly Asn Leu Asp Ile Arg Phe Val Pro Leu 195 200 205 Ser Ala Leu Glu Gly Asp Asn Val Ala Ser Gln Ser Gly Asn Met Pro 210 215 220 Trp Tyr Ser Gly Pro Thr Leu Leu Glu Val Leu Glu Thr Val Glu Ile 225 230 235 240 Gln Arg Val Val Asp Thr Gln Pro Met Arg Phe Pro Val Gln Tyr Val 245 250 255 Asn Arg Pro Asn Leu Asp Phe Arg Gly Phe Ser Gly Thr Ile Ala Ser 260 265 270 Gly Ser Val Lys Val Gly Gln Arg Val Lys Val Leu Pro Ser Gly Val 275 280 285 Glu Ser Ala Ile Ala Arg Ile Val Thr Phe Asp Gly Asp Leu Asp Glu 290 295 300 Ala Gly Ala Gly Glu Ala Val Thr Leu Val Leu Lys Asp Glu Ile Asp 305 310 315 Ile Ser Arg Gly Asp Leu Leu Val Asp Ala Gln Glu Thr Leu Ala Ala 325 330 335 Val Gln Gly Ala Ser Val Asp Val Val Trp Met Ala Glu Gln Pro Leu 340 345 350 Thr Ala Gly Gln Ser Tyr Asp Ile Lys Ile Ala Gly Lys Lys Thr Arg 355 360 365 Ala Arg Val Asp Gly Ile Gln Phe Gln Val Asp Ile Asn Asn Leu Thr 370 375 380 His Arg Asp Val Ser Glu Leu Pro Leu Asn Gly Ile Gly Leu Val Asp 385 390 395 400 Met Thr Phe Asp Glu Pro Leu Val Leu Asp Pro Tyr Gln Gln Asn Pro 405 410 415 Val Thr Gly Gly Leu Ile Phe Ile Asp Arg Leu Thr Asn Val Thr Val 420 425 430 Gly Ala Gly Met Val Arg Glu Pro Asn Ala Gln Ala Ala Val Ala Ser 435 440 445 Glu Phe Ser Ala Phe Glu Leu Glu Leu Asn Ala Leu Val Arg Lys His 450 455 460 Phe Pro His Trp Gly Ala Arg Asp Leu Leu Gly Gly Lys 470 <210> 7813 <211> 116 <212> PRT

<213> Enterobacter cloacae

<400> 7813 Val Thr Val Thr Gly Leu Ala Met Arg Asn Ser Glu Asn Tyr Met Ile Thr Thr Gly Ser Glu Pro Leu Thr Thr Asp Asp Glu Thr Thr Trp Ser 2.0 25 Phe Pro Gly Ala Ile Val Gly Phe Val Ser Trp Leu Leu Ala Leu Gly 40 3.5 4.5 Ile Pro Phe Leu Ile Tyr Gly Gly Asn Thr Leu Phe Phe Phe Leu Tyr 5.5 60 Thr Trp Pro Phe Phe Leu Ala Leu Met Pro Val Ala Val Val Gly 70 75 Val Ala Leu His Ser Leu Phe Asn Gly Lys Leu Leu Tyr Ser Thr Leu 90 8.5 Ile Thr Ile Ala Thr Val Val Val Ile Phe Gly Leu Leu Phe Leu Trp 105 Leu Met Glv 115

<210> 7814 <211> 360 <212> PRT

<213> Enterobacter cloacae

<400> 7814 Ser Arg Gly Ala Ala Gly Glu Gly Gly Gln Met Thr Asp Phe Asp Asn 1.0 Leu Thr Tyr Leu His Gly Glu Pro Gln Gly Lys Gly Leu Leu Lys Ala 20 25 Asn Pro Glu Asp Phe Val Val Val Glu Asp Leu Gly Phe Glu Pro Asp 40 35 Gly Glu Gly Glu His Ile Leu Val Arg Ile Leu Lys Asn Gly Cys Asn 5.5 Thr Arg Phe Val Ala Asp Ala Leu Ala Lys Phe Leu Asn Ile His Ala 7.0 75 Arg Glu Val Ser Phe Ala Gly Gln Lys Asp Lys His Ala Val Thr Glu 85 90 Gln Trp Leu Cys Ala Arg Val Pro Gly Asn Ala Met Pro Asp Leu Ser 105 110 100 Lys Phe Glu Leu Glu Gly Cys Lys Val Leu Glu Tyr Ala Arg His Lys 115 120 Arg Lys Leu Arg Leu Gly Ala Leu Lys Gly Asn Ala Phe Thr Leu Val 130 135 140 Leu Arg Glu Val Thr Glu Arg Glu Asp Val Glu Lys Arg Leu Lys Ala 150 155 145 Ile Asn Glu Arg Gly Val Pro Asn Tyr Phe Gly Ala Gln Arg Phe Gly 165 170 Ile Gly Gly Ser Asn Leu Leu Gly Ala Leu Arg Trp Ala Gln Ser Gly 180 185 190 Ala Pro Val Arg Asp Arg Asn Lys Arg Ser Phe Trp Leu Ser Ala Ala 200 205 Arg Ser Ala Leu Phe Asn Cln Ile Val Ser Glu Arg Leu Lys Lys Pro 215 Asp Ala Asn Gln Val Val Val Gly Asp Ala Leu Gln Leu Ala Gly Arg 230 235 240 Gly Ser Trp Phe Val Ala Thr Ala Asp Glu Met Ala Asp Val Gln Ser 250 245 Arg Val Asp Ala Lys Thr Leu Met Ile Thr Ala Ala Leu Pro Gly Ser 265 Gly Asp Trp Gly Thr Gln Gly Glu Ala Leu Ala Ala Glu Gln Ser Ala

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280
Val Ala Asp Ala Pro Glu Leu Gln Ser Leu Leu Val Arg Glu Lys Val
                      295
                                          300
Glu Ala Ala Arg Arg Ala Met Leu Leu Tyr Pro Gln Gln Leu Ser Trp
                                   315
                310
Asn Trp Trp Asp Asp Val Thr Val Glu Leu Arg Phe Trp Leu Pro Ala
            325 330
Gly Ser Phe Ala Thr Ser Val Val Arg Glu Leu Ile Asn Thr Ser Gly
         340
                           345
Asp Tyr Ala Asn Ile Ala Glu
<210> 7815
<211> 121
<212> PRT
<213> Enterobacter cloacae
<400> 7815
Cys Gly Val Gly Leu Val Arg Ser Gly Arg Ser Glu Arg Ala Met Val
                                  10
Ser Lys Arg Val Gln Thr Leu Leu Glu Gln Leu Arg Ala Gln Gly Ile
                              25
Ala Asn Glu Gln Val Leu Asp Ala Leu Ala Gln Val Pro Arg Glu Lys
                           40
Phe Val Asp Glu Ala Phe Glu His Lys Ala Trp Glu Asn Val Ala Leu
                      55
Pro Ile Gly Gln Gly Gln Tnr Ile Ser Gln Pro Tyr Met Val Ala Arg
                                       75
                   7.0
Met Thr Glu Leu Glu Leu Thr Pro Asp Ser Arg Val Leu Glu Ile
               85
                                  90
Gly Thr Gly Ser Gly Tyr Gln Thr Ala Ile Leu Ala His Leu Val His
           100
                    105
His Val Cys Ser Arg Gly Thr Asp
      115
<210> 7816
<211> 351
<212> PRT
<213> Enterobacter cloacae
<400> 7816
Gly Leu Thr Met Phe Ser Ala Met Arg His Arg Phe Val Ala Leu Ala
                                  1.0
Leu Gly Val Cys Phe Ile Leu Pro Ala Gln Ala Lys Asn Pro Ser Tyr
            20
                               25
Gly Glu Ile Ala Ser Met Gln Ala Arg His Ile Ala Thr Val Phe Pro
       35
                           40
Gly Arg Met Thr Gly Thr Pro Ala Glu Met Leu Ser Ala Asp Tyr Ile
                       5.5
Arg Gln Gln Phe Ala Asp Met Gly Tyr Glu Ser Asp Ile Arg Ala Phe
                                      75
                                                          80
65
                   70
His Ser Arg Tyr Ile Tyr Thr Thr Arg Asn Lys Thr Gln Asn Trp His
                                   90
               85
                                                     95
Asn Val Thr Gly Ser Thr Val Ile Ala Ala His Glu Gly Lys Thr Ala
           100
                               105
Glu Gln Ile Ile Ile Met Ala His Leu Asp Thr Tyr Thr Pro Leu Ser
                           120
Asp Ala Asp Val Asp Asn Asn Leu Gly Gly Leu Thr Leu Gln Gly Leu
                      135
                                           140
Asp Asp Asn Ala Ala Gly Leu Gly Val Met Leu Glu Leu Ala Glu Arg
                   150
                                      155
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Leu Lys Asn Ile Pro Thr Lys Tyr Ser Ile Arg Phe Val Ala Thr Ser
                         170
                                      175
           165
Gly Glu Glu Glu Gly Lys Leu Gly Ala Glu Asn Leu Leu Lys Arg Met
        180
                      185
Ser Ala Glu Glu Lys Lys Asn Thr Leu Leu Val Ile Asn Leu Asp Asn
     195 200
                                  205
Leu Ile Val Gly Asp Lys Leu Tyr Phe Asn Ser Gly Gln Ser Thr Pro
 210 215 220
Ser Ser Val Arg Lys Leu Thr Arg Asp Arg Ala Leu Ala Leu Ala Arg
225 230 235
Thr His Gly Val Tyr Ala Ala Thr Asn Pro Gly Gly Asn Pro Glu Tyr
        245 250 255
Pro Lys Gly Thr Gly Cys Cys Asn Asp Gly Glu Val Phe Asp Lys Ala
       260 265 270
Gly Ile Pro Val Leu Tyr Val Giu Ala Thr Asn Trp Ala Leu Gly Lys
     275 280 285
Lys Asp Gly Tyr Gln Gln Arg Ser Lys Ser Lys Ala Phe Pro Asp Gly
 290 295 300
Thr Ser Trp His Asp Val Arg Leu Asp Asn Gln Gln His Ile Asp Lys
305 310 315 320
Ala Leu Pro Gln Arg Ile Glu His Arg Ser Arg Asp Val Val Lys Val
  325 330 335
Met Leu Pro Leu Val Lys Glu Leu Ala Lys Ala Gly Lys Ala
                      345
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<210> 7817 <211> 431 <212> PRT

<213> Enterobacter cloacae

<400> 7817 Leu Asn Cys Met Lys Asn Asn Gln Asn Lys Ala Val Ala Leu Gln Gln 1.0 Lys Ile Ala Phe Ser Gly Ser Thr Ile Val Ile Asp Ser Lys Leu Ser 25 Ser Phe Gly Arg Lys Arg Ile Thr Lys Met Thr His Pro Ile Ile Glu 4.0 Ala Leu Arg Gly Asn Glu Ala Arg Phe Thr Glu Leu Arg Arg Tyr Phe 55 His Gln His Pro Glu Ile Gly Phe Glu Glu His Asn Thr Ser Asp Arg 70 75 Val Ala Ala Leu Leu Gln Glu Trp Gly Tyr Glu Val His Arg Gly Leu 85 90 Ala Lys Thr Gly Val Val Gly Thr Leu Lys Val Gly Asn Gly His Lys 105 100 Arg Leu Gly Leu Arg Ala Asp Met Asp Ala Leu Pro Met Gln Glu Asn 115 125 Asn Gly Lys Ala Trp Ser Ser Thr Val Glu Gly Lys Phe His Gly Cys 130 135 140 Gly His Asp Gly His Thr Thr Thr Leu Leu Tyr Ala Ala Glu Tyr Leu 145 \$150\$Ala Arg Thr Arg Asn Phe Asn Gly Thr Leu His Leu Ile Phe Gln Pro 165 170 Ala Glu Glu Leu Leu Tyr Gly Gly Arg Val Met Val Glu Asp Gly Leu 180 185 190 Phe Asp Leu Phe Pro Cys Asp His Ile Phe Gly Leu His Asn Met Pro 200 205 195 Ser Gln Pro Leu Gly Lys Ile Gly Leu Arg Asp Gly Ala Met Met Ala 220 210 Ser Ser Asp Thr Leu His Ile Glu Val Asn Gly Val Gly Gly His Gly 230 235

230

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Ala Val Pro Glu His Thr Val Asp Ala Thr Leu Val Ala Cys His Ile
                        250
           245
Thr Ile Ala Leu Gln Ser Ile Val Ser Arg Asn Ile Thr Pro Phe Gln
         260
                       265
Pro Ala Val Val Thr Val Gly Ser Ile Gln Ala Gly His Ala Pro Asn
     275
                    280
                                    285
Ile Ile Asn Asp Lys Val Leu Met Lys Leu Thr Val Arg Thr Leu Asp
 290 295
                                 300
Glu Arg Val Arg Gln Thr Val Leu Gln Arg Ile His Asp Ile Ala Val
305 310 315
Ala Gln Ala Glu Ser Phe Asn Ala Thr Ala Thr Ile Arg His Ile Asn
      325 330 335
Gly Ser Pro Val Leu Lys Asn Asn Pro Gln Ala Asn Glu Met Val Arg
        340 345 350
Ser Val Ala Thr Asp Leu Phe Gly Gln Asp Ala Val Ala Glu Val Asn
     355 360 365
Ala Phe Met Gly Ser Glu Asp Phe Ala Phe Met Leu Glu Lys Asn Pro
 370 375 380
Asn Gly Cys Tyr Phe Thr Leu Gly Ala Gly Asp Glu Pro Asp Arg Cys
      390 395 400
Met Val His Asn Pro Gly Tyr Asp Phe Asn Asp Asn Ile Leu Leu Thr
    405 410 415
Gly Ala Ala Leu Trp Ala Ala Leu Thr Glu His Asn Leu Arg
               425
<210> 7818
<211> 475
<212> PRT
<213> Enterobacter cloacae
<400> 7818
Phe Ala Pro Ser Arg Glu Gly Cys Thr Met Ser Thr Val Ser Leu Thr
                  10 15
Gly Ala Ser Ala Tyr Ala Gly Asn Asp Arg Leu Leu Ala Gly Ile Val
                 2.5
Met Ser Val Leu Thr Phe Trp Leu Phe Ala Gln Ser Val Ile Asn Val
                  40 45
Val Pro Ala Met Gln Asn Ser Leu Asp Ile Ala Leu Glu Thr Leu Thr
                55 60
 50
Leu Ala Val Ser Leu Ser Ala Leu Phe Ser Gly Cys Phe Val Val Ala
            70 75
Cys Gly Gly Phe Ala Asp Lys Tyr Gly Arg Met Arg Leu Thr Met Ile
           85 90
Gly Leu Ile Leu Ser Met Ile Gly Ser Gly Leu Leu Phe Ile Ser Trp
                      105 110
        100
Glu Pro Val Leu Phe Leu Leu Gly Arg Ala Ile Gln Gly Leu Ser Ala
                    120 125
      115
Ala Cys Ile Met Pro Ala Thr Leu Ala Leu Ile Lys Thr Trp Tyr Asp
 130 135
                                140
Gly Lys Ala Arg Gln Arg Ala Ile Ser Phe Trp Val Ile Gly Ser Trp
     150 155
145
Gly Gly Ser Gly Leu Ser Ser Phe Val Gly Gly Ala Ile Ala Thr Thr
            165 170
Leu Gly Trp Arg Trp Ile Phe Ile Phe Ser Met Val Val Ala Leu Ala
            185
                                       190
         180
Ala Leu Leu Ile Ile Arg Ala Thr Pro Glu Ser Arg Ser His Asp Ala
                     200
                                    205
Cys Arg His Lys Leu Asp Ile Ser Gly Leu Val Ser Phe Val Leu Met
                           220
 210
Leu Val Leu Phe Asn Leu Phe Ile Ser Lys Gly His Ser Trp Gly Trp
```

Ser Ser Ser Leu Ser Leu Leu Val Leu Cys Gly Ala Val Ile Ala Leu 245 Met Cys Phe Val Val Thr Gly Arg Arg Lys Gly Asp Ala Ala Leu Ile 260 265 Asp Phe Ala Leu Phe Lys Asn Arg Ala His Ser Ala Ser Val Phe Ser 275 280 285 Asn Phe Leu Leu Asn Gly Cys Ile Gly Thr Met Met Ile Ala Ser Ile 290 295 300 Trp Leu Gln Gln Gly His His Leu Ser Pro Leu Gln Thr Gly Met Met 305 310 315 Thr Leu Gly Tyr Leu Val Thr Val Leu Ala Met Ile Arg Val Gly Glu 325 330 335 Lys Leu Leu Gln Arg Tyr Gly Ala Arg Leu Pro Met Met Thr Gly Pro 345 350 340 Leu Leu Thr Ala Thr Gly Ile Ser Leu Ile Ser Cys Thr Phe Leu Ser 355 360 365 Lys Glu Val Tyr Ile Val Thr Val Phe Leu Ser Asn Ile Leu Phe Gly 375 380 370 Leu Gly Leu Gly Cys Tyr Ala Thr Pro Ser Thr Asp Thr Ala Val Met 390 395 385 Asn Ala Pro Glu Asn Lys Val Gly Val Ala Ser Gly Ile Tyr Lys Met 410 415 405 Gly Ser Ser Leu Gly Gly Ala Met Gly Ile Ala Val Thr Ala Ser Leu 425 430 420 Tyr Ala Leu Trp Leu Pro Met Gly Thr Ala Ser Ala Ala Gin Tyr Ala 435 440 445 Leu Leu Phe Asn Ser Ala Ile Cys Leu Gly Ser Ala Val Val Thr Trp 450 455 Ala Leu Leu Pro Thr Thr Lys Ala Pro Arg 470

<210> 7819 <211> 178 <212> PRT <213> Enterobacter cloacae

<400> 7819 Leu Ser Phe Leu Thr Ile Lys Ala Ile Lys Gln Leu Ser Glu Ile Lys 10 Gln Gln Lys Ser Ile Asn Thr Met Asn Thr Arg Arg Arg Gln Phe Arg 20 25 Ala Val Leu Val Asn Asp Lys Asn Cys Ala Phe Arg Tyr Tyr Ala Ala 45 35 40 Val Phe Ser Ala Phe Leu Arg Ala Met Met Ser Thr Thr Leu Phe Lys 55 Asp Phe Thr Phe Glu Ala Ala His His Leu Pro His Val Pro Ala Gly 75 70 His Lys Cys Gly Arg Leu His Gly His Ser Phe Met Val Arg Leu Glu 90 85 Ile Thr Gly Glu Val Asp Pro His Thr Gly Trp Ile Met Asp Phe Ala 105 100 Glu Leu Lys Ala Ala Phe Lys Pro Thr Tyr Asp Arg Leu Asp His Tyr 125 115 120 Tyr Leu Asn Asp Ile Pro Gly Leu Glu Asn Pro Thr Ser Glu Val Leu 130 135 140 Ala Lys Trp Ile Trp Asp Gln Met Lys Pro Leu Val Pro Leu Leu Ser 150 155 Ala Val Met Ile Lys Glu Thr Cys Thr Ala Gly Cys Val Tyr Arg Gly 170 Glu

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<210> 7820
<211> 108
<212> PRT
<213> Enterobacter cloacae
<400> 7820
His Phe Arg Ala Ile Ser Trp Leu His Ile Asn Gly Arg Glu Trp Lys
                                 1.0
His Ile Arg Glu Val Leu Ile Tyr Ala Phe Ile Tyr Glu Gly Val Pro
           20
                             25
                                                30
Ser Trp Asp Lys Thr Asp Gly Val Val Thr Ile His Val Pro Asp Gln
      35
                         4.0
                                       4.5
Pro Pro Ile Glu Thr Arg Leu Thr Glu Gly Glu Asn Arg Arg Thr Leu
                      5.5
                                       60
Cys Ala Ile Ala Arg Leu Val Asn Glu Asn Gly Ala Ile Lys Val Glu
                  70
                       75
Arg Ile Asn Gln Tyr Phe Lys Gly Gln Asp Glu Met Asp Arg Ala Phe
                           90
             85
Gly Trp Gly Phe Arg Trp Ser Ala Gly Ser Lys
<210> 7821
<211> 102
<212> PRT
<213> Enterobacter cloacae
<400> 7821
Gly Gln Leu Met Ile Asn Asn Asp Tyr Pro Leu Asn Thr Leu Asn Gln
                                  1.0
Leu Arg Pro Leu Leu Ile Gly Phe Arg Lys Ala Asn Gly Leu Thr Gln
          20
                             25
                                                  30
Lys Asp Leu Ser Glu Arg Leu Gly Val Thr Gln Gln Thr Tyr Ser Arg
                      40
Leu Glu Ala Asn Pro Ala Ser Ala Ser Ile Glu Arg Leu Phe Lys Val
                      55
Phe Thr Val Leu Gly Val Lys Ile Ser Phe Ser Ser Ala Thr Thr Ser
                  7.0
                                   7.5
Ser Glu Arg Lys Gln Thr Glu Asp Ile Tyr Lys Leu Asn Ser Pro Ala
                                  90
Pro Gln Glu Asp Trp
<210> 7822
<211> 276
<212> PRT
<213> Enterobacter cloacae
<400> 7822
Glu Glu Ile Lys Met Arg Glu Pro Arg Pro Arg His Thr Leu Gln Val
                                                    1.5
Ile Arg Val Pro Ser Leu Glu Val Gln Asp Leu Gly Leu Thr Ser Phe
           20
                              25
                                                  30
Asp Ser Trp Leu Asp Glu His Gly Tyr Asp Lys Thr Asn Ala Arg Asn
       35
                          40
                                             4.5
Asn Arg Thr Ile Trp Ala Arg Glu Gly Gly Trp His Leu Lys Arg Cys
 50
                      55
Arg Asn Leu Glu Thr Gly Thr Asp Asp Phe Trp Phe Ile Ala Phe Asp
                 70
                                      75
                                                         80
Gly Lys Gly Gly Lys Ile Tyr Pro Leu Lys Thr Gln Arg Asp Tyr Arg
```

95

```
Ala Ala Tyr Arg Lys Leu Glu Ala Glu Gly Tyr Ala Pro Ala Val Ile
       100
                      105
Glu Gln Met Thr Thr Gly Ala Ala Tyr Asn Leu Ala Tyr Pro Arg Ser
                      120
                                     125
Thr Leu Lys Gln Val Glu Thr Ala Thr Ser Glu Pro Met Arg Lys Pro
                  135
                                 140
Asp Val Asp Ile Gln Gly Glu His Cys Glu Arg Val Val Thr Gln Arg
               150 155 160
Ser Gly Val Ala Gln Gly Lys Phe Lys Ala Leu Leu Ile Glu Asn Phe
            165
                 170 175
Ala Gly Arg Cys Ala Val Thr Gly Trp Val Asn Gly Gly Val Leu Asp
      180 185 190
Ala Ala His Ile Glu His Gly Thr Arg Tyr Asn Pro Ser Asn Gly Ile
    195 200 205
Leu Met Thr Pro Thr Met His Ala Leu Phe Asp Ala Asp Leu Met Gly
 210 215 220
Ile Asp Pro Ala Thr Leu Thr Val His Phe Lys Pro Gly Ile Glu Val
225 230 235
Gly Glu Leu Phe Glu Gly Arg Lys Ile Thr Pro Leu Val Tyr Asp Leu
    245 250 255
Asp Leu Glu Arg Leu Ala Val Arg Trp Ala Glu Tyr Gln Gly Leu Ala
              265 270
Gln Asp Gln
<210> 7823
<211> 175
<212> PRT
<213> Enterobacter cloacae
<400> 7823
Tyr Gly His Glu Trp Arg Trp Met Pro Gly Asn Arg Pro His Tyr Gly
1 5
                     10
                                      15
Arg Trp Pro Gln His Asp Phe Pro Pro Phe Lys Lys Leu Arg Pro Gln
   20
                        25
Ser Val Thr Ser Arg Ile Gln Pro Gly Ser Asp Val Ile Val Cys Ala
                     4.0
Glu Met Asp Glu Gln Trp Gly Tyr Val Gly Ala Lys Ser Arg Gln Arg
                  5.5
Trp Leu Phe Tyr Ala Tyr Asp Arg Leu Arg Lys Thr Val Val Ala His
               70
                             7.5
Val Phe Gly Glu Arg Thr Met Ala Thr Leu Gly Arg Leu Met Ser Leu
                           90
Leu Ser Pro Phe Asp Val Val Ile Trp Met Thr Asp Gly Trp Pro Leu
                        105 110
Tyr Glu Ser Arg Leu Lys Gly Lys Leu His Val Ile Ser Lys Arg Tyr
     115 120 125
Thr Gln Arg Ile Glu Arg His Asn Leu Asn Leu Arg Gln His Leu Ala
 130 135 140
Arg Leu Gly Arg Lys Ser Leu Ser Phe Ser Lys Ser Val Glu Leu His
               150 155
Asp Lys Val Ile Gly His Tyr Leu Asn Ile Lys His Tyr Gln
            165
                           170
<210> 7824
<211> 196
<212> PRT
<213> Enterobacter cloacae
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<400> 7824

Thr Lys Thr Ala Gln Leu Lys Ser Ser Glu Leu Thr Ser Thr Ser Lys

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10
Ala Arg Thr Lys Trp Thr Gly His Leu Ala Gly Asp Phe Ala Gly Ala
Pro Val Leu Asn Asn Thr Ala Thr Lys Glu Thr Gly Met Ser Phe Phe
                      40
Asp Lys Val Lys Gly Ala Ile Asn Ser Gly Arg Asp Glu Leu Thr Arg
           55
                                   60
Gln Val Gly Arg Phe Lys Asn Lys Lys Phe Met Gln Gly Thr Val Ala
       70 75
Val Cys Ala Arg Ile Ala Val Ser Ser Asp Gly Val Ser Ser Glu Glu
          8.5
                 90
Lys Gln Lys Met Met Gly Phe Leu Arg Ser Ser Glu Glu Leu Lys Val
      100 105 110
Phe Asp Thr Asn Glu Val Ile Glu Phe Phe Asn Lys Leu Val Ser Ser
     115 120 125
Phe Asp Phe Asp Val Glu Ile Gly Lys Gly Glu Thr Met Lys Tyr Ile
130 135 140
Leu Ala Leu Lys Asp Gln Pro Glu Ala Ala Gln Leu Ala Leu Arg Val
145 150 155
Gly Ile Ala Val Ala Lys Ser Asp Gly Asn Phe Asp Gln Asp Glu Lys
        165 170 175
Leu Ala Ser Arg Glu Ile Ala Ile Ala Leu Gly Phe Asp Pro Ala Glu
Phe Gly Leu
<210> 7825
<211> 211
<212> PRT
<213> Enterobacter cloacae
<400> 7825
Leu Phe Tyr Pro Gly Leu Leu Met Gln Pro Ser Phe Asn Cys Leu Gln
                             1.0
Glu Leu Lys Met Ala Val Ser Leu Val Lys Gly Gly Asn Val Ser Leu
                       25
Thr Lys Glu Ala Pro Thr Met Asn Val Ala Met Val Gly Leu Gly Trp
     35 40
Asp Ala Arg Val Thr Asp Gly Gln Gly Phe Asp Leu Asp Ala Ser Val
Phe Ala Val Gly Glu Asp Gly Lys Val Leu Ser Asp Ala His Phe Ile
             70
Phe Phe Asn Asn Lys Thr Ser Pro Asp Gly Ala Val Glu His Gln Gly
                             90
           85
Asp Asn Arg Thr Gly Glu Gly Asp Gly Asp Asp Glu Gln Val Lys Ile
         100
                          105
Asp Leu Thr Lys Val Ser Ala Asp Ile Lys Lys Leu Val Phe Ala Val
      115
                       120
Thr Ile Tyr Asp Ala Glu Ala Arg Lys Gln Asn Phe Gly Met Val Ser
                    135
                                    140
Asn Ser Phe Met Arg Val Tyr Asn Asn Asp Asn Gly Thr Glu Ile Ala
                150
                                155
Arg Phe Asp Leu Ser Glu Asp Ala Ser Thr Glu Thr Ala Met Val Phe
            165
                              170
Gly Glu Leu Tyr Arg His Gly Ala Glu Trp Lys Phe Lys Ala Val Gly
                       185
                                190
         180
Gln Gly Phe Ala Gly Gly Leu Ala Ala Leu Ala Ser Gln His Gly Val
                      200
Asn Ile
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<210> 7826
<211> 421
<212> PRT
<213> Enterobacter cloacae
<400> 7826
Ser Lys Ile Arg Arg Val Asn Val Asn Leu Gln Ser Gly Gln Asn Ile
                     10
Pro Leu Gln Gln Ser Ala Ile Arg Leu Asn Leu Gln Tyr Pro Thr Lys
               25
                                       30
  20
Ser Gly Phe Lys Gly Glu Pro Asp Thr Cys Leu Phe Leu Leu Asn Ala
                         4.5
 35 40
Gln Gly Lys Val Ser Gly Asp Ser Asp Phe Ile Phe Tyr Asn Asn Leu
                      60
 50 55
Ser Ser Pro Glu Gly Ala Val Lys Leu Val Thr Gly Ser Gln Gln Ser
              70
                              7.5
Ser Ile Glu Ile Ala Leu Asp Arg Val Pro Ala Asn Ile Ser Lys Ile
                           90 95
         85
Ala Ile Thr Val Val Ile Asp Gly Glu Asp Thr Ile Ser Gly Leu Ser
            105 110
         100
Ser Leu Ser Met Gln Ala Gln Gly Ile Ala Glu Phe Gln Ala Glu Thr
 115 120 125
Gln Gly Arg Ser Glu Lys Ala Ile Ile Leu Gly Glu Val Tyr Arg His
 130 135 140
Asn Gly Ala Trp Lys Leu Arg Ala Leu Gly Gln Gly Phe Asn Gly Gly
      150 155 160
145
Leu Glu Pro Leu Ala Ile Ser Tyr Gly Val Asp Val Ala Gln Pro Ala
           165 170 175
Pro Gln Pro Ala Lys Pro Ala Arg Ile Ser Leu Glu Lys Lys Leu Glu
            185 190
         180
Thr Arg Ser Pro Arg Leu Val Ser Leu Ala Lys Lys Ala Ser Val Ser
195 200 205
Leu Thr Lys Asn Lys Leu Asp Thr Leu Glu Ala Ala Val Ala Phe Val
                                 220
 210
        215
Leu Asp Ala Ser Gly Ser Met Ser Gly Gln Phe Ser Lys Gly Asn Val
              230
                            235
Gln Ser Val Leu Asp Arg Ile Ala Val Leu Ala Ala Gln Phe Asp Asp
           245
                           250 255
Asp Gly Glu Met Asp Val Trp Gly Phe Gly Glu Lys His Lys Lys Tyr
                        265 270
         260
Pro Asn Val Thr Leu Asp Asn Leu Asp Thr Tyr Ile Gln Ser Ile Arg
      275
                     280
                                    285
Gly Ala Gly Lys Arg Ser Ala Trp Glu Asn Leu Pro Gly Leu Gly Gly
                  295
                                 300
Thr Asn Asn Glu Pro Pro Val Met Glu Glu Ile Val Asp Tyr Phe Lys
                              315
305
               310
Asp Ser Lys Ile Pro Val Tyr Val Val Phe Ile Thr Asp Gly Gly Ile
                           330
                                          335
            325
Ser Lys Thr Arg Ala Ile Lys Asp Ala Ile Arg Arg Ser Ala Asn Tyr
                                       350
                        345
         340
Pro Ile Phe Trp Lys Phe Val Gly Leu Gly Gly Ser Ser Tyr Gly Ile
                     360
                                     365
Leu Lys Asn Leu Asp Asp Phe Thr Asp Arg Arg Val Asp Asn Thr His
                  375
                                 380
Phe Phe Ala Met Asp Asp Phe Gly Ser Ile Ser Asp Glu Lys Leu Tyr
                            395
              390
                                          400
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Asp Asn Leu Leu Glu Glu Phe Arg Pro Trp Ile Asp Glu Thr Lys Arg 410

415

Leu Gly Ile Leu 420

<210> 7827 <211> 453 <212> PRT <213> Enterobacter cloacae <400> 7827 Ile His Leu His His Arg Arg Ile Gly Asn Tyr Met Ser Arg Lys Gln 1.0 Gln Arg Leu Val Ile Trp Met Asn Gly Ile Lys Ile Gly Tyr Trp Glu 20 25 3.0 Lys Ser Lys Gly Val Asp Ser Leu Glu Tyr Leu Pro Glu Trp Val Ala 3.5 40 4.5 Asp Glu Gln Gly Arg Pro Leu Ser Leu Ser Leu Pro Phe Thr Pro Gly 50 55 Asn Gln Val Trp Arg Gly Asn Val Val Arg Asp Tyr Phe Asp Asn Leu 65 70 75 80 Leu Pro Asp Ser Glu Gly Ile Arg Arg Arg Leu Ala Met Arg Tyr Lys 85 90 Ala Asp Ser Leu Glu Pro Phe Asp Leu Leu Thr Glu Leu Gly Lys Asp 100 105 110 Cys Val Gly Ala Ile Gln Leu Leu His Asp Gly Asp Glu Pro Thr Asp 115 120 125 Leu Tyr Ser Val Lys Tyr His Pro Leu Thr Glu Ser Glu Ile Ala Ala 130 135 140 Thr Leu Arg Asn Thr Thr Glu Thr Leu Leu Pro Gly Arg Pro Glu Asp 145 150 155 Asn Asp Asp Leu Arg Leu Ser Ile Ala Gly Ala Gln Glu Lys Thr Ala 165 170 175 Leu Leu Trp His Glu Asp Arg Trp Cys Met Pro Glu Gly Asn Thr Pro 180 185 190 Thr Thr His Ile Phe Lys Leu Pro Leu Gly Leu Val Gly Asn Met Lys 195 200 205 Ala Asp Met Ser Ser Ser Val Glu Asn Glu Trp Leu Cys Ser Val Leu 210 215 220 Leu Asp Gln Tyr Gly Leu Pro Val Ala Arg Thr Gln Ile Ala His Phe 225 230 235 Glu Asp Gln Lys Ala Leu Val Val Glu Arg Phe Asp Arg Lys Trp Ser 245 250 255 Gly Asp Gly Gln Trp Ile Ile Arg Leu Pro Gln Glu Asp Met Cys Gln 260 265 270 Ala Leu Gly Val Ser Pro Leu Arg Lys Tyr Gln Ala Asp Gly Gly Pro 275 280 285 Gly Ile Ser Glu Ile Met Glu Val Leu Ser Asn Ser Asp Arg Ala Glu 290 295 300 Arg Asp Lys Ala Gln Phe Phe Met Thr Gln Ile Ile Phe Trp Met Met 310 315 Ala Ala Thr Asp Gly His Ala Lys Asn Phe Ser Ile Ser Ile Gly Pro 325 330 Gln Gly Arg Tyr His Leu Thr Pro Leu Tyr Asp Val Leu Ser Ala Trp 340 345 350 Pro Val Ile Gly His Gly Asn Asn Gln Ile Ser Trp Gln Lys Cys Lys 355 360 365 Leu Ala Met Ala Val Arg Gly Ser Ser Asn Tyr Tyr Gln Ile Tyr Arg 375 380 Ile Gln Arg Arg His Trp Ile Arg His Gly Glu Ile Thr Gly Leu Ser 390 395 Lys Gln Gln Thr Glu Ala Met Ile Glu Glu Ile Ile Ala Arg Thr Pro 405 410 Gly Val Ile Glu Arg Val Ser Gly Leu Leu Pro Asp Gln Phe Pro Gln

420 425 430 Gln Leu Ala Glu Ser Ile Phe Asp Gly Met Arg Gln Gln Cys Arg Arg

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435
                       440
                                        445
Leu Ala Glu Lys
   450
 <210> 7828
 <211> 95
 <212> PRT
 <213> Enterobacter cloacae
 <400> 7828
 Gly Ala Pro Val Ala Ser Val Ser Ile Ser Cys Pro Ser Cys Ser Ala
                        10
 Thr Asp Gly Val Val Arg Asn Gly Lys Ser Thr Ala Gly His Gln Arg $20$
 Tyr Leu Cys Ser His Cys Arg Lys Thr Trp Gln Leu Gln Phe Thr Tyr
  35 40
                            45
 Thr Ala Ser Gln Pro Gly Thr His Gln Lys Ile Ile Asp Met Ala Met
 50 55
 Asn Gly Val Gly Cys Arg Ala Thr Ala Arg Ile Met Gly Val Gly Leu
65 70 75 80
 Asn Thr Ile Phe Arg His Leu Lys Asn Ser Gly Arg Ser Arg
             85
<210> 7829
<211> 348
<212> PRT
 <213> Enterobacter cloacae
<400> 7829
 Asn Met Val Ser Thr His Ile Gly Phe Pro Thr Glu Thr Val Ile Val
                            10
 Phe Ile Ala Leu Ser Val Gly Ala Ile Phe Ile Asp Leu Phe Met His
        20
                           25
                                30
 Arg Asp Asp Lys Pro Ile Ser Leu Lys Ser Ala Ala Leu Trp Ser Val
 35
                     40 45
 Phe Trp Val Val Val Ala Met Ala Phe Ala Gly Phe Leu Tyr Ile His
                    55
 His Gly Ala Glu Val Ala Ser Leu Phe Val Thr Gly Tyr Ala Leu Glu
              70 75
 Lys Val Leu Ser Val Asp Asn Leu Phe Val Met Met Ala Ile Phe Ser
            85 90
 Trp Phe Ala Val Pro Asp Arg Tyr Arg His Arg Val Leu Tyr Trp Gly
                         105 110
          100
 Ile Ile Gly Ala Ile Val Phe Arg Gly Ile Phe Val Ala Ile Gly Thr
       115
                       120
                                         125
 Ser Leu Leu Ser Leu Gly Pro Tyr Val Glu Val Val Phe Ala Ile Ile
  130
                     135
                                     140
 Val Ala Trp Thr Ala Val Met Met Leu Lys Ser Gly Asp Asp Asp Asp
              150
                                 155
 Glu Ile Glu Asp Tyr Ser Gln His Leu Ala Tyr Arg Met Val Lys Arg
             165 170
 Phe Phe Pro Ile Trp Pro Lys Leu Arg Gly His Ala Phe Leu Leu Asn
                        185 190
           180
 Gln Lys Glu Val Asp Ala Glu Leu Ala Lys Pro Glu Asn Ser Asp Val
                                         205
                       200
 Thr Ile Gly Arg Gly Lys Lys Ala Ala Leu Tyr Ala Thr Pro Leu Phe
                    215
 Leu Cys Val Ala Val Val Glu Leu Ser Asp Val Met Phe Ala Phe Asp
                 230
                     235 240
 Ser Val Pro Ala Ile Ile Ala Val Ser Arg Glu Pro Leu Ile Val Tyr
              245
                               250
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Ser Ala Met Met Phe Ala Ile Leu Gly Leu Arg Thr Leu Tyr Phe Val
                         265
         260
Leu Glu Ala Leu Lys Gln Tyr Leu Val His Leu Glu Lys Ala Val Ile
      275
                       280
                                   285
Val Leu Leu Phe Phe Ile Ala Ala Lys Leu Gly Leu Asn Ala Thr Asp
                   295
                                     300
His Ile Trp His His Gly Tyr Ser Ile Ala Ala Thr Thr Ser Leu Tyr
       310
305
                                 315
Val Val Leu Gly Val Leu Ala Leu Gly Ile Leu Ala Ser Val Met Phe
       325 330 335
Pro Gly Lys Pro Glu Ser Glu Glu Lys Gly Ser
         340 345
<210> 7830
<211> 202
<212> PRT
<213> Enterobacter cloacae
<400> 7830
Thr Ile Thr Asn Arg Arg Gly Tyr Phe Met Ser Val Ser Leu Ser Lys
                           10
Gly Gly Asn Val Ser Leu Ser Lys Ala Ala Pro Ser Met Lys Asn Val
       20 25
                                           30
Leu Val Gly Leu Gly Trp Asp Ala Arg Ser Thr Asp Gly Gln Asp Phe
                  40
                                       4.5
Asp Leu Asp Ala Ser Ala Phe Leu Leu Ala Ser Asn Gly Lys Val Arg
 50
                   55
Gly Asp Ser Asp Phe Ile Phe Tyr Asn Asn Leu Thr Ser Ser Asp Gly
              70 75
Ser Val Thr His Thr Gly Asp Asn Arg Thr Gly Glu Gly Asp Gly Asp
                             90
Asp Glu Ser Leu Lys Ile Lys Leu Asp Ala Val Pro Ser Glu Val Asp
        100
                 105 110
Lys Ile Ile Phe Val Val Thr Ile His Asp Ala Gln Ala Arg Arg Gln
      115
                      120
Ser Phe Gly Gln Val Ser Gly Ala Phe Ile Arg Leu Val Asn Asp Asp
                    135
Asn Gln Thr Glu Val Ala Arg Tyr Asp Leu Thr Glu Asp Ala Ser Thr
               150 155
Glu Thr Ala Met Leu Phe Gly Glu Leu Tyr Arg His Asn Gly Glu Trp
            165 170 175
Lys Phe Arg Ala Val Gly Gln Gly Tyr Ala Gly Gly Leu Ala Ser Val
                           185
Cys Ala Gln Tyr Gly Ile Asn Ala Ser
<210> 7831
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 7831
Cys Cys Gln Leu Thr Asp Leu Val Tyr Asp Gly Val Phe Glu Val Leu
                               1.0
Gln Trp Leu Leu Phe Leu Ser Ala Val Pro Pro Val Gln Leu Leu Thr
                                            30
Gly Trp Cys Val Thr Ala Lys Ala Pro Pro Asp Ile Ser Ala Ile Ser
                                        45
      35
                       40
Ala Leu Thr Ala Val Lys His Gly Asn Cys Ser Ser Leu Thr Pro Leu
                    55
Leu Asn Pro Val Arg Thr Arg Lys Ser Leu Ile Trp Pro
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12

.3

10

1.77

i.Fi

15

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<210> 7832

<211> 681

<212> PRT

<213> Enterobacter cloacae

<400> 7832

Gly Met Thr Lys Arg Leu Thr Trp Glu Gln Lys Ser Ile Val Ser His 10 Asp Thr Gly His Ala Leu Val Lys Ala Val Pro Gly Ser Gly Lys Thr

20 25 Thr Thr Leu Val Lys Arg Val Glu Arg Leu Val Lys Thr Gly Thr Asp

40 45

Pro Arg Ser Ile Leu Ile Leu Met Tyr Asn Lys Ser Ala Gln Val Ser 50 55 60

Phe Thr Glu Lys Leu Lys Thr Ala Leu Met Ser Ser Val Ile Pro Glu 65 70 75 80

Ile Arg Thr Phe His Ser Leu Ala Leu Lys Ile Val Gly Tyr Gly Glu 85 90 95

Arg Gln Gln Ile Ile Lys Lys Lys Asp Leu Ile Thr Pro Ser Asp Tyr 100 105 110

Arg Tyr Glu Gln Leu Val Lys Gln Ala Tyr Arg Tyr Gly Phe Asp His 115 120 125

Glu Ala Asn Tyr Ile Asp Pro Asn Glu Ile Glu Asn Phe Glu Leu Phe

130 135 140

Ile Ala Arg Cys Arg Ala Ala Ala Val Thr Pro Val Asp Ala Ala Asn 145 150 155 160

Asp Pro Thr Phe Ser Asn Ile Lys Arg Glu Phe Ile His Ala Tyr Gly 165 170 175

Arg Tyr Cys Glu Leu Leu Glu Glu Asn Ser Leu Arg Thr Phe Asp Asp 180 185 190

Cys Leu Ile Glu Ala Val Ala Leu Leu Arg Asn Asp Ser Ser Leu Gly 195 200 205

Ala His Phe Lys His Ile Ile Val Asp Glu Tyr Gln Asp Val Asn Leu 210 215

Ile Gln His Asp Met Thr Arg Leu Leu Ser Lys Ser Asp Thr Ser Val 225 230 235 240

Met Ala Val Gly Asp Val Asn Gln Cys Ile Tyr Glu Trp Arg Gly Ala 245 250 255

Arg Pro Asp Phe Ile Gly Gly Leu Phe Glu Arg His Tyr Pro Asn Thr 260 265 270

Lys Val Phe Gln Leu Ser Cys Thr Phe Arg Phe Gly His Glu Leu Ser

275 280 285 Leu Met Ala Asn Ser Val Ile Arg Arg Asn Ser Thr Lys Leu Thr Lys

290 295 300 Leu Cys Val Ser His Pro Ser Thr Pro Lys Thr Glu Val Arg Leu His

310 315

Phe Asp Asn Cys Leu Ser Lys Val Leu Ser Asn Leu Ser Val Ser Ser 325 330 335

Gly Thr Gln Ala Ile Leu Ser Arg Thr Lys Ala Asn Leu Ala Glu Ala 345 350 340

Glu Ile Ala Leu Arg Leu Cys Gly Leu Pro Tyr Arg Tyr Leu Asn Gly 355 360 365

Ser Ser Ala Leu His Thr Arg Thr Glu Ile Gly Ile Leu Val Val Gly 375 380 370

Val Leu Leu Ser Val Tyr Gly Asp Leu Arg Leu Leu Glu Asn His Pro 390 395

Asn Lys Gln Ala Ile Val Tyr Gly Phe Leu Lys Glu Ala Gly Phe Ser 410 405 415

Trp Gln Lys Gly Gln Phe Lys Ala Ala Leu Ser Gly Leu Met Ala Pro

425 His Ala Asp Leu Trp Ser Ala Leu Gly Gln Leu Phe Glu Gly Ala Gln 435 440 Tyr Gln Lys Asp Arg Leu Gly Arg Leu Ala Thr Ile Cys Gln Lys Asp 455 460 Gly Glu Glu Thr Pro Ala Ile Asp Val Leu Arg Arg Leu Ser Met Glu 470 475 Gly Phe Ile Asp Ser Val Gly Ser Glu Gly Val Thr Arg Thr Gly Ser 485 490 495 Asn Asp Gln Gln Arg Gly Val Val Arg Ile Gly Glu Leu Leu Asp Ser 505 510 500 Ser Lys Ile Asp Ser Arg Thr Phe Leu Asn Leu Ile Leu Asn Pro Gly 515 520 525 Glu Ala Ala Thr Asp Cys Asp Pro Phe Ile Leu Ser Thr Leu His Gly 530 535 540 Ser Lys Gly Leu Glu Trp Asp Asn Val Ile Leu Ile Gly Leu Asn Glu 545 550 555 Gln Glu Phe Pro Gly Gly Lys Pro Asp Asp Val Tyr Ser Val Arg Thr 565 570 575 Ser Met Asn Thr Pro Pro Ala Glu Glu Glu Ile Glu Glu Glu Arg Arg 585 Leu Phe Tyr Val Gly Ile Thr Arg Thr Lys Gln Gln Leu Asn Leu Val 595 600 605 Val Pro Leu Asp Glu Gly Leu Ala Arg Trp Leu Lys Asn Arg Trp Asp 610 615 620 Ser Thr Pro Lys Lys Ser Pro Ile Ala Thr Arg Phe Val Tyr Glu Ala 630 635 Gly Trp Thr Ala Cys Ala Val Thr Ser Asp Ala Ile Tyr Asn Ser Thr 645 650 655 Val Glu Lys Gln Lys Ala Asp Phe Ser Lys Phe His Gln Trp Tyr Leu 660 Arg Asp Leu Gln Arg Leu Lys Val

<210> 7833 <211> 816

<212> PRT <213> Enterobacter cloacae

<400> 7833

Thr Leu Thr Ala Gln Val Glu Lys Gln His Lys Ser Ala Leu Asp Ser 10 Leu Leu Ile Ser Glu Gly Glu Gln Ala Ser Arg Leu Ala Leu Leu Leu 20 25 Gln Pro Pro Gly Lys Ile Asn Gly Lys Asn Val Leu Gln His Ile Asp 4.0 4.5 Arg Leu Asn Ser Ile Ala Ala Leu Gly Leu Pro Asp Gly Ile Ala Leu 55 60 Ser Val His Gln Asn Arg Leu Leu Lys Leu Ala Arg Glu Gly Arg Lys 7.0 75 Met Ser Ser Arg Asp Leu Ala Lys Phe Thr Asp Val Arg Arg Tyr Ala 85 90 95 Thr Leu Val Cys Ile Ile Thr Glu Ala Arg Ala Thr Leu Thr Asp Glu 100 105 110 Val Ile Asp Leu His Glu Arg Ile Leu Gly Ser Leu Phe Ser Arg Ala 115 120 Lys Arg Thr Gln Ala Glu Arg Leu Gln Gln Thr Gly Lys Leu Ile Gln 140 130 135 Ser Lys Leu Lys Gln Tyr Val Thr Val Gly Gln Ala Leu Leu Asn Ala 150 155 Arg Glu Ser Gly Glu Asp Pro Trp Thr Ala Ile Glu Asp Val Leu Pro

170 165 Trp Gln Glu Phe Ile Asn Ser Val Glu Glu Thr Arg Phe Leu Ser Arg 185 180 Lys Gly Asn Phe Asp Ala Leu His Leu Ile Thr Glu Lys Tyr Ser Thr 195 200 205 Leu Arg Lys Tyr Ala Pro Arg Met Leu Ser Ala Leu Gln Phe Met Ala 210 215 220 Thr Pro Ala Ala Gln Ala Leu Ser Asp Ala Leu Asp Thr Ile Thr Glu 225 230 235 Met Tyr Arg Lys Gln Leu Arg Lys Val Pro Pro Ser Ala Pro Thr Gly 245 250 255 Phe Ile Pro Glu Ser Trp Arg Lys Leu Val Leu Thr Pro Ser Gly Ile 260 265 270 Asp Arg Lys Tyr Tyr Glu Phe Cys Val Leu Asn Glu Leu Lys Gly Ala 275 280 285 Leu Arg Ser Gly Asp Ile Trp Val Lys Gly Ser Arg Arg Tyr Lys Asn 290 295 300 Phe Asp Asp Tyr Leu Ile Pro Thr Ala Glu Phe Glu Lys Ser Arg His 305 310 315 Asn Asp Gln Leu Gln Leu Ala Val Gln Thr Asp Ser Gln Ala Tyr Leu 325 330 335 Gln Ala Arg Met Thr Leu Leu Ala Ser Arg Leu Glu Glu Val Asn Ala 340 345 350 Met Ala Leu Ala Gly Asp Leu Pro Asp Val Asp Ile Ser Asp Lys Gly 355 360 365 Val Lys Ile Thr Pro Leu Glu Asn Ser Val Pro Ser Gly Val Ser Pro 370 375 380 Phe Ala Gly Leu Val Tyr Gly Met Leu Pro His Pro Lys Ile Thr Glu 385 390 395 400 Ile Leu Glu Glu Val Asp Ser Trp Thr Gly Phe Thr Arg His Phe Ala 405 410 415 His Leu Lys Asn Asn Asn Val Arg Pro Lys Asp Gly Arg Leu Leu Leu 420 425 430 Thr Thr Ile Leu Ala Asp Gly Ile Asn Leu Gly Leu Thr Lys Met Ala 435 440 445 Glu Ser Cys Pro Gly Ala Thr Arg Ser Ser Leu Glu Gly Ile Gln Ala 450 455 460 Trp Tyr Ile Arg Asp Glu Thr Tyr Ser Ala Ala Leu Ala Glu Leu Val 465 470 475 480 Asn Ala Gln Lys Glu Arg Pro Leu Ala Ala Phe Trp Gly Asp Gly Thr 485 490 495 Thr Ser Ser Ser Asp Gly Gln Asn Phe Arg Val Gly Ser His Gly Arg 500 505 510 Tyr Ala Gly Gln Val Asn Leu Lys Tyr Gly Gln Glu Pro Gly Val Gln 515 520 525 Ile Tyr Thr His Ile Ser Asp Gln Tyr Ser Pro Phe Tyr Ala Lys Val 530 535 540 Ile Ser Arg Val Arg Asp Ser Thr His Val Leu Asp Gly Leu Leu Tyr 545 550 555 560 His Glu Ser Asp Leu Glu Ile Thr Glu His Tyr Thr Asp Thr Ala Gly 565 570 575 Phe Thr Glu His Val Phe Ala Leu Met His Leu Leu Gly Phe Ala Phe 585 590 580 Ala Pro Arg Ile Arg Asp Leu His Asp Lys Arg Leu Phe Ile His Gly 595 600 605 Lys Ala Glu Arg Tyr Pro Gly Leu Gln Ser Val Ile Ser Thr Thr Cys 615 620 Leu Asn Ile Lys Asp Ile Glu Ser His Trp Asp Glu Val Leu Arg Leu 630 635 625 Ala Thr Ser Ile Lys Gln Gly Thr Val Thr Ala Ser Leu Met Met Lys 645

Lys Leu Ala Ser Tyr Pro Lys Gln Asn Gly Leu Ala Lys Ala Leu Arg 665 Glu Ile Gly Arg Ile Glu Arg Thr Leu Phe Met Leu Asp Trp Phe Arg 680 Asp Pro Gly Leu Arg Arg Arg Val Gln Ala Gly Leu Asn Lys Gly Glu 695 Ala Arg Asn Ala Leu Ala Arg Ala Val Phe Leu His Arg Leu Gly Glu 705 710 715 720Ile Arg Asp Arg Gly Leu Glu Asn Gln Ser Tyr Arg Ala Ser Gly Leu 725 730 Thr Leu Leu Thr Ala Ala Ile Thr Leu Trp Asn Thr Val Tyr Ile Glu 740 745 750 Arg Ala Ile Glu Ser Leu Lys Arg Lys Gly Ile Pro Ile Asn Glu Gln 755 760 765 Leu Val Ser His Leu Ser Pro Leu Gly Trp Glu His Ile Asn Leu Ser 770 775 780 Gly Asp Tyr Val Trp Arg Asn Asn Leu Lys Leu Gly Ser Gly Lys Tyr 785 790 795 800 Arg Ser Leu Arg Thr Val Asp Thr Ala Leu Tyr Lys Lys Gln Ser 805 810

<210> 7834 <211> 342 <212> PRT

<213> Enterobacter cloacae

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Lys Arg Gly Asn Lys Lys Ile Arg Thr Leu Leu Val Gln Cys Ala Arg
                          280
                                              285
Val Phe Ile Gln Lys Leu Glu His Gln Ser Gly Lys Leu Ala Asp Trp
   290
                  295
                                          300
Val Arg Asp Leu Leu Cys Arg Lys Ser Asn Phe Val Val Thr Cys Ala
305 310
                                      315
Leu Ala Asn Lys Leu Ala Arg Ile Ala Trp Ala Leu Thr Ala Arg Gln
            325
Gln Thr Tyr Val Ala
           340
<210> 7835
<211> 99
<212> PRT
<213> Enterobacter cloacae
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Asp Phe Arg Pro Ser Arg Ala Arg Cys Cys Leu Arg Phe Arg Leu Cys
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                                                3.0
Arg Ser Ile Arg Cys Val Tyr Arg Leu Leu Ile Thr Cys Ser Phe Pro
                          40
                                            45
Phe Arg Arg Asp Ser Tyr Ser Gly Gln Pro Ser Val Ile His Ile Thr
                       55
Thr Ser Lys Gly Asp Ser Arg Leu Ile Arg Arg Pro Ser Val Ala Ile
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                                      75
Val Arg Ser Pro Asn Thr Cys Ala Thr Thr Val Phe Arg Ser Leu Ser
Tyr Ala
<210> 7836
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<212> PRT
<213> Enterobacter cloacae
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Ala Val Arg Ser Val Leu Ser Trp Ile Phe Leu Gly Gly Tyr Ala Val
           2.0
                              25
Met Thr Thr Gln Ser Ser Ser Ile Gln Tyr Ala Tyr Ala Leu Asp Gly
       35
                           40
Glu Gly Thr Leu Thr His Ile Gly Ala Ala Leu Arg Ser His Thr Tyr
  50
                       55
                                          60
Thr Cys Pro Gly Cys Lys Ser Pro Leu Thr Pro Val Met Gly Glu Phe
                   70
                                       75
Asn Ala Lys His Phe Arg His Ser Glu Glu Cys Cys Ala Leu Glu Thr
                                   90
               85
Tyr Leu His Lys Cys Gly Lys Glu Ala Phe Phe Tyr Arg Tyr Gln Gln
                              105
                                                  110
           100
Ala Leu Ser Arg Glu Met Pro Ile Ser Leu Glu Leu Glu Arg Arg Val
       115
Ala Cys Asn Gly Ser His Leu Ala Leu Val Arg Asp Glu Ala Arg Gln
   130
                       135
                                           140
Cys Val Lys Ser Val Pro Ala Arg Tyr Asn Leu Thr Gln Phe Phe Asp
                   150
                                      155
                                                         160
Gln Ala Glu Leu Glu Lys His Asp Lys Val Thr Gly Leu Arg Pro Asp
                                  170
              165
Val Met Leu Tyr Asp Thr Thr Gly Glu Arg Arg Cys Tyr Val Glu Ile
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185 Cys Val Thr His Pro Cys Ser Gln Asp Lys Ile Glu Ala Gly Ile Pro 195 200 205 Ile Leu Glu Phe Lys Val Gln Ser Ala Ser Asp Ile Gln Met Leu Leu 215 220 Thr Gly Ala Tyr Ser Ile Lys Glu Lys Ile Leu Arg Val Phe Asn Trp 225 230 235 Leu Pro Pro Phe Gln Ser Val Asp Thr Cys Ser Gly Val Cys Ser Val 245 250 255 Gly Asn Val Asp Met Ser Val Trp Ser Leu Ser Gly Ser Gly Arg Leu 260 265 270 Asn Glu Gln Thr Met Pro Leu Ala Glu Val Asp Leu Thr Ile Asn Ser 275 280 285 Asp Val Asn Thr Trp Pro Arg Ser Leu Gly Ala Ala Glu Leu Ala Asp 290 295 300 Asn Leu Arg Ala Phe Ile Arg His Ala Asp Pro His Ser Leu Phe Pro 305 310 315 Asn Cys Ile Met Cys Glu Gln Ala Gly Arg Trp Glu Asp Gly Tyr Leu 325 330 335 Gln Cys His Ser Lys Ala Lys Ile Val Pro Tyr Thr Glu Ala Arg Gln 340 345 Cys Ala Asn Tyr Lys Val Lys Ala

<210> 7837 <211> 876 <212> PRT <213> Enterobacter cloacae

<400> 7837 Arg Leu Phe Phe Glu Ile Leu Arg Val Arg Cys Phe Phe Cys Ser Asp 10 Trp His Ala Thr Pro Gly Asn Ile Arg Arg Tyr Val Leu Tyr Leu Tyr 25 Ile Glu Thr Leu Lys Gln Arg Leu Asp Ala Ile Asn Gln Leu Arg Val 40 35 Asp Arg Ala Leu Ala Ala Met Gly Pro Ala Phe Gln Gln Val Tyr Ser 50 5.5 Leu Leu Pro Thr Leu Leu His Tyr His His Pro Leu Met Pro Gly Tyr 70 75 Leu Asp Gly Asn Val Pro Gln Gly Ile Cys Leu Phe Thr Pro Asp Glu 90 95 85 Thr Gln Gln His Tyr Leu Thr Glu Leu Glu Leu Tyr Arg Gly Met Pro 100 105 Pro Gln Asp Ser Pro Lys Gly Glu Leu Pro Ile Thr Gly Val Tyr Ser 115 120 125 Met Gly Ser Thr Ser Ser Val Gly Gln Ser Cys Ser Ser Asp Leu Asp 135 140 Ile Trp Val Cys His Gln Ser Trp Leu Asp Asn Glu Glu Arg Gln Leu 150 155 145 Leu Gln Arg Lys Cys Ser Leu Leu Glu Ser Trp Ala Ala Ser Leu Gly 165 170 175 Val Glu Val Ser Phe Phe Leu Ile Asp Glu Asn Arg Phe Arg His Asn 180 185 190 Glu Ser Gly Ser Leu Gly Gly Glu Asp Cys Gly Ser Thr Gln His Ile 205 195 200 Leu Leu Leu Asp Glu Phe Tyr Arg Thr Ala Val Arg Leu Ala Gly Lys 210 215 220 Arg Ile Leu Trp Asn Met Val Pro Cys Asp Glu Glu Glu Asn Tyr Asp 230 235 Asp Tyr Val Met Ser Leu Tyr Ser Gln Gly Val Leu Thr Pro Asn Glu

245 250 Trp Leu Asp Leu Gly Gly Leu Ser Ser Leu Ser Ala Glu Glu Tyr Phe 260 265 Gly Ala Ser Leu Trp Gln Leu Tyr Lys Ser Ile Asp Ser Pro Tyr Lys 275 280 285 Ala Val Leu Lys Thr Leu Leu Leu Glu Ala Tyr Ser Trp Glu Tyr Pro 290 295 300 Thr Pro Arg Leu Leu Ala Lys Asp Ile Lys Gln Arg Leu His Asp Gly 305 310 315 320 Glu Ile Val Ser Tyr Gly Leu Asp Ala Tyr Cys Met Met Leu Glu Arg 325 330 335 Val Thr Glu Tyr Leu Thr Ala Ile Glu Asp Ala Thr Arg Leu Asp Leu 340 345 350 Val Arg Arg Cys Phe Tyr Leu Lys Val Cys Glu Lys Leu Ser Arg Glu 355 360 365 Arg Ala Cys Val Gly Trp Arg Arg Glu Val Val Ser Gln Leu Val Lys 370 375 380 Glu Trp Gly Trp Asp Glu Ala Arg Leu Ala Met Leu Asp Asn Arg Ala 385 390 395 400 Asn Trp Lys Ile Asp Gln Val Arg Glu Ala His Asn Glu Leu Leu Asp 405 410 415 Ala Met Met Gln Ser Tyr Arg Asn Leu Ile Arg Phe Ala Arg Arg Asn 420 425 430 Asn Leu Ser Val Ser Ala Ser Pro Gln Asp Ile Gly Val Leu Thr Arg 435 440 445 Lys Leu Tyr Ala Ala Phe Glu Ala Leu Pro Gly Lys Val Thr Leu Val 450 455 460 Asn Pro Gln Ile Ser Pro Asp Leu Ser Glu Pro Asn Leu Thr Phe Ile 465 470 475 480 Tyr Val Pro Pro Gly Arg Ala Asn Arg Thr Gly Trp Tyr Leu Tyr Asn 485 490 495 Arg Ala Pro Ser Met Asp Ser Ile Ile Ser His Gln Pro Leu Glu Tyr 500 505 510 Asn Arg Tyr Leu Asn Lys Leu Val Ala Trp Ala Trp Phe Asn Gly Leu 515 520 525 Leu Thr Ser Arg Thr Arg Leu Phe Ile Lys Gly Asn Glu Val Val Asp 530 535 540 Leu Ala Lys Leu Gln Glu Met Val Ala Asp Val Ser His His Phe Pro 545 550 555 560 Leu Arg Leu Pro Ala Pro Thr Pro Lys Ala Leu Tyr Ser Pro Cys Glu 565 570 575 Ile Arg His Leu Ala Ile Ile Val Asn Leu Glu Tyr Asp Pro Thr Ala 580 585 590 Ala Phe Arg Asn Gln Val Val His Phe Asp Phe Arg Lys Leu Asp Val 595 600 605 Phe Ser Phe Gly Glu Gln Gln Asn Cys Leu Val Gly Ser Val Asp Leu 610 615 620 Leu Tyr Arg Asn Ser Trp Asn Glu Val Arg Thr Leu His Phe Asn Gly 625 630 635 Glu Gln Ala Met Ile Glu Ala Leu Lys Thr Ile Leu Gly Lys Met His 645 650 Gin Asp Ala Ala Pro Pro Asp Ser Val Glu Val Phe Cys Tyr Ser Gln 665 660 His Leu Arg Gly Leu Ile Arg Thr Arg Val Gln Gln Leu Val Ser Glu 675 680 685 Cys Ile Glu Leu Arg Leu Ser Ser Thr Arg Gln Glu Thr Gly Arg Phe 700 690 695 Lys Ala Leu Arg Val Ser Gly Gln Thr Trp Gly Leu Phe Phe Glu Arg 705 710 715 720 Leu Asn Val Ser Val Gln Lys Leu Glu Asn Ala Ile Glu Phe Tyr Gly 730

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Ala Ile Ser His Asn Lys Leu His Gly Leu Ser Val Gln Val Glu Thr
         740 745
                                        750
Asn His Val Lys Leu Pro Gln Val Val Asp Gly Phe Ala Ser Glu Gly
 755
                     760
Ile Ile Gln Phe Phe Phe Glu Glu Ser Gly Asp Asn Ala Gly Phe Asn
       775
                                 780
Ile Tyr Ile Leu Asp Glu Thr Asn Arg Ala Glu Val Tyr His His Cys
              790 795
Glu Gly Ser Lys Glu Glu Leu Val Arg Asp Val Ser Arg Phe Tyr Ser 805 \, 810 \, 815
Ser Ser His Asp Arg Phe Thr Tyr Gly Ser Ser Phe Ile Asn Phe Asn
     820 825
                            830
Leu Pro Gin Phe Tyr Gin Ile Val Asn Val Asp Gly Arg Ala Gin Val
835 840 845
Ile Pro Phe Arg Thr Gln Ala Ile Thr Pro Ala Ala Pro Ala Asn Gln
850 855 860
Glu Thr Ala Pro Leu Leu Gln Gln Tyr Phe Ser
865 870 875
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<212> PRT
<213> Enterobacter cloacae
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 20 25
Asp Phe Met Val Val Asp Ala Val Thr Gln Asn Val Phe Phe Ser Pro
35 40 45
Glu Leu Ile Arg Arg Leu Ala Asp Arg His Val Gly Val Gly Phe Asp
50 55
Gln Leu Leu Val Val Glu Pro Pro Tyr Asp Pro Asp Leu Asp Phe His
    70
Tyr Arg Ile Phe Asn Ala Asp Gly Ser Glu Val Ser Gln Cys Gly Asn
         85 90
Gly Ala Arg Cys Phe Ala Arg Phe Val Arg Leu Lys Gly Leu Thr Asn
       100 105 110
Lys Arg Asp Ile Arg Val Ser Thr Ala Asn Gly Arg Met Val Leu Ser
    115 120 125
Val Thr Asp Asp Glu Leu Val Arg Val Asn Met Gly Glu Pro Asn Phe
 130 135 140
Glu Pro Ser Ala Val Pro Phe Arg Ala Asn Lys Ala Glu Lys Thr Tyr
145 150 155 160
Ile Met Arg Ala Ala Glu Gln Thr Val Leu Cys Gly Val Val Ser Met
165 170 175
Gly Asn Pro His Cys Val Ile Gln Val Asp Asp Val Gln Thr Ala Ala
    180 185 190
Val Glu Thr Leu Gly Pro Val Leu Glu Ser His Glu Arg Phe Pro Glu
 195 200 205
Arg Ala Asn Ile Gly Phe Met Gln Val Val Lys Arg Glu His Ile Arg
 210 215 220
Leu Arg Val Tyr Glu Arg Gly Ala Gly Glu Thr Gln Ala Cys Gly Ser
            230
                     235
Gly Ala Cys Ala Ala Val Ala Val Gly Ile Ser Gln Gly Leu Leu Ala
           245
                           250
Glu Glu Val Arg Val Glu Leu Pro Gly Gly Arg Leu Asp Ile Ala Trp
                        265 270
     260
Lys Gly Ala Gly His Pro Leu Tyr Met Thr Gly Pro Ala Thr His Val
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<212> PRT
<213> Enterobacter cloacae
<400> 7839
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                 25
                                    30
Tyr Asp Asn Arg Pro Val Ile Leu Arg Thr Glu Gln Glu Ser Leu Ala
     35
                   40
                                   45
Phe Val Gln Asn Tyr His Pro Ala Leu Lys Thr Met Gln Asn Lys Asp
50 55
Phe Gln Lys Leu Arg Gln Ser Leu Arg Glu Thr Glu Pro Glu Ile Tyr
              70 75
His Asp Val Thr Glu Trp Arg Arg Ala Val Glu Gln Ala Met Leu
            85 90 95
Asn Ala Gly Leu Ser Ala Gln Asp Ala Ala Thr Gly Ala Glu Ala Ala
        100 105
Met Glu Asn Phe Ala Lys Trp Arg Ser Arg Ile Asp Val Pro Gln Glu
115 120 125
Thr His Asp Thr Leu Ala Lys Leu Ala Glu Lys Trp Pro Leu Val Ala
130 135 140
Ile Thr Asn Gly Asn Ala Gln Pro Glu Leu Phe Gly Leu Gly Asn Tyr
               150 155
Phe Gln Phe Val Leu Arg Ala Gly Pro His Gly Arg Ser Lys Pro Phe
          165 170
Asn Asp Met Tyr His Leu Ala Ala Glu Lys Leu Asp Leu Pro Leu Gly
 180 185 190
Glu Ile Leu His Val Gly Asp Asp Leu Thr Thr Asp Val Ala Gly Ala
195 200 205
Ile Arg Cys Gly Met Gln Ala Cys Trp Ile Lys Pro Glu Asn Ala Asp
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Leu Met Thr Thr Pro Asp Ser Arg Leu Leu Pro His Val Glu Ile Ser
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                               235
Arg Leu Ala Ser Leu Thr Thr Leu Ile
             245
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<211> 341
<212> PRT
<213> Enterobacter cloacae
<400> 7840
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                         25
                                          30
Asn Asn Arg Leu Thr Arg Leu Glu Ala Glu Glu Ser Gln Pro Leu Ile
35
                40
Asp Ala Val Trp Val Asp Leu Val Glu Pro Asp Asp Asp Glu Arg Leu
                  55
                                   60
Arg Val Gln Ser Glu Leu Gly Gln Ser Leu Ala Thr Arg Pro Glu Leu
               7.0
Glu Asp Ile Glu Ala Ser Ala Arg Phe Phe Glu Asp Glu Asp Gly Leu
            85
                            90
His Ile His Ser Phe Phe Phe Glu Asp Ala Glu Asp His Ala Gly
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105
Asn Ser Thr Val Ala Phe Thr Ile Arg Asp Gly Arg Leu Phe Thr Leu
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          120
                      125
Arg Glu Arg Glu Leu Pro Ala Phe Arg Leu Tyr Arg Met Arg Ala Arg
 130 135 140
Ser Gln Ala Met Met Asp Gly Asn Ala Tyr Glu Leu Leu Leu Asp Leu
145 150 155
Phe Glu Thr Lys Ile Glu Gln Leu Ala Asp Glu Ile Glu Asn Ile Tyr
        165 170 175
Ser Asp Leu Glu Lys Leu Ser Arg Val Ile Met Glu Gly His Gln Gly
     180 185 190
Asp Glu Tyr Asp Glu Ala Leu Ser Thr Leu Ala Glu Leu Glu Asp Ile
   195 200 205
Gly Trp Lys Val Arg Leu Cys Leu Met Asp Thr Gln Arg Ala Leu Asn
210 215 220
Phe Leu Val Arg Lys Ala Arg Leu Pro Gly Gly Gln Leu Glu Gln Ala
225 230 235 240
Arg Glu Ile Leu Arg Asp Ile Glu Ser Leu Leu Pro His Asn Glu Ser
        245 250 255
Leu Phe Gln Lys Val Asn Phe Leu Met Gln Ala Ala Met Gly Phe Ile
 260 265 270
Asn Ile Glu Gln Asn Arg Ile Ile Lys Ile Phe Ser Val Val Ser Val
275 280 285
Val Phe Leu Pro Pro Thr Leu Val Ala Ser Ser Tyr Gly Met Asn Phe
290 295 300
Glu Phe Met Pro Glu Leu Lys Trp Ser Phe Gly Tyr Pro Gly Ala Ile
305 310 315
Ile Phe Met Ile Leu Ala Gly Leu Ala Pro Tyr Leu Tyr Phe Lys Arg
Lys Asn Trp Leu
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<212> PRT <213> Enterobacter cloacae

<210> 7841 <211> 308

<400> 7841 Asn Ala Arg Thr Lys Leu Phe Ile Lys Cys His His Phe Arg Arg Thr 10 Pro Pro Met Arg Thr Tyr Leu Gly Trp Leu Leu Ala Ala Val Ala Leu 25 Pro Leu Thr Ala Tyr Ala Gln Glu Ala Thr Ile Lys Glu Val His Asp 35 4.0 Lys Pro Ala Val Lys Gly Ser Ile Ile Ala Asn Met Leu Gln Glu His 55 60 Asp Asn Pro Phe Thr Leu Tyr Pro Tyr Asp Thr Asn Tyr Val Ile Tyr 70 75 Thr Gln Thr Ser Asp Leu Asn Lys Glu Ala Ile Ser Ser Tyr Asn Trp 85 90 95 Ser Asp Asn Ala Arg Lys Asp Glu Val Lys Phe Gln Leu Ser Leu Ala 105 110 100 Phe Pro Phe Trp Arg Gly Ile Leu Gly Pro Asn Ser Val Leu Gly Ala 120 Ser Tyr Thr Gln Lys Ser Trp Trp Gln Leu Ser Asn Ser Gly Glu Ser 135 130 140 Ser Pro Phe Arg Glu Thr Asn Tyr Glu Pro Gln Leu Phe Leu Gly Phe 145 150 155 Ala Thr Asp Tyr Glu Phe Ala Gly Trp Thr Leu Arg Asp Val Glu Val 165 170 Gly Tyr Asn His Asp Ser Asn Gly Arg Ser Asp Pro Thr Ser Arg Ser

185 Trp Asn Arg Ile Tyr Thr Arg Leu Met Ala Gln Asn Gly Asn Phe Met 195 200 205 Val Glu Val Lys Pro Trp Tyr Val Val Gly Ser Thr Asp Asp Asn Pro 210 215 220 Asp Ile Thr Lys Tyr Met Gly Tyr Tyr Gln Leu Lys Val Gly Tyr Gln 230 235 Leu Gly Asp Ala Val Leu Ser Ala Lys Gly Gln Tyr Asn Trp Asn Thr 245 250 255 Gly Tyr Gly Gly Ala Glu Leu Gly Leu Ser Tyr Pro Val Thr Lys His 260 265 270 Val Arg Leu Tyr Thr Gln Val Tyr Ser Gly Tyr Gly Glu Ser Leu Ile 275 280 285 Asp Tyr Asn Phe Asn Gln Thr Arg Val Gly Val Gly Val Met Leu Asn 290 295 Asp Ile Phe <210> 7842 <211> 632 <212> PRT <213> Enterobacter cloacae <400> 7842 Thr Leu Lys Phe Leu Ser Gln Ala Leu Lys Ile Ala Pro Val Ser Phe 10 Leu Ala Tyr Gly Val Asn Val Ala Gln Ala Glu Val Leu Asn Gln Glu 20 25 30Ser Leu Ala Lys Gln Val Leu His Glu Thr Phe Gly Tyr Gln Gln Phe 35 40 4.5 Arg Pro Gly Gln Glu Thr Ile Ile Glu Thr Val Leu Glu Gly Arg Asp 55 60 Cys Leu Val Val Met Pro Thr Gly Gly Gly Lys Ser Leu Cys Tyr Gln 65 70 75 Val Pro Ala Leu Val Leu Asn Gly Leu Thr Val Val Val Ser Pro Leu 85 90 Ile Ser Leu Met Lys Asp Gln Val Asp Gln Leu Leu Ala Asn Gly Val 100 105 Ala Ala Cys Leu Asn Ser Thr Gln Thr Arg Glu Gln Gln Glu Glu 115 120 125 Val Met Ala Gly Cys Arg Thr Gly Gln Val Arg Leu Leu Tyr Ile Ala 135 140 Pro Glu Arg Leu Met Leu Asp Asn Phe Leu Asp His Leu Ala His Trp 150 155 160 Asn Pro Val Leu Leu Ala Val Asp Glu Ala His Cys Ile Ser Gln Trp 165 170 175 Gly His Asp Phe Arg Pro Glu Tyr Ala Ala Leu Gly Gln Leu Arg Gln 180 185 190 Arg Phe Pro Glu Leu Pro Phe Met Ala Leu Thr Ala Thr Ala Asp Asp 200 205 Thr Thr Arg Gln Asp Ile Val Arg Leu Leu Gly Leu Asn Asp Pro Tyr 210 215 220 Ile Gln Val Ser Ser Phe Asp Arg Pro Asn Ile Arg Tyr Met Leu Met 225 230 235 Glu Lys Phe Lys Pro Leu Asp Gln Leu Leu Arg Tyr Val Gln Glu Gln 245 250 Arg Gly Lys Ser Gly Ile Ile Tyr Cys Asn Ser Arg Ala Lys Val Glu 260 265 270 Asp Thr Ala Ala Arg Leu Gln Asn Arg Gly Phe Ser Ala Ala Ala Tyr 275 280 His Ala Gly Leu Glu Asn His Ile Arg Ala Asp Val Gln Glu Lys Phe

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295
Gln Arg Asp Asp Leu Gln Ile Val Val Ala Thr Val Ala Phe Gly Met
                            315
         310
Gly Ile Asn Lys Pro Asn Val Arg Phe Val Val His Phe Asp Ile Pro
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                          330
Arg Asn Ile Glu Ser Tyr Tyr Gln Glu Thr Gly Arg Ala Gly Arg Asp
        340
               345
Gly Leu Pro Ala Glu Ala Met Leu Phe Tyr Asp Pro Ala Asp Met Ala
   355 360 365
Trp Leu Arg Arg Cys Leu Glu Glu Lys Pro Gln Gly Gln Leu Gln Asp
  370 375 380
Ile Glu Arg His Lys Leu Asn Ala Met Gly Ala Phe Ala Glu Ala Gln
385 390 395
Thr Cys Arg Arg Leu Val Leu Leu Asn Tyr Phe Gly Glu Gly Arg Gln
        405 410 415
Ala Pro Cys Gly Asn Cys Asp Ile Cys Leu Asp Pro Pro Lys Gln Tyr
        420 425 430
Asp Gly Leu Met Asp Ala Arg Lys Ala Leu Ser Thr Ile Gly Arg Val
 435 440 445
Asn Gln Arg Phe Gly Met Gly Tyr Val Val Glu Val Leu Arg Gly Ala
                      460
450 455
Asn Asn Gln Arg Ile Arg Asp Met Gly His Asp Lys Leu Pro Val Tyr
465 470 475 480
Gly Ile Gly Lys Asp Gln Ser His Glu His Trp Val Ser Ile Ile Arg
          485 490 495
Gln Leu Ile His Leu Gly Phe Ala Thr Gln Asn Ile Ala Gln His Ser
        500 505 510
Ala Leu Gln Leu Thr Glu Ala Ala Arg Pro Val Leu Arg Gly Glu Val
   515 520 525
Glu Leu Lys Leu Ala Val Pro Arg Val Val Ala Leu Lys Pro Arg Val
530 535 540
Met Gln Lys Ser Tyr Gly Gly Asn Tyr Asp Arg Lys Leu Phe Ala Lys
            550 555 560
Leu Arg Lys Leu Arg Lys Ala Ile Ala Asp Glu Glu Asn Ile Pro Pro
          565 570
Tyr Val Val Phe Asn Asp Ala Thr Leu Ile Glu Met Ala Glu Gln Met
        580 <sup>2</sup> 585 590
Pro Leu Ser Ala Ser Glu Met Leu Ser Val Asn Gly Val Gly Thr Arg
    595 600 605
Lys Leu Glu Arg Phe Gly Lys Glu Phe Met Ala Leu Ile Arg Ser His
610 615
Ala Asp Gly Asp Asp Glu Glu
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<211> 157
<212> PRT
<213> Enterobacter cloacae
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Phe Trp Arg Gln Arg Glu Glu Asp Glu Phe Met Gly Val Gly Glu Ile
      35
                     40
Pro Val Arg Phe Val Arg Phe Arg Asp Glu Lys Asn Asp Arg Val Ile
                 55
Val Val Cys Pro Gly Arg Ile Glu Ser Tyr Ile Lys Tyr Ala Glu Leu
                              75
Ala Tyr Asp Leu Phe His Leu Gly Phe Asp Val Leu Ile Ile Asp His
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Arg Gly Gln Gly Leu Ser Gly Arg Met Leu Pro Asp Thr His Arg Gly 100 105 His Val Asp Asn Phe Ser Asp Tyr Val Asp Asp Leu Ala Ala Phe Trp 115 120 125 Gln Gln Glu Val Gln Pro Gly Pro Trp Arg Lys Arg Tyr Ile Leu Ala 135 140 His Ser Met Gly Gly Ala Ile Ser Thr Leu Phe Leu 150 <210> 7844 <211> 153 <212> PRT <213> Enterobacter cloacae <400> 7844 Gly Gln Asp Pro Ala Val Asp Phe Thr Ile Asp Ile Ala Val Ala Val 10 Pro Val Val Asp Thr Leu Phe Asp Gly His Pro Gln Gly Ile Gly Lys 20 25 Ala Met Lys Phe Thr Val Val His Gly Phe Ile Pro Val Phe Arg Asp 35 40 Gly Gly Ser Ile Thr Leu Asn Asn Ser Arg Cys Arg Lys Ala Ala Asn 5.5 Ser Cys Phe Cys Val Phe Ser Cys Asp Asp Arg Asn Arg Phe Glu Leu 7.0 75 Thr Gly Asn Leu Tyr Met Lys Asn Val Phe Arg Thr Leu Val Val Leu 85 90 Val Thr Leu Phe Ser Leu Thr Gly Cys Gly Leu Lys Gly Pro Leu Tyr 100 105 110 Phe Pro Pro Glu Asp Lys Asn Ala Pro Pro Pro Thr Lys Pro Val Gln 115 120 125 Ser Gly Ile Glu Ser Ser Thr Pro Asp Thr Asn Asp Arg Gly Asn Asn 130 135 Gly Gly Pro Thr Gln Val Asn Leu <210> 7845 <211> 303 <212> PRT <213> Enterobacter cloacae <400> 7845 Ala Arg Met Thr Asp Gly Leu Leu Ala Thr Asp Val Asn Arg Phe Leu Arg Tyr Leu Gly Val Glu Arg Gln Leu Ser Pro Ile Thr Leu Leu Asn 20 25 Tyr Gln Arg Gln Leu Asp Ala Ile Met Gln Ile Ala Asp Glu Ile Gly 35 40 45 Leu Lys Ser Trp Gln Gln Cys Asp Ala Ala Thr Val Arg Gly Phe Val 50 Val Arg Ser Arg Lys Lys Asn Leu Ser Pro Ala Ser Leu Ala Leu Arg 70 8.0 Leu Ser Ala Leu Arg Ser Phe Phe Asp Trp Leu Val Ser Gln Gly Gly 90 85 Leu Lys Ala Asn Pro Ala Lys Gly Ile Ala Thr Pro Lys Ala Pro Arg 105 His Leu Pro Lys Asn Ile Asp Val Asp Val Asn Arg Leu Leu Asp 120

Ile Asp Leu Asn Asp Pro Leu Ala Val Arg Asp Arg Ala Met Leu Glu

```
Val Met Tyr Gly Ala Gly Leu Arg Leu Ser Glu Leu Val Asn Leu Asp
          150
                    155
Leu Lys His Leu Asp Leu Glu Ser Gly Glu Val Trp Val Met Gly Lys
          165
                          170
Gly Ser Lys Glu Arg Arg Leu Pro Ile Gly Arg Asn Ala Val Ser Trp
                      185 190
Ile Glu His Trp Leu Asp Leu Arg Gly Leu Phe Gly Ala Asp Glu Asp
                   200 205
    195
Ala Leu Phe Leu Ser Lys Leu Gly Lys Arg Ile Ser Ala Arg Asn Val
                 215
                                220
Gln Lys Arg Phe Ala Glu Trp Gly Ile Lys Gln Gly Leu Asn Ser His
   230 235
Val His Pro His Lys Leu Arg His Ser Phe Ala Thr His Met Leu Glu
      245 250 255
Ser Ser Gly Asp Leu Arg Gly Val Gln Glu Leu Leu Gly His Ala Asn
        260 265 270
Leu Ser Thr Thr Gln Ile Tyr Thr His Leu Asp Phe Gln His Leu Ala
 275 280 285
Ser Val Tyr Asp Ala Ala His Pro Arg Ala Lys Arg Gly Lys
 290 295
<210> 7846
<211> 739
<212> PRT
<213> Enterobacter cloacae
<400> 7846
Gln Gly Phe Gly Glu Trp Lys His Leu Pro Ala Arg His Asp Val Thr
                    10
Val Pro Met Asp Val Ser Tyr Leu Leu Asp Ser Leu Asn Asp Lys Gln
              25
                                     3.0
Arg Asp Ala Val Ala Ala Ser Arg Thr Asn Leu Leu Val Leu Ala Gly
35 40 45
Ala Gly Ser Gly Lys Thr Arg Val Leu Val His Arg Ile Ala Trp Leu
               55 60
Gln Ser Val Glu Asn Cys Ser Pro Tyr Ser Ile Met Ala Val Thr Phe
            70 75
Thr Asn Lys Ala Ala Ala Glu Met Arg His Arg Ile Ala Gln Leu Met
          85 90 95
Gly Thr Ser Gln Gly Gly Met Trp Val Gly Thr Phe His Gly Leu Ala
       100 105 110
His Arg Leu Leu Arg Ala His His Met Asp Ala Asn Leu Pro Gln Asp
    115 120 125
Phe Gln Ile Leu Asp Ser Glu Asp Gln Leu Arg Leu Leu Lys Arg Leu
 130 135 140
Ile Lys Ala Met Asn Leu Asp Glu Lys Gln Trp Pro Pro Arg Gln Ala
145 150 155
Met Trp Tyr Ile Asn Gly Gln Lys Asp Glu Gly Leu Arg Pro His His
           165 170 175
Ile Gln Ser Phe Gly Asn Pro Val Glu Gln Thr Trp Gln Asn Val Tyr
       180 185 190
Lys Ala Tyr Gln Glu Ala Cys Asp Arg Ala Gly Leu Val Asp Phe Ala
                  200 205
     195
Glu Leu Leu Arg Ala His Glu Leu Trp Leu Asn Lys Pro His Ile
 210
                 215
                                220
Leu Gln His Tyr Arg Glu Arg Phe Thr Asn Ile Leu Val Asp Glu Phe
225 230 235
Gln Asp Thr Asn Asn Ile Gln Tyr Ala Trp Ile Arg Leu Leu Ala Gly
          245 250 255
Asp Thr Gly Lys Val Met Ile Val Gly Asp Asp Asp Gln Ser Ile Tyr
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Gly Trp Arg Gly Ala Gln Val Glu Asn Ile Gln Arg Phe Leu Asn Asp 275 280 Phe Pro Gly Ala Gln Thr Ile Arg Leu Glu Gln Asn Tyr Arg Ser Thr 290 295 300 Ser Asn Ile Leu Ser Ala Ala Asn Ala Leu Ile Glu Asn Asn Asn Gly 310 Arg Leu Gly Lys Lys Leu Trp Thr Asp Gly Val Asp Gly Glu Pro Ile 325 330 335 Ser Ile Tyr Cys Ala Phe Asn Glu Leu Asp Glu Ala Arg Phe Val Val 340 345 Asn Arg Ile Lys Thr Trp Gln Glu Asn Gly Gly Ala Leu Glu Gln Cys 355 360 365 Ala Ile Leu Tyr Arg Ser Asn Ala Gln Ser Arg Val Leu Glu Glu Ala 370 375 380 Leu Leu Gln Val Ser Met Pro Tyr Arg Ile Tyr Gly Gly Met Arg Phe 390 395 Phe Glu Arg Gln Glu Ile Lys Asp Ala Leu Ser Tyr Leu Arg Leu Ile 405 410 415 Ala Asn Arg Asn Asp Asp Ala Ala Phe Glu Arg Val Val Asn Thr Pro 425 430 Thr Arg Gly Ile Gly Asp Arg Thr Leu Asp Val Val Arg Gln Ala Ser 435 440 445 Arg Asp Arg Gln Leu Thr Leu Trp Gln Ala Cys Arg Glu Leu Leu Gln 450 455 460 Glu Lys Ala Leu Ala Gly Arg Ala Ala Ser Ala Leu Gl
n Arg Phe Leu 465 $\,$ 470 $\,$ 475 $\,$ 480 Glu Leu Ile Asp Ala Leu Ala Gln Glu Thr Ala Asp Met Pro Leu His 485 490 495 Val Gln Thr Asp Arg Val Ile Lys Asp Ser Gly Leu Arg Thr Met Tyr 500 505 510 Glu Gln Glu Lys Gly Glu Lys Gly Gln Thr Arg Ile Glu Asn Leu Glu 515 520 525 Glu Leu Val Thr Ala Thr Arg Gln Phe Ser Tyr Asn Glu Glu Asp Glu 535 540 530 Asp Leu Met Pro Leu Gln Ala Phe Leu Ser His Ala Ala Leu Glu Ala 550 555 560 Gly Glu Gly Gln Ala Asp Thr Trp Gln Asp Ala Val Gln Leu Met Thr 565 570 575 Leu His Ser Ala Lys Gly Leu Glu Phe Pro Gln Val Phe Ile Val Gly 580 585 590 Met Glu Glu Gly Met Phe Pro Ser Gln Met Ser Leu Asp Glu Gly Gly 595 600 605 Arg Leu Glu Glu Glu Arg Arg Leu Ala Tyr Val Gly Val Thr Arg Ala 615 620 610 Met Gln Lys Leu Thr Leu Thr Tyr Ala Glu Thr Arg Arg Leu Tyr Gly 630 635 Lys Glu Val Tyr His Arg Pro Ser Arg Phe Ile Gly Glu Leu Pro Glu 645 650 655 Glu Cys Val Glu Glu Val Arg Leu Arg Ala Ser Ile Ser Arg Pro Val 665 670 660 Ser His Gln Arg Met Gly Ser Pro Ile Ser Glu Thr Asp Thr Gly Tyr 675 680 685 Lys Leu Gly Gln Arg Val Arg His Ser Lys Phe Gly Glu Gly Thr Ile 695 700 690 Val Asn Leu Glu Gly Ser Gly Glu His Ser Arg Leu Gln Val Ala Phe 710 715 Gln Gly Gln Gly Ile Lys Trp Leu Val Ala Ala Tyr Ala Lys Leu Glu 725 730 Ser Val

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<210> 7847
<211> 217
<212> PRT
<213> Enterobacter cloacae
<400> 7847
Leu Thr Val Leu Phe Pro Arg Glu Leu Ile Met Leu Met Leu Phe Leu
                             10
Thr Val Ala Leu Val His Ile Val Ala Leu Met Ser Pro Gly Pro Asp
 20
                          25
Phe Phe Phe Val Ser Gln Thr Ala Val Ser Arg Ser Arg Lys Glu Ala
3.5
          4.0
                                        4.5
Met Met Gly Val Leu Gly Ile Thr Met Gly Val Met Val Trp Ala Ala
50
                   55
                                    60
Val Ala Leu Leu Gly Leu Asn Leu Ile Leu Ala Lys Met Ala Trp Leu
               70
                                7.5
His Asn Ile Ile Met Val Gly Gly Leu Tyr Leu Cys Trp Met Gly
            85
                             90
Tyr Gln Met Leu Arg Gly Ala Leu Lys Lys Glu Glu Ser Lys Pro Glu
         100 105 110
Glu Pro Lys Val Glu Leu Ala Thr Gly Gly Arg Ser Phe Val Lys Gly
115 120
Leu Leu Thr Asn Leu Ala Asn Pro Lys Ala Ile Ile Tyr Phe Gly Ser
       135
                                    140
Val Phe Ser Leu Phe Val Gly Asp Asn Val Gly Ala Gly Ala Arg Trp
145 150 155
Gly Ile Phe Leu Leu Ile Val Val Glu Thr Phe Ala Trp Phe Thr Val
            165 170 175
Val Ala Ser Leu Phe Ala Leu Pro Ala Met Arg Arg Gly Tyr Gln Arg
         180 185 190
Ile Ala Lys Trp Ile Asp Gly Phe Ala Gly Ala Leu Phe Ala Gly Phe
195 200
Gly Ile His Leu Ile Ile Ser Arg
  210
<210> 7848
<211> 241
<212> PRT
<213> Enterobacter cloacae
<400> 7848
Arg Val Tyr Pro Ser Met Lys Gln Pro Gly Glu Glu Leu Arg Glu Pro
                           10
Val Thr Glu Leu Asp Asp Ser Thr Val Val Asp Tyr Leu Leu His Asn
         20
Pro Glu Phe Phe Ile Arg Asn Ala Arg Val Val Glu Arg Met Arg Val
                    40
      35
Pro His Pro Val Arg Glu Thr Val Ser Leu Val Glu Trp His Met Ala
                 55
                                    60
Arg Ser Arg Asn His Ile Asn Gln Leu Glu Glu Asn Met Thr Leu Leu
               70
                                 7.5
65
Met Glu Gln Ala Ser Asn Asn Glu Ser Leu Phe Tyr Arg Leu Leu His
                             90
            85
Leu Gln Ala Arg Leu Ala Ser Ala His Ser Leu Glu Glu Phe Leu Asn
                          105
          100
                                           110
Arg Phe His Arg Trp Ala Arg Glu Leu Gly Leu Ala Gly Ala Thr Ile
                                     125
                       120
Arg Leu Phe Pro Asp Arg Trp Arg Ile Gly Ala Pro Ser Gly Phe Thr
 130
                   135
                                    140
His Leu Ala Leu Ser Arg Gln Ala Phe Glu Pro Leu Arg Ile Gln Arg
                150
                       155
```

```
Leu Gly His Glu His His Tyr Leu Gly Pro Leu Asn Gly Pro Glu Leu
                                170
           165
Leu Val Val Leu Pro Glu Ala Lys Ala Ile Gly Ser Val Ala Met Ser
          180
                            185
                                              190
Leu Met Gly Arg Asp Gly Asp Leu Gly Val Met Leu Phe Thr Ser Arg
   195 200
                                           205
Asp Ala His His Tyr Glu Gln Gly Gln Gly Thr Gln Leu Leu Gln Glu
 210 215
                                       220
Ile Ala Leu Met Leu Pro Glu Leu Leu Glu Arg Trp Ile Glu Arg Val
      230 235
<210> 7849
<211> 215
<212> PRT
<213> Enterobacter cloacae
<400> 7849
Lys Gln Thr Ile Arg Glu Phe Gln Met Thr Phe Glu Trp Trp Phe Ala
                                10
Tyr Leu Leu Thr Ser Ile Ile Leu Ser Leu Ser Pro Gly Ser Gly Ala
                             25
                                              30
  20
Ile Asn Thr Met Thr Thr Ser Ile Asn His Gly Tyr Arg Gly Ala Val
 35
                        4.0
                                          45
Ala Ser Ile Ala Gly Leu Gln Thr Gly Leu Gly Ile His Ile Val Leu
                   5.5
Val Gly Ile Gly Leu Gly Thr Leu Phe Ser Arg Ser Val Leu Ala Phe
                 70
                                   75
Glu Val Leu Lys Trp Ala Gly Ala Ala Tyr Leu Ile Trp Leu Gly Ile
                                               95
              8.5
                                90
Gln Gln Trp Arg Ala Ala Gly Ser Ile Asp Leu His Thr Leu Ser Arg
           100
                          105
Thr Gln Thr Arg Gly His Leu Phe Lys Arg Ala Val Phe Val Asn Leu
                         120
                                           125
      115
Thr Asn Pro Lys Ser Ile Val Phe Leu Ala Ala Leu Phe Pro Gln Phe
                     135
 130
Ile Val Pro His Gln Pro Gln Val Met Gln Tyr Val Val Leu Gly Ala
                                   155
                  150
Thr Thr Ile Ile Val Asp Ile Ile Val Met Ile Gly Tyr Ala Thr Leu
              165
                                170
Ala Gln Arg Ile Ala Ala Trp Ile Lys Gly Pro Lys Gln Met Lys Ala
                            185 190
           180
Leu Asn Lys Val Phe Gly Ser Leu Phe Met Leu Val Gly Ala Leu Leu
                         200
                                           205
       195
Ala Ser Ala Arg His Ala
<210> 7850
<211> 418
<212> PRT
<213> Enterobacter cloacae
<400> 7850
Lys Arg Arg Gln Arg Cys Ala Ala Ala Arg Ile Thr Ile Thr Leu Lys
Trp Glu Ala Ile Met Thr Glu His Glu Lys Ser Ser Ala Val Val Glu
                                               30
                            25
          20
```

Glu Thr Arg Glu Thr Val Asp Thr Thr Ser Gln Pro Glu Thr Thr Asp 40

Thr Thr Val Glu Lys Lys Asn Gly Ser Asn Lys Thr Ser Leu Thr Leu

4.5

```
Ser Val Ile Ala Ile Ala Ile Ala Leu Ala Ala Gly Val Gly Leu Tyr
                             7.5
Gly Leu Val Lys Lys Gln Gly Thr Asn Gln Thr Ala Thr Ser Asp Ala
           85
                          90
Leu Val Asn Gln Ile Thr Ala Leu Gln Lys Ala Gln Glu Thr Gln Lys
                      105
                                      110
      100
Ala Glu Leu Glu Gly Val Ile Lys Gln Gln Ala Ala Ala Leu Ala Asp
   115 120
Ala Asn Ser Lys Arg Glu Glu Leu Thr Lys Gln Leu Ser Glu Val Gln
 130 135 140
Glu Lys Val Ala Thr Ile Ser Gly Thr Asp Ala Lys Thr Trp Leu Leu
145 150 155
Ser Gln Ala Asp Phe Leu Val Lys Leu Ala Gly Arg Lys Leu Trp Ser
          165 170 175
Asp Gln Asp Val Thr Thr Ala Ala Ala Leu Leu Lys Ser Ala Asp Ala
        180 185 190
Ser Leu Ala Asp Met Asn Asp Pro Ser Leu Ile Asn Ala Arg Arg Ala
 195 200 205
Ile Thr Glu Asp Ile Ala Ser Leu Ser Ala Val Ser Gln Val Asp Tyr
                 215 220
Asp Gly Ile Ile Leu Lys Val Asn Gln Leu Ser Asn Gln Ile Asp Asn
              230 235 240
Leu Gln Leu Ala Asp Asn Asn Asp Asp Asp Ser Pro Met Asp Ser Asp
           245 250 255
Gly Thr Glu Leu Ser Ser Ser Leu Ser Glu Trp Arg Ile Asn Leu Gln
            265 270
         260
Lys Ser Trp Gln Asn Phe Met Asp Ser Phe Ile Thr Ile Arg Arg Arg
     275 280 285
Asp Glu Thr Ala Val Pro Leu Leu Ala Pro Asn Gln Asp Val Tyr Leu
               295 300
 290
Arg Glu Asn Ile Arg Ser Arg Leu Leu Val Ala Ala Gln Ala Val Pro
              310 315
Arg His Gln Glu Glu Thr Tyr Lys Gln Ala Leu Asp Asn Val Ser Thr
            325 330 335
Trp Val Arg Ala Tyr Tyr Asp Thr Asn Asp Ala Thr Thr Thr Ala Phe
            345 350
         340
Leu Glu Asp Ile Asp Lys Leu Ser Gln Gln Asn Ile Thr Met Asn Val
                    360 365
     355
Pro Asp Lys Leu Glu Ser Gln Pro Ile Leu Glu Lys Ile Met Gln Thr
                 375 380
  370
Arg Val Arg Asn Leu Leu Ala Gln Pro Gly Val Pro Ala Glu Arg Pro
             390 395 400
385
Ala Glu Ala Pro Ala Ala Ala Pro Ala Pro Glu Ser Ala Pro Gln Gly
            405
Glu
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<210> 7851 <211> 185 <212> PRT

<213> Enterobacter cloacae

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55
Glu Lys Asp Phe Ala Gln Leu Ser Phe Asn Asn Gln Pro Met Met Val
                               75
Gly Asn Trp Ala Gln Ser Ile Leu His Gly Gly Val Ile Ala Ser Ala
           85
                            90
Leu Asp Val Ala Ala Gly Leu Val Cys Val Gly Ser Thr Leu Thr Arg
        100
                        105
His Asp Thr Ile Asn Glu Asp Glu Leu Arg Gln Arg Leu Ser Arg Met
     115 120
Gly Thr Ile Asp Leu Arg Val Asp Tyr Leu Arg Pro Gly Arg Gly Asn
                          140
 130 135
Arg Phe Thr Cys Thr Ser Ser Met Leu Arg Ala Gly Asn Lys Val Ala
145 150 155
Val Ala Arg Val Glu Leu His Asn Glu Glu Gln Val Tyr Ile Ala Ser
         165 170
Ala Thr Ala Thr Tyr Met Val Gly
<210> 7852
```

<211> 303 <212> PRT

<213> Enterobacter cloacae

<400> 7852 Arg Ile Phe Pro Met Asp Ala Lys Gln Thr Arg Gln Gly Val Leu Leu 10 Ala Leu Ala Ala Tyr Phe Ile Trp Gly Ile Ala Pro Ala Tyr Phe Lys 25 30 Leu Ile Ala Tyr Val Pro Ala Asp Glu Ile Leu Thr His Arg Val Ile 35 40 4.5 Trp Ser Phe Phe Phe Met Ile Ala Leu Met Ser Ile Ser Arg Gln Trp 50 5.5 60 Ser Gly Val Lys Thr Leu Leu Lys Thr Pro Lys Lys Val Phe Leu Leu 70 75 Ala Leu Ser Ala Val Leu Ile Gly Gly Asn Trp Leu Leu Phe Ile Trp 90 85 Ala Val Asn Asn His His Met Leu Glu Ala Ser Leu Gly Tyr Phe Ile 105 110 100 Asn Pro Leu Val Asn Ile Leu Leu Gly Met Ile Phe Leu Gly Glu Arg 120 125 115 Phe Arg Arg Met Gln Trp Val Ala Val Ile Leu Ala Phe Cys Gly Val 135 Leu Val Gln Leu Trp Thr Phe Gly Ser Leu Pro Val Ile Ala Leu Gly 145 150 155 160 Leu Ala Phe Ser Phe Ala Phe Tyr Gly Leu Val Arg Lys Lys Ile Ala 165 170 175 Val Glu Ala Gln Thr Gly Met Leu Phe Glu Thr Leu Trp Leu Leu Pro 180 185 190 Val Ala Ala Ile Tyr Leu Phe Gly Ile Ala Asp Ser Ala Thr Ser His 195 200 Met Gly Ser Asn Pro Trp Ser Leu Asn Leu Met Leu Ile Ala Ala Gly 215 220 Val Val Thr Thr Ile Pro Leu Leu Cys Phe Thr Gly Ala Ala Thr Arg 230 235 Leu Arg Leu Ser Thr Leu Gly Phe Phe Gln Tyr Ile Gly Pro Thr Leu 245 250 Met Phe Leu Leu Ala Val Val Phe Tyr Gly Glu Val Pro Gly Ala Asp 260 265 Lys Met Val Thr Phe Ala Phe Ile Trp Val Ala Leu Ala Ile Phe Val 280 275 Ala Asp Ala Ile Tyr Thr Gln Arg Arg Val Arg Lys Gly Leu

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290
                  295
                                  300
<210> 7853
<211> 252
<212> PRT
<213> Enterobacter cloacae
<400> 7853
Arg Arg Ala Pro Cys Met Ser Ile Leu Val Thr Arg Pro Ser Pro Ala
                         10
Gly Glu Gln Leu Val Ser Arg Leu Arg Ala Leu Gly Gln Val Ala Trp
   20
                        25
                                        3.0
Ser Phe Pro Leu Ile Glu Phe Ser Pro Gly Arg Glu Leu Pro Glu Leu
35
                40
                                    45
Ala Asp Gln Met Arg Leu Leu Gln Glu Gly Asp Leu Leu Phe Ala Leu
50
                  55
                                 60
Ser Gln His Ala Val Glu Phe Ala His Ala Gln Leu Gln Gln Gln Gly
65 70 75 80
Val Arg Trp Pro His Ala Pro Arg Tyr Phe Ala Ile Gly Arg Thr Thr
         85
                           90 95
Ala Leu Ala Leu His Thr Ala Ser Gly Ile Asp Val Arg Tyr Pro Leu
100 105 110
Asp Arg Glu Ile Ser Glu Val Leu Leu Gln Leu Pro Glu Leu Gln Asn
115 120 125
Ile Ala Gly Lys Arg Thr Leu Ile Leu Arg Gly Asn Gly Gly Arg Glu
                  135 140
Leu Leu Gly Glu Thr Leu Arg Glu Arg Gly Ala Asp Val Thr Phe Val
145 150 155 160
Glu Cys Tyr Gln Arg Cys Ala Lys His Tyr Asp Gly Ala Glu Glu Ala
           165 170 175
Met Arg Trp His Ala Arg Gly Ile Asn Thr Leu Val Val Thr Ser Gly
       180 185 190
Glu Met Leu Gln Gln Leu Trp Ser Leu Ile Pro Leu Trp Tyr Arg Glu
195 200 205
Asn Trp Leu Leu Arg Cys Arg Leu Leu Val Val Ser Glu Arg Leu Ala
210
                215 220
Asn His Ala Arg Glu Leu Gly Trp Gln Asp Ile Arg Ile Ala Glu Asn
225 230 235
Ala Asp Asn Asp Ala Leu Leu Arg Ala Leu Gln
            245
<210> 7854
<211> 120
<212> PRT
<213> Enterobacter cloacae
<400> 7854
Arg Tyr Thr Ala Ala Ile Thr Lys Asn Arg Asn Lys Thr Met Asn Asp
                     10
Ser Glu Phe His Arg Leu Ala Asp Thr Leu Trp Met Thr Ile Glu Glu
                                        3.0
Arg Ile Asp Asp Trp Asp Gly Asp Ser Asp Ile Asp Cys Glu Ile Asn
                     4.0
                                     4.5
Gly Gly Ile Leu Thr Leu Ser Phe Glu Asn Gly Ser Lys Ile Ile Ile
                 55
 50
Asn Arg Gln Glu Pro Leu His Gln Val Trp Leu Ala Ala Lys Gln Gly
         70
                              75
Gly Tyr His Phe Asp Leu Lys Gly Asp Glu Trp Val Cys Asp Arg Ser
                           90
           8.5
```

Gly Glu Thr Phe Trp Asp Leu Leu Glu Gln Ala Ala Thr Ala Gln Ala

105

110

```
3746
Gly Glu Asp Val Ser Phe Arg
  115
<210> 7855
<211> 322
<212> PRT
<213> Enterobacter cloacae
<400> 7855
Arg Leu Ile Met Thr Val Thr Ser Met Leu Asp Asn Val Leu Arg Ile
                           10
Ala Thr Arg Gln Ser Pro Leu Ala Leu Trp Gln Ala His Tyr Val Lys
                        25
         20
Gln Arg Leu Glu Ala Cys His Thr Gly Leu Arg Val Glu Leu Val Pro
                  40
                                   4.5
Met Val Thr Arg Gly Asp Val Ile Leu Asp Thr Pro Leu Ala Lys Val
                 55
 50
                            60
Gly Gly Lys Gly Leu Phe Val Lys Glu Leu Glu Leu Ala Leu Leu Glu
             7.0
                       7.5
Asn Arg Ala Asp Ile Ala Val His Ser Met Lys Asp Val Pro Val Glu
                90 95
            8.5
Phe Pro Glu Gly Leu Gly Leu Val Thr Ile Cys Glu Arg Glu Asp Pro
        100 105
Arg Asp Ala Phe Val Ser Asn Arg Tyr Asp Ser Leu Asp Ala Leu Pro
    115 120 125
Ala Gly Ser Val Val Gly Thr Ser Ser Leu Arg Arg Gln Cys Gln Leu
                 135 140
Ala Glu Arg Arg Pro Asp Leu Val Ile Arg Ser Leu Arg Gly Asn Val
               150 155
Gly Thr Arg Leu Gly Lys Leu Asp Asn Gly Asp Tyr Asp Ala Ile Ile
           165 170 175
Leu Ala Val Ala Gly Leu Lys Arg Leu Gly Leu Glu Glu Arg Ile Arg
        180 185 190
Val Ala Leu Pro Pro Glu Leu Ser Leu Pro Ala Val Gly Gln Gly Ala
     195
          200 205
Val Gly Ile Glu Cys Arg Leu Asp Asp Val Arg Thr Gln Ala Leu Leu
                  215 220
Ala Pro Leu Asn His Asp Asp Thr Ala Val Arg Val Lys Ala Glu Arg
    230 235
Ala Met Asn Thr Arg Leu Glu Gly Gly Cys Gln Val Pro Ile Gly Ser
            245
                           250
                                           255
Tyr Ala Glu Leu Thr Asp Gly Glu Leu Trp Leu Arg Ala Leu Val Gly
         260
                      265 270
Ala Pro Asp Gly Ser His Met Val Arg Gly Glu Arg Arg Gly Lys Pro
                     280
      275
Gln Asp Ala Glu Ala Leu Gly Val Ser Leu Ala Glu Glu Leu Leu Asn
                 295
Asn Gly Ala Arg Glu Ile Leu Ala Glu Val Tyr Asn Gly Glu Pro Pro
               310
                               315
305
Ala
<210> 7856
<211> 408
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<400> 7856

V2112 900

<212> PRT

<213> Enterobacter cloacae

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25
Gln Gly Tyr Val Leu Ile Gln Thr Asp Asn Tyr Asn Ile Glu Thr Ser
                   40
Val Thr Gly Leu Val Ile Ile Leu Ile Leu Gly Val Val Val Leu Leu
                55
Ala Val Glu Trp Leu Leu Arg Arg Ile Phe Arg Thr Gly Val His Thr
      70
                            75
Arg Gly Trp Phe Val Gly Arg Lys Arg Arg Arg Ala Arg Lys Gln Thr
        85 90
Glu Gln Ala Leu Leu Lys Leu Ala Glu Gly Asp Tyr Gln Gln Val Glu
      100 105 110
Lys Leu Met Ser Lys Asn Ala Asp His Ala Glu Gln Pro Val Val Asn
    115 120 125
Tyr Leu Leu Ala Ala Glu Ala Ala Gln Gln Arg Gly Asp Glu Ala Arg
 130 135 140
Ala Asn Gln His Leu Glu Arg Ala Ser Glu Leu Ser Thr Lys Asp Pro
145 150 155 160
Ile Pro Val Glu Ile Thr Arg Val Arg Leu Gln Leu Ala Arg Asn Glu
        165 170 175
Asn His Ala Ala Arg His Gly Val Asp Arg Leu Leu Glu Ile Thr Pro
   180 185 190
Arg His Pro Glu Val Leu Arg Leu Ala Glu Gln Ala Tyr Ile Arg Thr
195
                   200 205
Gly Ala Trp Gly Ser Leu Leu Asp Ile Ile Pro Ser Met Ala Lys Ala
 210 215 220
Asp Val Gly Asp Asp Glu His Arg Asp Glu Leu Gln Arg Leu Ala Trp
225 230 235
Ile Gly Leu Met Asp Gln Ala Arg Ala Asp Leu Gly Ser Asp Gly Leu
         245 250 255
Lys Thr Trp Trp Lys Asn Gln Ser Arg Lys Thr Arg Gln Gln Val Pro
        260 265 270
Leu Gln Val Ala Met Ala Glu His Leu Ile Glu Cys Asp Asp His Asp
275 280 285
Thr Ala Gln Glu Ile Leu Leu Asp Gly Leu Lys Arg Gln Tyr Asp Asp
290 295 300
Arg Leu Val Met Val Ile Pro Arg Leu Lys Thr Asn Asn Pro Glu Gln
             310
                          315
Ile Glu Lys Ala Leu Arg Gln Gln Ile Lys Thr Val Gly Asp Arg Pro
           325 330
Leu Leu Trp Ser Thr Leu Gly Gln Ser Leu Met Lys His Gly Glu Trp
        340 345 350
Gln Glu Ala Ser Leu Ala Phe Arg Ala Ala Leu Lys Gln Arg Pro Asp
     355 360
Ala Phe Asp Tyr Ala Trp Leu Ala Asp Ser Leu Asp Lys Gln His Lys
              375 380
Pro Glu Glu Ala Ala Ala Met Arg Arg Asp Gly Leu Leu Leu Thr Leu
                            395
              390
Gln Asn Asn Gly Thr Gln Gln
           405
```

```
<210> 7857
<211> 408
<212> PRT
<213> Enterobacter cloacae
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```
40
Gln Trp Ser Ala Pro Ser Ala Leu Leu Thr Leu Ala Phe Leu Phe Ala
                55
Thr Val Pro Gly Phe Ile Gly Ser Leu Ile Gly Glu Lys Leu Cys Gln
              7.0
Arg Phe Ser Pro Leu Tyr Leu Leu Met Leu Thr Glu Trp Leu Gly Leu
         85
                         90
Leu Ala Leu Leu Phe Pro Leu Ser Gly Ala His Tyr His Ser Ile Pro
      100
                   1.05
Ala Leu Leu Ala Val Gln Ser Thr Glu Ala Leu Leu Ser Gly Met Ser
   115 120
                       125
Trp Pro Ala Leu Thr Leu Leu Phe Lys Arg Gly Leu His Glu Ala Glu
 130 135
                     140
Leu Pro Ala Ala Thr Cys Leu Glu Asn Val Ile Phe Ala Ser Gln Val
145 150 155
Leu Leu Gly Thr Gly Leu Gly Val Val Leu Phe Gln Arg Ile Pro Val
      165 170 175
Phe Ala Leu Leu Val Ile Asp Ala Ala Ser Phe Met Gly Ser Leu Val
 180 185 190
Met Leu Phe Leu Ala Glu Arq Gln Tyr Val Ala Arg Pro Ala Pro Leu
195 200 205
Pro Val Gly Asp Pro Gln Pro Val Ala Leu Arg Trp Gln Thr Leu Thr
                     220
210 215
Leu Arg Gln Lys Arg Ser Leu Leu Ile Leu Pro Ala Leu Ala Ala Val
225 230 235
Gly Ser Pro Ala Met Ala Leu Leu Pro Ala Leu Ala Gln Gln Ile Asn
          245 250 255
Pro Glu Asn Ala Ala Gly Leu Ala Leu Pro Leu Leu Phe Ala Arg Ser
       260 265 270
Leu Gly Gln Leu Cys Gly Pro Leu Leu Arg Lys Glu Ser Leu Thr
275 280 285
Arg Phe Ala Ala Arg Thr Pro Leu Leu Leu Ser Cys Leu Ala Leu Phe
 290 295 300
Leu Ala Ala Tyr Gly Leu Leu Pro Phe Leu Ser Ala Trp Val Val Leu
305 310 315
Ala Leu Gly Met Ile Phe Ile Ala His Leu Ala Ser Asn Ile Val Phe
          325
               330
Ala Ala Gly Thr Phe Gly Val Leu Ser Asn Phe Gln Ala Ile Gln Ile
       340 345 350
Ser Ala Ala Ser Gly Lys Ala Trp Arg Trp Gln Thr Leu Ser Ala Ser
     355 360 365
Leu Phe Thr Gly Leu Ala Ala Met Thr Ala Thr Ile Leu Gly Ala Ala
 370 375
                     380
Gln Thr Leu Tyr Ala Val Ser Ala Ile Ala Leu Leu Leu Val Ala Leu
         390
                            395
Val Leu Ala His Tyr Arg Glu
```

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<210> 7858
<211> 1027
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<400> 7858

<212> PRT <213> Enterobacter cloacae

Pro Val Asn Asn Ser Thr Ser His Ser Leu Ala Val Lys Thr Pro Leu 1 5 10 0 15. Ser Arg Leu Tyr Leu Ala Leu Phe Ser Ala Pro Leu Leu Leu Phe Leu 20 30 20 20 Pro Ala Asp 11e Ala Arg Ala Ala Asp Ala Phe Phe Asp GLy Asp Ser Arg Ile Thr Glu Thr Leu Gly Tyr Thr Gly Asp Val Tyr Val Gly Arg

Asn Gln Arg Gly Asn Leu Leu Ile Asp Asn Gly Lys Ile Thr Ala Tyr 75 7.0 Asn Ile Asn Ile Gly Arg Leu Phe Asp Gly Lys Ile Tyr Glu Ser Val 85 90 Val Thr Val Arg Gly Pro Asp Ala Glu Leu Asn Ala Val Asn Asp Arg 100 105 Tyr Val Leu Arg Gly Asp Leu Asn Leu Gly Leu Gly Thr Leu Arg Val 115 120 125 Glu Glu Gly Ala Leu Ala Ser Ala Lys Glu Ile Val Val Gly Thr Thr 130 135 140 Arg Gly Tyr Asp Ser His Leu Ile Ala Thr Gly Ala Gly Ser Arg Val 145 150 155 Thr Ser Asn Phe Leu Ser Val Gly Thr Asp Leu Gly Ala Arg Ser Thr 165 170 175 Leu Ala Ile Glu Asp Gly Ala Ala Leu Asn Thr Ala Tyr Asp Ala Arg 180 185 190 Ile Gly Asn Gly Thr Gly Pro Gly Glu Thr Asp Thr Leu Ser Pro Lys 195 200 205 Ala Thr Val Thr Gly Ser Gly Ser Gln Trp Asn Val Gly Arg Thr Leu 210 215 220 Thr Leu Tyr Gly Asp Leu Asp Val Leu Asn Gly Gly Thr Val Asn Val 225 230 235 Gly Gly Val Gln Val Ala Gly Val Ser Gly Ala Gly Lys Thr Ala Glu 245 250 255 Leu Val Ile Ala Gly Glu Asp Ser Arg Phe Thr Ser Gly Ser Ser Val 260 265 270 Ser Val Gly Asp Tyr Gly Asn Gly Val Leu Ser Val Ile Asp Gly Gly 275 280 285 Ser Phe Ser Ala Gly Ser Asn Ala Leu Ile Val Gly Thr Ser Gly Ser 290 295 300 Gly Ser Asn Arg Gly Ala Leu Ile Ile Gly Ser Arg Gly Asn Met Asp 305 310 315 320 Thr Gly Thr Gly Leu Thr Glu Pro Thr Leu Gly Thr Ala Gly Gly Ala 325 330 Gly Thr Leu Asp Ala Lys Thr Ala Ile Ser Leu Arg Gly Gly Leu Phe 340 345 350 Gly Ser Tyr Val Tyr Phe Asn His Thr Asp Gly Asn Tyr Ile Phe Ser 355 360 365 Asn Thr Met Ser Gly Glu Gly Asp Val Ile Asn Thr Ser Gly Gln Thr 370 375 380 Thr Leu Asn Gly Asp Leu Ser Ala Leu Lys Ala Asn Val Thr Ala Arg 385 390 395 Gly Gly Lys Val Ile Ile Ala Ser Asn Ile Asn Thr Gln Pro Glu Asp 405 410 415 Asp Ile Phe Asp Val Gln Thr Leu Ser Ala Glu Asn Gly Gly Thr Leu 425 430 420 Ile Leu Asn Ala Thr Ala Gly Ser Asp Val Ser Asn Gly Val Gly Tyr 440 445 Ser Ser Ala Ala Ser Ile Lys Ser Gly Gly Thr Leu Gly Gly Asn Gly 455 460 450 Thr Leu Gly Gln Thr Glu Ile Leu Ser Gly Gly His Ile Ser Pro Gly 470 475 480 Asp Gly Thr Ile Gly Thr Leu Thr Leu Lys Arg Tyr Leu Asn Phe Ile 485 490 495 Gly Glu Ser Phe Tyr Asp Val Asp Ile Ala Gly Asp Gly Arg Ser Asp 505 510 500 Gln Leu Leu Val Ser Gly Lys Thr Thr Ile Ser Asn Gln Ala Lys Val 520 525 515 Gln Val Thr Ala Leu Asp Pro Gln Thr Ser Tyr Lys Thr Gly Gln Ser 535

Tyr Arg Ile Leu Thr Ser Asp Gly Gly Ile Asp Gly Glu Phe Ala Gly 550 555 Ala Ile Ser Lys Ser Ala Phe Leu Asp Val Ala Leu Lys Gln Ser Thr 570 565 Asn Ala Val Asp Leu Thr Ile Ala Gln Lys Glu Thr Gly Gly Glu Asn 585 580 590 Pro Gly Gly Glu Asn Pro Gly Gly Glu Asn Pro Gly Gly Glu Asn Pro 605 595 600 Gly Gly Glu Asn Pro Gly Gly Glu Asn Pro Gly Gly Glu Asn Pro Gly 610 615 620 Gly Glu Asn Pro Gly Gly Glu Asn Pro Gly Gly Glu Asn Pro Gly Gly 625 630 635 Glu Asn Pro Gly Gly Glu Asn Pro Gly Ser Gly Lys Pro Gly Ile Phe 645 650 655 Gln Thr Val Ala Gln Ser Ser Asn Gln Trp Asn Thr Ala Gly Ala Leu 660 665 670 Ser Thr Leu Thr Gln Ser Gly Gln Ser Leu Ala Leu Tyr Asn Ser Leu 675 680 685 Leu Leu Leu Ser Ala Pro Glu Ala Arg Glu Ala Phe Asn Gln Leu Ser 690 695 700 Gly Glu Val Tyr Pro Ser Met Gln Ser Asn Leu Ile Ala Gly Ser Thr 710 715 720 Gln Val Phe Asn Val Leu Asn Gln Arg Met Gln Arg Ala Phe Asp Asn 725 730 735 Asp Ser Leu Pro Ile Pro Pro Leu Ala Met Ser Leu Val Gln Gln Pro 740 745 750 Glu Pro Gln Asn Asn Gly Val Trp Gly Gln Thr Phe Ser Ser Trp Ser 755 760 765 Arg Asn Ser Gly Asp Gly Asn Val Gly Lys Leu Asp Gly Asn Thr Thr 770 775 780 Gly Phe Leu Leu Gly Ala Asp Arg Lys Leu Ala Asp His Asn Val Arg 790 795 800 Val Gly Gly Tyr Phe Gly Tyr Ser Arg Gly Asp Tyr Asp Val Asp Ser 805 810 815 Arg Arg Ser Ser Thr Asp Thr Asp Asn Tyr His Leu Gly Leu Tyr Ala 820 825 830 Ala Gly Gln Gln Asp Ala Phe Ser Leu Arg Gly Ala Leu Gly Tyr Thr 835 840 845 Trp His Lys Ile Glu Gly Glu Arg Asn Val Asp Phe Ser Gly Phe Ser 855 860 Asp Arg Leu Lys Ser Asp Tyr Asp Ala Asn Ser Leu Leu Ala Phe Thr 865 870 870 Glu Ala Gly Tyr Arg Phe Gly Gln Pro Asp Arg Asn Ile Glu Pro Phe 890 895 885 Val Asn Leu Ser Tyr Ile Arg Leu His Thr Asp Ser Phe Arg Glu Asp 900 905 910 Gly Gly Ala Ala Ala Leu Ser Val Arg Asn Glu Thr Met Asn Thr Phe 915 920 925 Tyr Thr Thr Leu Gly Leu Arg Gly Val Thr Glu Leu Pro Lys His Val 930 935 940 Asn Leu Tyr Gly Ser Leu Gly Trp Gln His Ala Tyr Gly Asp Lys Asn 950 955 Thr Ser Ser Arg Met Ala Phe Ala Gly Ser Asp Ala Phe Ile Thr Gln 965 970 975 Gly Gln Ala Val Asp Glu Asp Val Met Val Gly Asp Ile Gly Val Ser 980 985 990 Val Gln Leu Ser Arg Ala Ala Thr Leu Asp Val Gly Tyr Gln Gly Gln 1000 1005 995 Tyr Gly Ala Asp Thr Arg Val Asn Ser Val Asn Ala Asn Leu Arg Trp 1015 1020 1010 Ser Phe

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1025
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<211> 273
<212> PRT
<213> Enterobacter cloacae
<400> 7859
Pro Gly Gly Ser Pro Pro Phe Phe Arg Asp Glu Lys Asn Ala Ser Ala
                    10
Arg Val Arg Lys Glu Pro Arg Met Ser Asp Gln Thr Leu Lys Ala Thr
        20
                       25
                                      3.0
Arg Gln Gln Ser Leu Ile Thr Leu Leu Ser Gln Ser Asp Trp Leu Thr
                  40
35
                                4.5
Thr Glu Val Leu Ala Glu Lys Leu Ser Val Ser Lys Glu Thr Ile Arg
50 55
                       60
Arg Asp Leu Lys Ser Leu Gln Gln Gln Gly Lys Leu Leu Arg Gln His
65 70
                            75
Gly Arg Ala Arg Leu Ile His Pro Asp Ser Arg Asp Ser Gly Glu Pro
         85 90
Phe Gly Ala Arg Leu Lys Ser His Tyr Ala Asp Lys Ala Asp Ile Ala
        100 105 110
Arg His Ala Leu Gly Trp Ile Ser Glu Gly Met Thr Ile Ala Leu Asp
   115 120
                                  125
Ala Ser Ser Thr Cys Phe His Leu Ala Arg Gln Leu Pro Asp Ile Asp
130 135
                               140
Leu Thr Val Phe Thr Asn Ser Leu Pro Val Cys His Glu Met Ala Lys
145 150 155 160
Arg Glu Arg Ile Thr Leu Ile Cys Ser Gly Gly Thr Leu Glu Arg Lys
           165 170 175
Tyr Arg Cys Tyr Val Asn Pro Ala Leu Val Thr Gln Leu Lys Gly Leu
      180 185 190
Glu Ile Asp Leu Phe Ile Phe Ser Cys Glu Gly Val Asp Glu His Gly
195 200 205
Val Leu Trp Asp Pro Ser Glu His Asn Ala Gly Phe Lys Ala Leu Leu
 210 215
                               220
Leu Asn Arg Ala Ser Gln Ser Leu Leu Leu Ile Asp Lys Ser Lys Phe
              230
                            235
Met Arg Ala Ser Glu Val Lys Ile Gly Gln Leu Ser Gin Val Thr Gln
         245 250 255
Ile Ile Gln Ser Asp Lys Arg Gln Ala Ala Arg Asp Gly Leu Thr Arg
                       265
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<210> 7860
<211> 116
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(51)
<220>
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<221>UNSURE <222>(53)

<220> <221>UNSURE <222>(54)

275

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<400> 7860
Leu Leu Arg Asn Ala Gly Arg Val Arg Arg Arg Arg His Pro Ala Gly
Lys Ala Ala Arg Ala Phe Val Leu Leu Arg Gly Arg Phe Leu Phe Ala
      20
                           25
Asp Gln Thr Asn Leu Gln Val Ala Arg Leu Met Gln Arg Val His Tyr
                       40
Leu His Xaa Pro Xaa Xaa Gly Phe Ser Ile Ile Asp Gly Phe Ile Arg
                                     60
        5.5
Ala Glu Glu Asp Gly Gly Val Phe Leu Ala Ala Gly Glu Leu Val Gln
                     75
       70
Arg Arg Asn Asn Arg Gly Ile Arg Tyr Arg Ile Val Ala Gln Glu His
                  90
           85
Gly Leu Met Ala Leu His Leu Phe Ile Thr Arg Arg Gln Glu Ala Glu
                  105
Lys Val Val
      115
<210> 7861
<211> 671
<212> PRT
<213> Enterobacter cloacae
<400> 7861
Ala Pro Leu Arg Arg Gln Thr Arg Glu Gln Ser Leu Arg His Val Arg
                               1.0
Cys Asp Phe Thr Leu Leu Arg Met Asn Met Leu Asn Thr Arg Phe Ser
                                            30
                           25
Val Ser Leu Ile Val Ile Gly Trp Leu Cys Leu Ser Ala Ser Leu Cys
       35
                       40
                                 4.5
Ala Gln Pro Leu Ser Phe Met Ala Pro Glu Glu Arg Pro Gln Leu Glu
                    55
 50
Ala Ser Lys Pro Trp Pro Glu Asn Gln Phe Leu Val Leu Ala Tyr His
                                75
                 70
Asp Val Glu Asp Asp Ala Ala Asp Gln Arg Tyr Leu Ser Val Arg Thr
                              90
              8.5
Ser Ala Leu Asn Glu Gln Ile Ser Trp Leu Leu His Asn Gly Tyr His
                         105
          100
Ala Ile Ser Val Gln Asp Ile Leu Asp Ala His Glu Gly Lys Lys Ala
                        120 125
       115
Leu Pro Pro Lys Ala Val Leu Leu Ser Phe Asp Asp Gly Tyr Ser Ser
                    135
                                     140
Phe Tyr Thr Arg Val Trp Pro Leu Leu Gln Ala Trp Asn Val Pro Ala
                 150 155 160
Leu Trp Ala Pro Val Gly Ser Trp Val Asp Thr Pro Ala Asn Gln Lys
                         170 175
              165
Val Asn Phe Gly Gly Leu Met Thr Pro Arg Asp Arg Phe Ala Thr Trp
                           185 190
           180
Asp Met Val Arg Glu Leu Ser Gln Ser Pro Leu Ile Glu Ile Gly Ser
                         200
                                         205
       195
His Thr Trp Ala Ser His Tyr Gly Ile Pro Ala Asn Pro Gln Gly Ser
                     215
                                     220
Arg Glu Pro Ala Ile Ala Asn Arg Phe Phe Asp Asn Ala Thr Gly His
                  230 235
Tyr Glu Thr Asp Glu His Phe Asn Gln Arg Ile Ala Ala Asp Val Arg
                            250 255
              245
Lys Val Thr Asp Lys Ile Thr Gln Val Thr Gly Lys Ala Pro Arg Ala
                            265
           260
 Trp Val Trp Pro Tyr Gly Ala Ala Asn Gly Thr Ser Leu Ala Ile Ala
```

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Gln Lys Gln Gly Tyr Gln Leu Ala Phe Thr Leu Glu Asp Gly Leu Ala
          295
Asn Val Arg Asp Leu Gly Asn Ile Pro Arg Leu Leu Ile Ala Gly Asn
                            315
              310
Pro Ser Ile Lys Thr Phe Ala Asn Thr Val Ser Arg Val Gln Glu Phe
                          330
         325
Glu Pro Val Arg Val Met His Val Asp Leu Asp Tyr Val Tyr Asp Pro
                                      350
                      345
      340
Asp Pro Ala Gln Gln Thr Lys Asn Ile Asn Lys Leu Val Gln Arg Val
                                   365
   355 360
Tyr Asp Met Lys Ile Ser His Val Phe Leu Gln Ala Phe Ser Asp Pro
  370 375
                                380
Arg Gly Asp Gly Arg Ile Ser Ala Leu Tyr Phe Pro Asn Arg Arg Leu
    390
                             395
Pro Val Arg Ala Asp Leu Phe Asn Phe Val Ala Trp Gln Leu Gln Thr
         405 410
Arg Ala Gly Val Lys Val Phe Ala Trp Met Pro Val Leu Ser Phe Asp
       420 425 430
Leu Ser Pro Ala Leu Pro Arg Val Gln Arg Arg Glu Arg Gln Thr Gly
     435 440 445
Glu Leu Thr Val Ala Ala Glu Pro Tyr Ile Arg Leu Ser Pro Trp Ser
      455 460
Pro Gln Val Arg Gln Gln Val Thr Glu Ile Tyr Glu Asp Leu Ala Arg
465 470 475
Tyr Ala Ser Phe Asn Gly Ile Leu Phe His Asp Asp Ala Val Leu Thr
        485 490 495
Asp Val Asp Asp Ala Gly Gln Asp Thr Thr Arg Gln Lys Ser Gln Arg
            505 510
        500
Leu Ile Gly Phe Thr Arg Thr Leu Ser Gln Ala Val Lys Asn Ile Arg
                    520 525
 515
Gly Pro Gln Ile Lys Thr Ala Arg Asn Met Phe Ala Leu Pro Ile Leu
                 535 540
  530
Glu Pro Glu Ser Glu Ala Trp Phe Ala Gln Asn Leu Asp Asp Phe Leu
              550 555 560
Ala Ala Tyr Asp Trp Thr Val Pro Met Ala Met Pro Leu Met Glu Ser
           565 570 575
Val Pro Ala Glu Glu Ser Asn Ala Trp Leu Thr Arg Leu Val Lys Ala
                       585 590
         580
Val Ala Glu Arg Pro Gly Ala Leu Asn Lys Thr Ile Phe Glu Leu Gln
                    600 605
     595
Ala Arg Asp Trp Ala Gln Lys Pro Gln Arg Ala Val Ala Asp Gly Arg
  610 615 620
Leu Val Glu Trp Met Arg Val Leu Gln Leu Asn Gly Ile Lys Asn Tyr
              630 635 640
625
Gly Tyr Tyr Pro Asp Asp Phe Leu Asn Asn Gln Pro Asp Ile Ser Arg
         645 650 655
Ile Arg Pro Glu Phe Ser Ser Tyr Trp Tyr Pro Asp Asn Asp
<210> 7862
<211> 149
<212> PRT
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<213> Enterobacter cloacae

<400> 7862 Arg Glu His Ser Met Asn Glu Ser Thr Leu Ile Leu Thr Glu His Arg 10 Leu Ala Pro Arg Leu Phe Asp Ala Ala Leu Thr Leu Ile Ala Trp Gly 20 25

Gly Phe Leu Phe Phe Leu Tyr Ala Arg Leu Trp Met Gln Leu Thr Glu 35 4 0

Glu Gly Asp His Arg Trp Asn Ala Ile Ile Ala Ser Phe Asn Thr Val Leu Val Tyr Leu Leu Ile Ala Ala Phe Asn Gly Trp Leu Leu Ile Leu 7.0 75 Trp Tyr Gln Tyr Asn Arg Arg Arg Ala His Val Arg Arg Arg His Pro 90 85 Glu Met Leu Arg His Asp Glu Leu Ala Gln Ser Phe Asn Val Thr Pro 100 105 Gln Ile Met Ser Glu Met Ser Gln Tyr Asn Leu Leu Thr Val Tyr His 115 120 125 Asp Gln Ile Gly Arg Ile Ile Asp Leu Lys Ile Ser Glu Gln Gln Asp 130 135 140 Glu Lys Glu Glu

<210> 7863 <211> 404 <212> PRT

<213> Enterobacter cloacae

<400> 7863

Asn Tyr Glu Ala Ser Ser Leu Ser Ile Pro Cys Arg Glu Gly Glu Phe 10 Ala Gln Arg Arg Val Leu Pro Ser Leu Ser Ala Asp Thr Val Glu Asn 20 25 30 Ile Leu Phe Ser Leu Ser Ser Arg His Arg Met Lys Thr Leu Phe Arg 3.5 40 45 Lys Phe Thr Asp Lys Lys Gly Asp Ile Met Ser Trp His Pro Tyr Thr 55 Gly Arg Tyr Glu Asn Met Gln Tyr Arg Tyr Cys Gly Lys Ser Gly Leu 70 75 Arg Leu Pro Ala Leu Ser Leu Gly Leu Trp His Ser Phe Gly His Val 8.5 90 Gln Pro Leu Asp Ser Gln Arg Ala Leu Leu Arg Lys Ala Phe Asp Leu 100 105 110 Gly Ile Thr His Phe Asp Leu Ala Asn Asn Tyr Gly Pro Pro Pro Gly 115 120 125 Ser Ala Glu Glu Asn Phe Gly Arg Leu Leu Arg Glu Asp Phe Ala Gly 135 130 Tyr Arg Asp Glu Leu Ile Ile Ser Thr Lys Ala Gly Tyr Asp Met Trp 150 155 160 145 Pro Gly Pro Tyr Gly Ser Gly Gly Ser Arg Lys Tyr Leu Leu Ala Ser 165 170 Leu Asp Gln Ser Leu Asn Arg Met Gly Val Glu Tyr Val Asp Ile Phe 185 180 Tyr Ser His Arg Val Asp Glu Asn Thr Pro Met Glu Glu Thr Ala Ala 200 195 Ala Leu Ala His Ala Val Gln Ser Gly Lys Ala Leu Tyr Val Gly Ile 215 220 210 Ser Ser Tyr Ser Thr Glu Arg Thr Ala Ala Met Thr Lys Leu Leu Arg 235 230 225 Glu Trp Lys Ile Pro Leu Leu Ile His Gln Pro Ser Tyr Asn Leu Leu 245 250 Asn Arg Trp Val Asp Lys Thr Gly Leu Leu Asp Ala Leu Glu Lys Asn 265 260 Gly Thr Gly Cys Ile Ala Phe Thr Pro Leu Ala Gln Gly Leu Leu Thr 280 285 Gly Lys Tyr Leu Asn Gly Ile Pro Asp Gly Ser Arg Met Gln Arg Glu 290 295 300 Gly Lys Lys Val Arg Gly Leu Thr Glu Lys Met Leu Thr Glu Ala Asn 310 315

Leu Ser Ser Leu Arg Leu Leu Asn Glu Met Ala His Ala Arg Gly Gln
325

Thr Met Ala Gln Met Ala Leu Ser Trp Leu Leu Lys Asp Glu Arg Val
340

Thr Ser Val Leu Ile Gly Ala Ser Arg Pro Glu Gln Leu Glu Glu Glu Asn
355

Val Gln Ala Leu Asn Asn Leu Arg Phe Ser Glu Asp Glu Leu Met Arg
370

Ile Asp Gln His Val Ala Asp Gly Glu Leu Asn Leu Trp Gln Ala Ser
385

390

385

390

400

<210> 7864 <211> 808 <212> PRT <213> Enterobacter cloacae

<400> 7864 Leu His Tyr Val Ile Leu Leu Ser His His Asn Ile Ile Val Pro Ala 10 Phe Thr Ala Pro Pro Val Leu Val Gln Ala Asp Glu Ser Val Tyr Glu 25 30 20 His Gln Ile Gln Gln Ala Arg Asn Gly Asn Tyr Ala Leu Phe Leu Asp 35 4.0 4.5 Tyr Leu Gln Arg Tyr Glu Gln Gln His Ala Leu Thr Pro Gly Gln Val 50 5.5 Ala Asp Trp Leu Gln Val Ala Ser Trp Ala Gly Arg Asp Asp Glu Val 7.0 75 Ile Arg Val Trp Gln Arg Tyr Gly Ile Tyr Met Pro Leu Pro Ala Arg 90 95 85 Ala Ile Ala Ala Val Ala Gln Ser Arg Arg Asn Gln Lys Ala Trp Pro 105 100 Ser Ala Leu Ser Leu Trp Lys Glu Ala Leu Ser Leu Ala Pro Asp Asn 120 125 115 Asp Asp Tyr Arg Ile Gly Tyr Val Lys Thr Leu Ala Asp Ala Ser Lys 135 130 Asp Arg Leu Ala Leu Ser Glu Ala Arg Gln Leu Val Lys Asp Asn Pro 150 155 160 145 Ser Pro Ala His Leu Glu Thr Leu Ser Tyr Val Trp Met Arg Gln Gly 165 170 175 Lys Asn Arg Asp Arg Leu Leu Ala Asp Met Arg Ala Leu Ser Ala Ala 185 190 180 Pro Gly Asn Glu Ala Leu Leu Arg Glu Thr Ile Asp Ala Leu Thr Asp 200 195 Asn Arg Val Ser Thr Pro Ala Leu Trp Leu Ser Gln Asn Ala Ala Leu 215 220 210 Ser Pro Ala Glu Arg Arg Leu Glu Arg Asn Ala Ala Glu Arg 230 235 240 225 Val Arg Leu Ala Asp Val Pro Gly Arg Thr Glu Lys Glu Arg Leu Arg 245 250 Leu Ala Gln Asn Ala Leu Asp Arg Tyr His Ala Leu Leu Ser Arg Trp 265 260 Gln Asn Asp Pro Gln Ala Ala Glu Asp Val Ile Leu Ala Arg Ile Asp 285 280 275 Arg Leu Gly Ala Leu Tyr Ala Gln Gly Asn Tyr Arg Gln Val Ile Ser 295 300 290 Glu Tyr Glu Ser Leu Thr Ala Ala Gln His Pro Val Pro Asp Trp Ala 315 305 310 Ile Gly Trp Val Ile Ser Ala Tyr Leu Gln Glu Lys Asn Thr Val Ala 325 330

Ala Phe Ser Leu Val Gln Arg Tyr Pro His Tyr Ala Ser Asp Pro Gln 345 340 Asp Glu Glu His Ala Leu Phe Tyr Ala Trp Leu Asp Thr Gly Gln Tyr 365 355 360 Gln Ala Ala Arg Arg Tyr Val Glu Arg Glu Thr Arg Ser Val Pro Trp 375 380 Thr Arg Tyr Asp Phe Gly Ser Pro Ala Ala Gln Pro Asn Asp Arg Trp 390 395 Leu Thr Gly Gln Ser Leu Lys Phe Asn Tyr Leu Leu Ala Thr Asn Ala 405 410 Leu Pro Glu Ala Glu Lys Leu Ser Tyr Arg Leu Ala Ser Thr Ala Pro 420 425 Gly Asn Gln Gly Leu Gln Ile Asp Tyr Ala Ala Leu Leu Gln Ala Arg 445 435 440 Gly Leu Pro Arg Ala Ala Glu Gln Lys Leu Lys Arg Ala Glu Ala Leu 455 460 Glu Pro Thr Asn Leu Glu Leu Glu Lys Gln Gln Ala Tyr Val Ala Met 470 475 Asp Leu Gln Glu Trp Arg Gln Met Asp Leu Leu Ala Asp Asn Val Ile 485 490 495 Ala Arg Ala Pro Ala Asp Arg Ser Ala Arg Arg Leu Asp Arg Leu Arg 500 505 510 Met Val His His Met Ser Glu Leu Arg Leu Asn Ala Ala Lys Gly Leu 515 520 525 His Ser Asp Asn Pro Val Ser Gly Ser His Asp Met Asn Trp Asp Ala 535 540 530 Thr Leu Tyr Gly Pro Pro Val Ala Asp Asn Trp Arg Leu Phe Ala Gly 550 555 560 545 Thr Arg Tyr Ala Gln Gly Asn Phe Asp Glu Gly Lys Gly Ile Ser Arg 565 570 575 His Leu Leu Gly Gly Val Glu Trp Arg Pro Arg Asp Leu Thr Leu Glu 585 590 580 Ala Glu Leu Ser Gly Asn Arg Tyr His Gly Lys Asn Arg Pro Gly Ala 600 605 595 Arg Leu Ser Thr Thr Tyr Ser Leu Ser Asp Asn Trp Gln Val Ser Gly 615 620 610 Asn Leu Glu Arg Leu Ser Arg Ala Thr Pro Leu Arg Ala Leu Arg Asn 630 635 Gly Ile Ser Ala Asn Arg Gly Glu Gly Gly Val Arg Trp Tyr Gln Asn 650 655 645 Glu Arg Arg Glu Tyr Gln Phe Asn Ala Ala Ile Ser Arg Phe Ser Asp 670 665 660 His Asn Arg Arg Gln Glu Tyr Thr Leu Ser Gly Lys Glu Arg Leu Trp 680 685 675 Gln Thr Pro Thr Leu Thr Leu Asp Leu Glu Pro Gly Ile Ala Ala Ser 695 700 690 Lys Asn Ser Leu Arg Asn Thr Leu Tyr Tyr Asn Pro Ala Arg Asp Leu 705 710 715 Ser Val Thr Ala Ala Leu Ser Val Asp His Glu Met Tyr Arg His Tyr 725 730 Asp Thr Leu Trp Ser Gln Gln Phe Val Ala Gly Gly Gly Ser Tyr Trp 740 745 750 Gln Lys Asn Gln Ser Pro Gly Ala Val Thr Leu Leu Gly Tyr Gly Gln 760 765 Arg Ile Gln Trp Asn Asn Val Val Asp Thr Gly Val Met Leu Asn Trp 780 770 775 Asp Lys Arg Pro Tyr Asp Gly Lys Arg Glu Ser Asn Leu Ser Val Thr 795 790 785 Leu Asp Ala Thr Leu Arg Phe 805

<210> 7865 <211> 478 <212> PRT

<213> Enterobacter cloacae

<400> 7865

Thr Ala Ser Lys Ile Thr Val Ile Thr Pro Thr Thr Ser Ser Thr Thr 10 Asn Leu Ile Phe Arg Val Ser Gly Leu Asn Phe Leu Arg Thr Gly Ile

20 25 Leu Thr Met Thr Asp Arg Ile Ile Ala Phe Ser Ile Leu Cys Leu Val 4.0 4.5

35 Phe Gly Leu Pro Leu Gly Val Ala Ala Leu Phe Thr Gly Glu Leu Ile 55 60

Leu Asp Phe Val Phe Phe Trp Pro Leu Phe Met Ser Val Leu Trp Val 70 [^] 75 80 Thr Gly Gly Leu Tyr Phe Trp Phe Gln Leu Glu Arg His Trp Ser Trp

85 90 95 Asp Asn Ala Thr Pro Ala Pro Ala Leu Ala Gly Glu Pro Leu Ile Ser

100 105 110 Ile Leu Ile Pro Cys Phe Asn Glu Glu Arg Asn Ala Arg Glu Thr Ile

115 120 125 Ser Ala Ala Leu Asp Gln Arg Tyr Trp Asn Val Glu Val Ile Ala Ile 130 135 140

Asn Asp Gly Ser Ser Asp Asn Thr Ala Glu Val Leu Gln Gln Leu Ala 145 150 155 160

Arg Glu Gln Pro Arg Leu Arg Val Ile Asn Leu Ala Glu Asn Gln Gly
165 170 175 Lys Ala Val Ala Leu Lys Ala Gly Ala Ala Ala Ala Arg Gly Asp Leu

180 185 190 Leu Val Cys Ile Asp Gly Asp Ala Leu Leu Asp Arg Asp Thr Ala Ala 195 200 205

Tyr Leu Val Ala Pro Leu Ile Gln Tyr Pro His Val Gly Ala Val Thr 210 215 220

Gly Asn Pro Arg Ile Arg Thr Arg Ser Thr Leu Ile Gly Arg Ile Gln 225 230 235

Val Gly Glu Phe Ser Ser Ile Ile Gly Leu Ile Lys Arg Thr Gln Arg 245 250 255 Ile Tyr Gly Arg Val Phe Thr Val Ser Gly Val Ile Ala Ala Phe Arg

260 265 270 Arg Gln Ala Leu Ala Asp Val Gly Tyr Trp Ser Pro Asp Met Ile Thr 275 280 285 275

Glu Asp Ile Asp Ile Ser Trp Lys Leu Gln Leu Arg His Trp Asp Ile 290 295 300 Phe Phe Glu Pro Arg Ala Leu Cys Trp Ile Leu Met Pro Glu Thr Leu

310 315 Lys Gly Leu Trp Lys Gln Arg Leu Arg Trp Ala Gln Gly Gly Ala Glu 325 330 335

Val Phe Leu Val Asn Leu Arg Lys Met Ala Arg Trp Glu His His Arg 340 345

Met Trp Pro Leu Phe Leu Glu Tyr Ala Leu Ser Thr Leu Trp Ala Phe 355 360 365 Ala Tyr Gly Ala Thr Val Val Leu Phe Ile Leu Ser His Ile Ile Pro

375 380 370 Leu Pro Ala Asn Leu Ala Val Ala Ser Leu Phe Pro Pro Ala Phe Thr 390 395 400

Gly Leu Leu Gly Val Met Cys Leu Leu Gln Phe Leu Val Ser Leu 405 410 415 Tyr Ile Glu Arg Arg Tyr Glu Arg Lys Val Ala Gly Ser Leu Phe Trp

420 425 Val Ile Trp Phe Pro Met Val Tyr Trp Met Ile Gly Leu Phe Thr Thr

440 Leu Val Ala Phe Pro Lys Val Met Leu Lys Arg Lys Arg Ala Arg Ala 460 455 450 Arg Trp Ile Ser Pro Asp Arg Gly Lys Gly Ser Ile Gln 470 <210> 7866 <211> 179 <212> PRT <213> Enterobacter cloacae <400> 7866 Ala Val Val Phe Gln His Leu Val Gly Gly Met Lys Val His Gln Val 10 Gln Phe Val Gly Gly Phe Asp Gln Leu Leu Leu Gly Ala Phe Gly Asn 20 25 Gly Glu Val Leu Ala Gly Ile Val Val Asp Asn Val Ala Val Gly Ala 35 40 Asn Val Arg Leu Leu Gln Gly Val Val Phe Ile Glu Pro Phe Ser Val 55 Glu Leu Ala Val Val Leu Gln Pro Arg Ala Ala Asp Phe Gln Gln Phe 7.0 75 Thr Val Asp Leu Arg Leu Arg Asn Thr Val Phe Arg Leu Leu Arg Leu 85 90 Asp His Pro Ala Glu Asp Leu Gly Ile Val Glu Arg Val Met Lys Arg 100 105 110 Ile Ala Thr Val Leu His Ala Gln Thr Gln Leu Ala Arg Pro Leu Leu 125 115 120 Pro His Arg Gln Arg Gly Val Asn Asn Val Leu Leu Gly Asn Ala His 130 135 140 Ser Val Ile Gln Gln Leu Gly Asn Asp Gly Asp Val Ala Gly Leu Met 145 150 155 Lys Leu Thr Ala Leu Leu Pro Asp Glu Gln Arg Thr Gly Leu Arg Arg 1.70 165 Ala Phe <210> 7867 <211> 327 <212> PRT <213> Enterobacter cloacae <400> 7867 Leu Thr Glu Val Ala Leu Ser Tyr Thr Arg Pro Ala His Tyr Ala Arg 1.0 Ile Val Lys Arg Phe Leu His Leu Leu Leu His Cys Leu Asn Thr Thr 30 25 20 Pro Lys Arg Gln Ala Asn Met Ser Asp Asn Thr Tyr Gln Pro Pro Lys 4.0 45 Val Trp Glu Trp Lys Gln Asn Asn Gly Gly Ala Phe Ala Asn Ile Asn 55 50 Arg Pro Val Ser Gly Ala Thr His Glu Lys Glu Leu Pro Val Gly Ala 75 70 His Pro Leu Gln Leu Tyr Ser Leu Gly Thr Pro Asn Gly Gln Lys Val 90 85 Thr Ile Met Leu Glu Glu Leu Leu Ala Leu Gly Val Thr Gly Ala Glu 105 110 100 Tyr Asp Ala Trp Leu Ile Arg Ile Gly Glu Gly Asp Gln Phe Ser Ser

120 Gly Phe Val Asp Val Asn Pro Asn Ser Lys Ile Pro Ala Leu Arg Asp

135

```
His Ser Thr Thr Pro Pro Thr Arg Val Phe Glu Ser Gly Asn Ile Leu
                                   155
145
Leu Tyr Leu Ala Glu Lys Phe Gly His Phe Leu Pro Lys Asp Pro Ala
                                                  175
           165
                                170
Gly Arg Thr Glu Thr Leu Asn Trp Leu Phe Trp Leu Gln Gly Ala Ala
                                               190
         180
                            185
Pro Phe Leu Gly Gly Gly Phe Gly His Phe Tyr Asn Tyr Ala Pro Val
                                           205
      195
Lys Ile Glu Tyr Ala Ile Asp Arg Phe Thr Met Glu Ala Lys Arg Leu
                     215
                                       220
 210
Phe Asp Val Leu Asp Lys Gln Leu Ala Arg Gly Arg Tyr Val Ala Gly
                230
                                   235
Glu Glu Tyr Thr Ile Ala Asp Met Ala Val Trp Pro Trp Phe Gly Cys
           245 250
Val Ala Leu Gly Ser Val Tyr Asn Ala Ala Glu Phe Leu Asp Ala Gly
                                 270
          260 265
Lys Tyr Thr Asn Val Gln Arg Trp Ala Lys Asp Val Ala Asn Arg Pro
       275
                         280
                              285
Ala Val Lys Arg Gly Arg Ile Val Asn Arg Thr Asn Gly Glu Leu Asn
   290 295
                          300
Glu Gln Leu His Glu Arg His Ser Ala Ser Asp Phe Asp Thr Gln Thr
305 310
                          315
Glu Asp Lys Arg Gln Gly
              325
<210> 7868
<211> 93
<212> PRT
<213> Enterobacter cloacae
<400> 7868
Thr Leu Asp Asp Phe Leu Gly Phe Leu Ala Pro Arg Asp Glu Glu Val
                         10
Lys Gly His Lys Ser Met Phe Leu Gly Asn Asp Pro Val Thr Asp Ala
                          2.5
                                              30
Ser Val Ile Pro Ala Leu Asp Gln Leu Thr Gly Gly Lys Lys Asp Thr
                      40
                                           4.5
Thr Val Phe Phe Arg Ala Asp Lys Thr Val Asp Tyr Arg Lys Thr Gln
                   55
                                       60
Leu Gly Glu Met Lys Val Met Asp Thr Leu His Gln Ala Gly Tyr Leu
                             75
                  70
Lys Ile Gly Leu Val Gly Glu Glu Lys Ala Ala Ala Lys
<210> 7869
<211> 177
<212> PRT
<213> Enterobacter cloacae
<400> 7869
Gln Lys Gln Arg Val Ile Gln Arg Gln Arg Leu Ala Ala Leu Arg Gln
                                10
Arg Gly Glu Arg Ala Ser Gly Ile Pro Leu Val Ala Ala Leu Gly His
                             25
Gly Leu Glu Asn Ala Arg Leu Ala Ala Ala Arg Val Phe Thr Ser Gly
       35
                         4.0
                                           45
Val Phe Thr Thr Arg Ile Leu Thr Ala Arg Ile Phe Thr Ser Gly Val
                     55
                                       60
   50
Phe Thr Ala Arg Ile Leu Thr Ala Arg Val Phe Ala Ser Gly Val Phe
                  7.0
                                    7.5
Thr Thr Arg Ile Leu Thr Ala Arg Val Phe Ala Ser Gly Ile Phe Ser
```

85 90 95
Ser Arg Ile Leu Ala Thr Gly Leu Phe Leu Arg Asp Gly Gln Ile Asp 100 105 110
Gly Ile Gly Ala Leu Leu Lys Arg His Val Glu Glu Gly Gly Phe Gly 115 120
Asp Arg Ala Gly Glu Leu Thr Val Asn Ser Pro Val Gly Gly Gln Asn 130 135 140
Ala Val Ala Leu Ala Arg Phe Ile Ala Gly Leu Arg Ile Gln Arg Gly Asp Leu Tyr Leu Ser Leu Ile Ala Asp Gly Gly Phe Ala Arg Tyr Gln Asp Leu Tyr Leu Ser Leu Ile Ala Asp Gly Gly Phe Ala Arg Tyr Gln 175

<210> 7870 <211> 215 <212> PRT <213> Enterobacter cloacae

<213> Enterobacter cloaca

<400> 7870 Lys Glu Ala Pro Leu Gly Gln Asn Tyr Ala Leu Val Val Asp Asp His 10 Pro Leu Val Ala Ser Gly Ile Ala Asn Phe Leu Ile Thr His Cys Gln 25 3.0 Phe Lys Gln Ala Cys Val Val Thr Asn Glu Asp Asp Cys Tyr Arg Gln 4.5 4.0 Ile Arg Asp His Gly Pro Pro Arg Leu Leu Val Ile Asp Phe Trp Leu 55 60 Ser Ser Gly Thr Ala Leu Lys Leu Leu Lys Glu Val Lys Gln Leu Tyr 75 70 Pro Gln Val Arg Leu Leu Val Val Ser Gly Asp Asp Asn Asn Asp Ile 90 8.5 Trp Arq Lys Val Asn Ala Ala Gly Gly His Gly Phe Val Leu Lys Ser 100 105 110 Glu Pro Pro Glu Met Phe Ser Arg Ala Val Phe Ala Leu Thr Asp Asn 115 120 125 Gln Thr Trp Phe Pro Glu Gly Asn Glu Ile Ser Val Lys Ala Asn Asn 135 140 Glu Lys Leu Ser Lys Phe Asn Leu Thr Pro Arg Gln Ile Asp Val Leu 150 155 Asn Met Ile Arg Arg Gly Leu Pro Asn Lys Arg Ile Ala Ala Gln Leu 165 170 175 Ser Ile Ser Glu Pro Thr Val Lys Glu His Ile Ser Asn Ile Leu Lys 180 185 190 Lys Ile Gly Val Asn Ser Arg Val Glu Ala Ile Thr Leu Leu His Gly 195 200 Lys Gln Glu Pro Ser Glu 210

<210> 7871 <211> 176 <212> PRT <213> Enterobacter cloacae

```
Gln Glu Ile Phe His Val Leu Pro Asn Ile Phe Ser Val Ala Glu Ala
                  55
Asp Leu Ile Leu Val Leu Leu Ser Leu Val Asp Met Thr Leu Val Gly
               7.0
                              75
Gly Leu Leu Val Met Val Met Phe Ser Gly Tyr Glu Asn Phe Val Ser
           8.5
                           90
Gln Leu Asp Ile Ala Glu His Lys Glu Lys Leu Ser Trp Leu Gly Lys
        100
                       105
Met Asp Ala Ser Ser Leu Lys Asn Lys Val Ala Ala Ser Ile Val Ala
     115
                   120
Ile Ser Ser Ile His Leu Leu Arg Val Phe Met Asp Ala Lys Asn Val
               135 140
 130
Pro Asp Asn Lys Leu Met Trp Tyr Val Ile Ile His Leu Thr Phe Val
145 150
                           155 160
Leu Ser Ala Phe Val Met Gly Tyr Leu Asp Lys Ile Ser Lys Lys
         165
                 170
<210> 7872
<211> 559
<212> PRT
<213> Enterobacter cloacae
<400> 7872
Ile Phe Glu Thr Thr Phe Ser Phe Tyr Ala Asp Ser Ile Thr Lys Lys
                          1.0
Val Tyr Phe Leu Gln Tyr Leu Pro Ile Thr Arg Gly Val Leu Ala Ser
   20
                     25
Gly Arg Ile His Pro His Gly Lys Glu Tyr Ser Met Lys Met Leu Arg
 35
                    40
                            4.5
Asn Phe Thr Ile Arg Phe Val Met Leu Thr Ile Leu Gly Ile Phe Cys
50
      55 60
Val Met Trp Ala Gly Val Gly Leu Tyr Ser Thr Trp Ser Leu Ser Arg
65 70 75 80
Val Ser Asp Gly Asn Asp Val Asp Arg Leu Leu Val Arg Gln Met Thr
           85 90 95
Val Leu Ser Gln Gly Asn Asp Gln Tyr Phe Arg Phe Val Thr Arg Leu
   100
            105 110
Ser Arg Ala Met Glu Val Lys Ala Ala Gly Gly Thr Pro Asp Leu Ala
 115 120 125
Pro Ala Gln Gln Ala Leu Asp Asn Met Ser Lys Lys Leu Ala Glu Met
 130 135 140
Lys Ala Ile Ser Pro Gly Pro Met Asp Glu Lys Val Ser Ala Gln Val
145 150 155
Ile Ser Thr Trp Gln Ala Leu Leu Asp Gln Gly Val Thr Pro Gln Met
         165 170
Ala Gln Ala Lys Gln Ala Thr Leu Glu Gly Tyr Arg Gln His Ala Asn
      180 185
                                      190
Asn Val Thr Pro Pro Leu Ser Arg Ala Phe Gly Ser Ala Ala Glu Asn
195 200 205
Phe Asn Asn Thr Ala Ala Lys Ala Leu Asp Ser Thr Arg Val Val Val
 210 215 220
Asp Gly Leu Thr Ser Met Thr Arg Thr Val Ile Ile Thr Ala Thr Ile
225 230 235
Val Gly Leu Leu Ile Leu Leu Phe Thr Asp Arg Tyr Leu Val Ala Ile
           245
                          250
```

Leu Val Lys Pro Leu Asp Arg Ile Arg Gln Gln Phe Arg Gln Ile Ala 265

Gln Gly Asp Leu Ser Gln Pro Ile Glu Ser Leu Gly Arg Asn Cys Val

Gly Gln Leu Val Pro Leu Leu Ser Ala Met Gln Asp Ser Leu Arg Glu

275 280

295

270

285

```
Ala Val Ser Thr Ile Arg Ser Gly Ser Glu Asn Ile Trp Arg Gly Ala
305
              310
                     315
Thr Glu Ile Ser Ser Gly Asn Asn Asp Leu Ser Ser Arg Thr Glu Glu
                 330
            325
Gln Ala Ala Leu Glu Glu Thr Ala Ala Ser Met Glu Gln Leu Thr
        340
                        345 350
Ala Thr Val Lys Leu Asn Ala Glu Ser Ala Arg Gln Ala Ser Gln Leu
     355 360 365
Ala Asp Val Ala Ser Ser Thr Ala Ser Arg Gly Gly Ser Leu Val Glu
       375 380
Asp Val Val Thr Thr Met Ser Gly Ile Ser Asp Ser Ser Lys Lys Ile
385 390 395 400
Ala Glu Ile Thr Thr Val Ile Asn Ser Ile Ala Phe Gln Thr Asn Ile
      405 410 415
Leu Ala Leu Asn Ala Ala Val Glu Ala Ala Arg Ala Gly Glu Gln Gly
   420 425 430
Arg Gly Phe Ala Val Val Ala Gly Glu Val Arg Asn Leu Ala Ser Arg
     435 440 445
Ser Ala Asn Ala Ala Lys Glu Ile Glu Gly Leu Ile Ala Asp Ser Val
450 450 460
Ala Arg Val Glu Gln Gly Ala Gln Leu Val Asn Asp Thr Gly Thr Thr
465 470 475 480
Met Glu Ala Ile Leu Arg Asp Val Thr Glu Val Thr Val Ile Met Lys
     485 490 495
Gln Ile Ala Thr Ala Ser Glu Glu Gln Ser Lys Gly Ile Ser Gln Val
 500 505
                                     510
Gly Val Ala Ile Thr Gln Met Asp Gly Val Thr Gln Gln Asn Ala Ser
515 520 525
Leu Val Glu Gln Val Ser Ala Ala Ala Ala Ala Leu Glu Arg Gln Thr
530 535 540
Glu Glu Leu Gln Arg Ser Val Gln Lys Phe Arg Leu Thr Ala
               550
```

<210> 7873 <211> 624 <212> PRT <213> Enterobacter cloacae

165

<400> 7873 Val Gly His Met Arg Lys Gly Thr Leu Ser Ser Asp Ala Pro Phe Gly 10 15 Thr Leu Leu Gly Tyr Ala Pro Gly Gly Val Ala Ile Tyr Ser Ser Asn 25 Tyr Gly Ser Leu Asp Pro Arg Arg Tyr Pro Glu Asp Ala Glu Phe Arg 4.0 Ser Tyr Ile Gly Asn Glu Tyr Met Gly His Lys Trp Gln Cys Val Glu 55 Phe Ala Arg Arg Phe Leu Phe Leu Asn His Gly Phe Val Phe Thr Asp 75 7.0 Val Gly Met Ala Trp Glu Ile Phe Ser Leu Arg Phe Leu Arg Gln Val 85 90 Val Asn Asp Asn Ile Leu Pro Leu Gln Ala Phe Ala Asn Gly Ser Lys 100 105 110 Arg Ala Pro Gln Ala Gly Ala Leu Leu Ile Trp Gln Lys Gly Gly Glu 120 Phe His Glu Thr Gly His Val Ala Val Ile Thr Gln Leu Leu Asp Asp 130 135 140 Arg Val Arg Ile Ala Glu Gln Asn Val Ile His Ser Pro Leu Pro Met 145 150 155 160

Gly Gln Gln Trp Thr Arg Glu Leu Arg Leu Ser Val Glu Asp Gly Cys

```
Tyr Thr Leu His Asp Thr Phe Asn Asp Thr Glu Ile Leu Gly Trp Met
       180 185 190
Ile Gln Thr Glu Glu Thr Glu His Ser Ile Pro Gln Pro Glu Ile Asp
     195
                 200
Gly Glu Leu Leu Lys Ile Ser Gly Ala Arg Leu Lys Asn Asn Arg Gln
      215 220
  210
Phe Asp Gly Lys Trp Leu Asn Glu Asn Asp Ala Leu Gln Gln Ala Tyr
             230
                 235
Val Arg Ala Asn Gly His Val Ile Asn Asn Asp Pro Cys Gln Tyr Phe
          245 250 255
Thr Ile Thr Glu Ser Ala Glu Gln Glu Leu Ile Lys Ala Thr Asn Glu
       260
                     265 270
Leu His Leu Met Tyr Leu His Ala Thr Asp Lys Val Leu Lys Asp Asp
     275 280
                       285
Ser Leu Leu Ala Leu Phe Asp Ile Pro Lys Ile Leu Trp Pro Arg Leu
      295 300
Arg Leu Ser Trp Gln Trp Arg Arg His His Met Ile Thr Gly Arg Met
305 310 315
Asp Phe Cys Met Asp Glu Arg Gly Ile Lys Val Tyr Glu Tyr Asn Ala
     325 330 335
Asp Ser Ala Ser Cys His Thr Glu Gly Gly Leu Ile Leu Glu Glu Trp
 340 345 350
Val Lys Asn Gly Tyr Arg Gly Thr Gly His Asn Pro Ala Glu Gly Leu
355 360 365
Leu Glu Glu Leu Thr Gly Ala Trp Lys His Ser His Ala Arg Pro Phe
370 375
                              380
Val His Ile Met Gln Asp Asn Asp Ile Glu Glu Asp Tyr His Val Leu
385 390 395
Phe Ile Gln Arg Ser Leu Ile Gln Ala Gly Phe Glu Thr Lys Ile Leu
      405 410
His Gly Leu Gly Ala Leu Ser Trp Asp Ala Ala Gly Gln Leu Ile Asp
       420 425
Asp Glu Gly Arg His Val Asn Cys Val Trp Lys Thr Trp Ala Trp Glu
435 440 445
Thr Ala Ile Glu Gin Ile Arg Glu Val Ser Glu Thr Glu Tyr Ala Ala
450 455 460
Val Pro Ile Arg Thr Gly His Pro Gln Gly Glu Val Arg Leu Ile Asp
465 470 475
Val Leu Leu Arg Pro Glu Val Leu Val Phe Glu Pro Leu Trp Thr Val
     485 490 495
Ile Pro Gly Asn Lys Ala Ile Leu Pro Val Leu Trp Gln Leu Phe Pro
       500 505 510
Asn His Arg Tyr Leu Leu Asp Thr Aso Phe Glu Val Asn Asp Leu Leu
515 520 525
Lys Arg Thr Gly Tyr Ala Val Lys Pro Ile Ala Gly Arg Cys Gly Ser
 530 535
                              540
Asn Ile Asp Leu Ile Gly Ala Glr Asp Glu Leu Leu Asp Gln Ser Ser
            550 555
Gly Lys Phe Val Asp Arg Lys Asn Ile Tyr Gln Gln Leu Trp Cys Leu
          565 570
Pro Lys Val Asp Gly Arg Tyr Ile Gln Val Cys Thr Phe Thr Val Gly
                     585 590
Gly Asn Tyr Gly Gly Thr Cys Leu Arg Gly Asp Asn Ser Leu Val Val
   595 600 605
Lys Lys Glu Ser Asp Ile Glu Pro Leu Ile Val Val Lys Asp Asn
               615
```

<210> 7874

<211> 130

<212> PRT

<213> Enterobacter cloacae

```
<400> 7874
Thr Val Arg Asn Ala Val Gln Val Phe Ser Gly Glu Gln Ala Leu Cys
Gln Arg Gly Lys Gly Asp Thr Ala Arg Ser Val Phe Leu Gln Arg Val
          20
                          25
Gln Gln Ala Gly Leu Val Asp Pro Ala Val Lys Gln Val Val Arg Arg
                      40
                                      4.5
Leu Val Asp Gln Lys Arg Asp Leu Pro Leu Ala Gln Gln Phe Gly His
                   55
                          60
Arg Arg Arg Ala Phe Arg Gly Val Arg Arg Asn Ala Asp Ile Gln Arg
                70
                                75
Phe Ser Ala Leu His Arg Val Cys Gln Arg Ser Gly Gly Leu Phe His
             8.5
                          90 95
Arg Arg Val Phe Val Tyr Ala Val Arg Ile Glu Asn Ile His Ile Leu
         100 105 110
His Thr His Ala Val Gln Ala Leu Val Glu Ala Gly Glu Gln Val Leu
            120
  130
<210> 7875
<211> 354
<212> PRT
<213> Enterobacter cloacae
<400> 7875
Met Leu Tyr Thr His Ser Ser His Gln Asn Arg Gly Asn Ala Met Ser
                            10
Lys Ile Lys Ser Tyr Ala Ala Pro Gln Ala Gly Ala Glu Leu Glu Leu
       20
                         25
                                         3.0
Tyr Glu Tyr Asp Ala Gly Glu Leu Lys Ala Glu Asp Val Glu Val Gln
                    40
                           4.5
Val Asp Tyr Cys Gly Ile Cys His Ser Asp Leu Ser Met Ile Asp Asn
Glu Trp Gly Phe Ser Ser Tyr Pro Leu Val Ala Gly His Glu Val Ile
             70
                               75
Gly Arg Val Val Ala Leu Gly Ser Ala Ala Gln Asp Lys Gly Leu Lys
            85
                            90
Val Gly Gln Arg Val Gly Ile Gly Trp Thr Ala Arg Ser Cys Gly His
       100
                        105 110
Cys Asp Ala Cys Ile Ser Gly Asn Gln Ile Asn Cys Leu Glu Gly Ala
   115
           120
                                      125
Thr Pro Thr Ile Leu Asn Lys Gly Gly Phe Ala Asp Lys Leu Arg Ala
 130 135 140
Asp Trp Gln Trp Val Ile Pro Leu Pro Asp Ser Ile Asp Ile Glu Ser
145 150 155
                                                160
Ala Gly Pro Leu Leu Cys Gly Gly Ile Thr Val Phe Lys Pro Leu Leu
          165 170 175
Met His His Ile Thr Ala Thr Ser Arg Val Gly Val Ile Gly Ile Gly
        180
                        185
                                          190
Gly Leu Gly His Ile Ala Ile Lys Leu Leu His Ala Met Gly Cys Glu
   195
          200
Val Thr Ala Phe Ser Ser Asn Pro Ala Lys Glu Gln Glu Val Leu Ala
      215
  210
                                  220
Met Gly Ala Asp Lys Val Val Asn Ser Arg Asp Pro Gln Ala Leu Thr
225 230
                               235
Ala Leu Ala Gly Gln Phe Asp Leu Ile Ile Asn Thr Val Asn Val Asp
           245 250 255
Leu Asp Trp Gln Pro Tyr Phe Glu Ala Leu Ala Tyr Gly Gly Asn Phe
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he

<210> 7876 <211> 960 <212> PRT

<213> Enterobacter cloacae

<400> 7876 Pro Glu Tyr Gly Asn Leu Glu Ile Met Glu Lys Thr Tyr Asn Pro Arg 10 Asp Ile Glu Gln Pro Leu Tyr Glu His Trp Glu Gln Gln Gly Tyr Phe 20 25 Lys Pro Asn Gly Asp Glu Ser Lys Glu Ser Phe Cys Ile Met Ile Pro 35 40 Pro Pro Asn Val Thr Gly Ser Leu His Met Gly His Ala Phe Gln Gln 50 55 60 Thr Ile Met Asp Thr Met Ile Arg Tyr Gln Arg Met Gln Gly Lys Asn 70 75 Thr Leu Trp Gln Ala Gly Thr Asp His Ala Gly Ile Ala Thr Gln Met 8.5 90 Val Val Glu Arg Lys Ile Ala Ala Glu Glu Gly Lys Thr Arg His Asp 100 105 110 Tyr Gly Arg Asp Ala Phe Ile Asp Lys Ile Trp Gln Trp Lys Ala Glu 115 120 1.25 Ser Gly Gly Thr Ile Thr Arg Gln Met Arg Arg Leu Gly Asn Ser Val 135 140 Asp Trp Glu Arg Glu Arg Phe Thr Met Asp Glu Gly Leu Ser Asn Ala 145 150 155 1.60 Val Lys Glu Val Phe Val Arg Leu Tyr Lys Glu Asp Leu Ile Tyr Arg 165 170 Gly Lys Arg Leu Val Asn Trp Asp Pro Lys Leu Arg Thr Ala Ile Ser 180 185 190 Asp Leu Glu Val Glu Asn Arg Glu Ser Lys Gly Ser Met Trp His Ile 195 200 Arg Tyr Pro Leu Ala Asp Gly Ala Lys Thr Ala Asp Gly Lys Asp Tyr 210 215 220 Leu Val Val Ala Thr Thr Arg Pro Glu Thr Leu Leu Gly Asp Thr Gly 225 230 235 Val Ala Val Asn Pro Glu Asp Pro Arg Tyr Lys Asp Leu Ile Gly Lys 245 250 255 Phe Val Val Leu Pro Leu Val Asn Arg Arg Ile Pro Ile Val Gly Asp 265 260 Glu His Ala Asp Met Glu Lys Gly Thr Gly Cys Val Lys Ile Thr Pro 280 285 Ala His Asp Phe Asn Asp Tyr Glu Val Gly Arg Arg His Gln Leu Pro 290 295 300 Met Ile Asn Ile Leu Thr Phe Asp Gly Asp Ile Arg Glu Ser Ala Glu 310 315 Val Tyr Asp Thr Lys Gly Asn Glu Ser Asp Val Tyr Ser Ser Asp Ile 325 330

Pro Ala Glu Phe Gln Lys Leu Glu Arg Phe Ala Ala Arg Lys Ala Ile 340 345 Val Ala Ala Val Asp Ala Leu Gly Leu Leu Glu Glu Ile Lys Pro His 355 360 Asp Leu Thr Val Pro Tyr Gly Asp Arg Gly Gly Val Val Ile Glu Pro 375 380 Met Leu Thr Asp Gln Trp Tyr Val Arg Ala Asp Val Leu Ala Lys Pro 390 395 Ala Val Glu Ala Val Glu Asr Gly Ser Ile Gln Phe Val Pro Lys Gln 405 410 415 Tyr Glu Asn Met Tyr Phe Ser Trp Met Arg Asp Ile Gln Asp Trp Cys 420 425 430 Ile Ser Arg Gln Leu Trp Trp Gly His Arg Ile Pro Ala Trp Tyr Asp 435 440 445 Asn Glu Gly Asn Val Tyr Val Gly Arg Thr Glu Glu Glu Val Arg Gln 455 460 450 Glu Asn Asn Leu Gly Ala Asp Val Ala Leu Arg Gln Asp Glu Asp Val 465 470 475 Leu Asp Thr Trp Phe Ser Ser Ala Leu Trp Thr Phe Ser Thr Leu Gly 485 490 495 Trp Pro Glu Asn Thr Asp Ala Leu Arg Gln Phe His Pro Thr Ser Val 500 505 510 Met Val Ser Gly Phe Asp Ile Ile Phe Phe Trp Ile Ala Arg Met Ile 515 520 525 Met Met Thr Met His Phe Ile Lys Asp Glu Asp Gly Lys Pro Gln Val 530 535 540 Pro Phe His Thr Val Tyr Met Thr Gly Leu Ile Arg Asp Asp Glu Gly 545 550 555 Gln Lys Met Ser Lys Ser Lys Gly Asn Val Ile Asp Pro Leu Asp Met 565 570 575 Val Asp Gly Ile Ser Leu Glu Glu Leu Leu Glu Lys Arg Thr Gly Asn 580 585 590 Met Met Gln Pro Gln Leu Ala Glu Lys Ile Arg Lys Arg Thr Glu Lys 595 600 Gln Phe Pro Asn Gly Ile Glu Ser His Gly Thr Asp Ala Leu Arg Phe 610 615 Thr Leu Ala Ala Leu Ala Ser Thr Gly Arg Asp Ile Asn Trp Asp Met 630 635 Lys Arg Leu Glu Gly Tyr Arg Asn Phe Cys Asn Lys Leu Trp Asn Ala 645 650 Ser Arg Phe Val Leu Met Asn Thr Glu Asp Gln Asp Cys Gly Phe Asn 660 665 670 Gly Gly Glu Met Thr Leu Ser Leu Ala Asp Arg Trp Ile Leu Ala Glu 680 Phe Asn Gln Thr Val Lys Ala Phe Arg Asp Ala Leu Asp Ser Tyr Arg 695 700 Phe Asp Ile Ala Ala Gly Ile Leu Tyr Glu Phe Thr Trp Asn Gln Phe 710 715 Cys Asp Trp Tyr Leu Glu Leu Ala Lys Pro Val Met Asn Gly Gly Ser 725 730 735 Glu Ala Glu Leu Arg Gly Thr Arg Asn Thr Leu Ile Thr Val Leu Glu 740 745 750 Gly Leu Leu Arg Leu Ala His Pro Ile Ile Pro Phe Ile Thr Glu Thr 755 760 765 Ile Trp Gln Arg Val Lys Val Ile Ala Gly Ile Asn Pro Asp Thr Ile 775 780 Met Leu Gln Pro Phe Pro Ala Phe Asp Ala Ala Lys Val Asp Glu Ala 795 785 790 Ala Ser Ala Asp Thr Glu Trp Leu Lys Gln Ala Ile Val Ala Ile Arg 805 810 Asn Ile Arg Ala Glu Met Asn Ile Ala Pro Gly Lys Pro Leu Glu Leu

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820
                          825
Leu Leu Arg Gly Cys Ser Glu Ala Ala Val Arg Arg Val Thr Glu Asn
      835
                      840
Asn Thr Phe Leu Lys Thr Met Ala Arg Leu Glu Ser Ile Thr Val Leu
 850
                   855
                                   860
Pro Ala Asp Asp Lys Gly Pro Val Ser Val Thr Lys Ile Ile Asp Gly
              870
                             875
Ala Glu Leu Leu Ile Pro Met Ala Gly Leu Ile Asp Lys Asp Ala Glu
         885 890
Leu Ala Arg Leu Ala Lys Glu Val Ala Lys Val Asp Val Glu Ile Gly
         900
              905
                              910
Lys Ile Glu Ser Lys Leu Ala Asn Glu Gly Phe Val Ala Arg Ala Pro
      915 920
                            925
Glu Ala Val Ile Ala Lys Glu Arg Glu Arg Leu Val Ala Phe Ala Asp
 930 935 940
Ala Lys Thr Lys Leu Ile Glu Gln Gln Ala Val Ile Ala Ala Leu
               950
<210> 7877
<211> 199
<212> PRT
<213> Enterobacter cloacae
<400> 7877
Gly Val Ser Phe Leu Lys Thr Pro Arg Leu His Ser Pro Phe Cys Gly
1 5
                             10
                                             1.5
Ala Ile Asn Ser Ser Cys Val Ser Ile Phe Val Met Ser Lys Ala Met
 20
                          25
Ser Val Ile Thr Pro Val Ala Thr Thr Met Arg Arg Ile Thr Lys Gln
35
                      40
                                       4.5
Asp Asn Pro Ala Ile Ala Ala Val Ile Arg Thr Val Ser Ala Glu Tyr
                   55
                                  60
Gly Leu Thr Ala Asp Lys Gly Tyr Thr Val Ala Asp Pro Asn Leu Asp
              7.0
                        75
Glu Leu Phe Gln Leu Tyr Ser Gln Pro Gly His Ala Tyr Trp Val Ile
       85
                 90
Glu Gln Asp Gly Gln Val Val Gly Gly Gly Ile Ala Pro Leu Leu
         100 105
                                          110
Cys Ser Glu Pro Asp Ile Cys Glu Leu Gln Lys Met Tyr Phe Leu Pro
                    120
                                       125
Thr Ile Arg Gly Gln Gly Leu Ala Lys Lys Leu Ala Leu Val Ala Leu
                   135 140
Glu His Ala His Ser Gln Gly Phe Lys Arg Cys Tyr Leu Glu Thr Thr
145 150
                             155
Ala Phe Leu Lys Glu Ala Ile Gly Leu Tyr Glu His Leu Gly Phe Glu
           165 170 175
His Ile Asp Ala Pro Leu Gly Cys Thr Gly His Val Asp Cys Glu Val
       180
                         185
Arg Met Leu Lys Ser Leu
<210> 7878
<211> 201
<212> PRT
<213> Enterobacter cloacae
<400> 7878
Gly Lys Thr Gln Arg Arg Asp Arg Asp Val Arg Trp Arg Cys Gly Arg
                            10
                                             1.5
Ser Ser Cys Ser Ile Gly Arg Val Leu Pro Gly Arg Ser Asn Asp Lys
         20
                                          30
```

```
Arg Arg Gly Gly Val Pro Leu Thr Arg Ala Leu His Leu Asn Pro Arg
                      40
Gln Glu Thr Pro Tyr Met Lys Asn Ala Thr Phe Tyr Leu Leu Asp Asn
                   55
Asp Thr His Gln Asp Gly Leu Ser Ala Val Glu Gln Leu Val Cys Glu
               70
                                75
Ile Ala Ala Glu Arg Trp Arg Ala Gly Lys Arg Val Leu Ile Ala Cys
            8.5
Glu Asp Glu Gln Gln Ala Ile Arg Leu Asp Glu Ala Leu Trp Ala Arg
         100
                         105
                                         110
Pro Pro Glu Ser Phe Val Pro His Asn Leu Ser Gly Glu Gly Pro Arg
                     120
                                     125
Gly Gly Ala Pro Val Glu Ile Ala Trp Pro Gln Lys Arg Asn Ser Ser
 130 135 140
Ala Arg Asp Ile Leu Ile Ser Leu Arg Thr Asp Phe Ala Asp Phe Ala
145
    150 155
Thr Ala Phe Thr Glu Val Val Asp Phe Val Pro Tyr Glu Glu Ser Leu
       165 170 175
Lys Gln Leu Ala Arg Glu Arg Tyr Lys Ala Tyr Arg Leu Ala Gly Phe
 180 185
Asn Leu Asn Thr Ala Thr Trp Lys
195
<210> 7879
<211> 524
<212> PRT
<213> Enterobacter cloacae
<400> 7879
Gly Ile Tyr Ala Asp Ile Leu Pro Ser Gly Cys Leu Tyr Ser Thr Gln
                   10
Asp Tyr Glu Arg Thr Cys Ile Met Ser Thr Pro Leu Leu Ile Ala Arg
 20
                25
Thr Leu Glu Lys Glu Leu Phe Leu Leu Pro Ala Met Ala Asn Arg His
35 40
Gly Leu Ile Thr Gly Ala Thr Gly Thr Gly Lys Thr Val Thr Leu Gln
                55
Lys Leu Ala Glu Ser Leu Ser Glu Thr Gly Val Pro Val Phe Met Ala
            70 75
Asp Val Lys Gly Asp Leu Thr Gly Val Ala Gln Glu Gly Ala Ala Ser
           85
               90
Glu Lys Leu Leu Glu Arg Leu Lys Asn Ile Gly Ile Thr Asp Trp Thr
      100
                      105
                                        110
Pro His Gly Asn Pro Val Val Val Trp Asp Ile Phe Gly Glu Lys Gly
115 120 125
His Pro Val Arg Ala Thr Val Ser Asp Leu Gly Pro Leu Leu Leu Ala
      135 140
Arg Leu Leu Asn Leu Asn Asp Val Gln Ser Gly Val Leu Asn Ile Ile
145 150
                   155 160
Phe Arg Ile Ala Asp Asp Gln Gly Leu Leu Leu Leu Asp Phe Lys Asp
           165 170
Leu Arg Ala Ile Thr Gln Tyr Ile Gly Asp Asn Ala Lys Ser Phe Gln
                        185 190
Asn Gln Tyr Gly Asn Ile Ser Ser Ala Ser Val Gly Ala Ile Gln Arg
                     200
                                     205
Gly Leu Leu Thr Leu Glu Gln Gln Gly Ala Glu His Phe Phe Gly Glu
 210 215
                                  220
Pro Met Leu Asp Ile Lys Asp Trp Met Arg Thr Asp Ser Ser Gly Lys
225 230
                              235
Gly Ile Ile Asn Ile Leu Ser Ala Glu Lys Leu Tyr Gln Met Pro Lys
```

```
Leu Tyr Ala Ala Ser Leu Leu Trp Met Leu Ser Glu Leu Tyr Glu Gln
         260
                         265
                               270
Leu Pro Glu Ala Gly Asp Leu Glu Lys Pro Lys Leu Val Phe Phe Phe
                    280 285
Asp Glu Ala His Leu Leu Phe Asn Asp Ala Pro Gln Val Leu Leu Asp
   290
                 295 300
Lys Ile Glu Gln Val Ile Arg Leu Ile Arg Ser Lys Gly Val Gly Val
      310 315
Trp Phe Val Ser Gln Asn Pro Ser Asp Ile Pro Asp Asn Val Leu Gly
            325 330 335
Gln Leu Gly Asn Arg Val Gln His Ala Leu Arg Ala Phe Thr Pro Lys
         340 345 350
Asp Gln Lys Ala Val Lys Ala Ala Ala Gln Thr Met Arg Val Asn Pro
 355 360
                                       365
Ala Phe Asp Thr Glu Thr Ala Ile Gln Ala Leu Gly Thr Gly Glu Ala
                   375 380
Leu Ile Ser Phe Leu Asp Ala Lys Gly Ser Pro Thr Val Val Glu Arg
    390
                                395
Ala Met Val Ile Ala Pro Cys Ser Arg Met Gly Pro Val Thr Asp Asp
     405 410
                                             415
Glu Arg Asn Gly Leu Ile Asn His Ser Pro Val Tyr Gly Lys Tyr Glu
 420
                          425
                                          430
Asp Glu Val Asp Arg Glu Ser Ala Phe Glu Met Leu Gln Lys Gly Val
 4.35
                      440
                                       445
Gln Ala Thr Ala Glu Ser Gln Asp Ala Pro Ala Ala Lys Gly Gln Ser
                   455
                                   460
Val Ala Val Asp Asp Gly Ile Leu Gly Gly Leu Lys Asp Ile Leu Phe
465 470
                                475
Gly Ser Thr Gly Pro Arg Gly Gly Lys Arg Asp Gly Val Val Gln Thr
           485 490
Met Ala Lys Ser Ala Thr Arg Gln Ile Thr Asn Gln Ile Val Arg Gly
       500 505
Met Leu Gly Ser Leu Leu Gly Gly Arg Arg Arg
<210> 7880
<211> 1501
<212> PRT
<213> Enterobacter cloacae
<400> 7880
Ser Ser Val Gly Ser Pro Thr Ser Leu Gly Arg Phe Thr Asp Met Leu
                                             15
                          10
Tyr Asp Lys Ser Leu Glu Lys Asp Asn Cys Gly Phe Gly Leu Ile Ala
                         25
His Ile Glu Gly Glu Pro Ser His Lys Val Val Arg Thr Ala Ile His
                      40
Ala Leu Ala Arg Met Gln His Arg Gly Ala Ile Leu Ala Asp Gly Lys
 5.0
                   55
Thr Gly Asp Gly Cys Gly Leu Leu Leu Gln Lys Pro Asp Arg Phe Phe
                    75
                70
Arg Ile Val Ala Glu Glu Arg Gly Trp Arg Leu Ala Lys Asn Tyr Ala
            8.5
                             90
Val Gly Met Leu Phe Leu Asn Gln Asp Pro Glu Lys Ala Ala Ala Ser
         100
                         105
Arg Arg Ile Val Glu Glu Leu Gln Arg Glu Thr Leu Ser Ile Val
      115
                      120
Gly Trp Arg Asp Val Pro Thr Asn Glu Gly Val Leu Gly Glu Ile Ala
            135
                                   140
Leu Ser Ser Leu Pro Arg Ile Glu Gln Ile Phe Val Asn Ala Pro Ala
               150
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Gly Trp Arg Pro Arg Asp Met Glu Arg Arg Leu Phe Ile Ala Arg Arg 165 170 175 Arg Ile Glu Lys Arg Leu Gln Asp Asp Lys Glu Phe Tyr Val Cys Ser 185 190 Leu Ser Asn Leu Val Asn Ile Tyr Lys Gly Leu Cys Met Pro Ala Asp 200 205 Leu Pro Arg Phe Tyr Leu Asp Leu Ala Asp Leu Arg Leu Glu Ser Ala 210 215 220 Ile Cys Leu Phe His Gln Arg Phe Ser Thr Asn Thr Val Pro Arg Trp 230 235 Pro Leu Ala Gln Pro Phe Arg Tyr Leu Ala His Asn Gly Glu Ile Asn 245 250 255 Thr Ile Thr Gly Asn Arg Gln Trp Ala Arg Ala Arg Thr Tyr Lys Phe 260 265 270 Gln Thr Pro Leu Ile Pro Asp Leu His Asp Ala Ala Pro Phe Val Asn 275 280 285 Glu Thr Gly Ser Asp Ser Ser Ser Met Asp Asn Met Leu Glu Leu Leu 290 295 300 Leu Ala Gly Gly Met Asp Ile Val Arg Ala Met Arg Leu Leu Val Pro 310 315 Pro Ala Trp Gln Asn Asn Pro Asp Met Asp Pro Glu Leu Arg Ala Phe 325 330 Phe Asp Phe Asn Ser Met His Met Glu Pro Trp Asp Gly Pro Ala Gly 340 345 350 Ile Val Met Ser Asp Gly Arg Phe Ala Ala Cys Asn Leu Asp Arg Asn 360 365 Gly Leu Arg Pro Ala Arg Tyr Val Ile Thr Lys Asp Lys Leu Ile Thr 375 380 Cys Ala Ser Glu Val Gly Ile Trp Asp Tyr Gln Pro Asp Glu Val Val 390 395 Glu Lys Gly Arg Val Gly Pro Gly Glu Leu Met Val Ile Asp Thr Arg 405 410 Gly Gly Arg Ile Leu His Ser Ala Glu Thr Asp Asn Asp Leu Lys Ser 425 430 Arg His Pro Tyr Lys Glu Trp Met Glu Lys Asn Val Arg Arg Leu Val 440 445 Pro Phe Glu Asp Leu Ser Asp Glu Glu Val Gly Ser Arg Glu Leu Asp 450 455 460 Asp Asp Thr Leu Ala Ser Phe Gln Lys Gln Phe Asn Tyr Ser Ala Glu 470 475 Glu Leu Asp Ser Val Ile Arg Val Leu Gly Glu Asn Gly Gln Glu Ala 485 490 495 Val Gly Ser Met Gly Asp Asp Thr Pro Phe Ala Val Leu Ser Ser Gln 505 510 Pro Arg Ile Ile Tyr Asp Tyr Phe Arg Gln Gln Phe Ala Gln Val Thr 520 525 Asn Pro Pro Ile Asp Pro Leu Arg Glu Ala His Val Met Ser Leu Ala 535 540 Thr Ser Ile Gly Arg Glu Met Asn Val Phe Cys Glu Ala Glu Gly Gln 550 555 Ala His Arg Leu Thr Phe Lys Ser Pro Ile Leu Leu Tyr Ser Asp Phe 565 570 Lys Gln Leu Thr Thr Met Thr Glu Glu His Tyr Arg Ala Asp Thr Leu 580 585 590 Asp Ile Thr Phe Asp Val Thr Glu Thr Ser Leu Glu Glu Thr Val Asn 600 Ala Leu Cys Asp Lys Ala Glu Gln Met Val Arg Asn Gly Thr Val Leu 615 620 Leu Val Leu Ser Asp Arg Asn Ile Ala Lys Asn Arg Leu Pro Val Pro 630 635 Ala Pro Met Ala Val Gly Ala Ile Gln Thr Arg Leu Val Asp Lys Ser

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645
                          650
Leu Arg Cys Asp Ala Asn Ile Ile Val Glu Thr Ala Ser Ala Arg Asp
        660
                    665
Pro His His Phe Ala Val Leu Leu Gly Phe Gly Ala Thr Ala Ile Tyr
            680
Pro Tyr Leu Ala Tyr Glu Thr Leu Ala Arg Leu Val Asp Thr Arg Ala
 690 695
                     700
Ile Asp Lys Asp Tyr Arg Ala Val Met Leu Asn Tyr Arg Asn Gly Ile
   710 715 720
Asn Lys Gly Leu Tyr Lys Ile Met Ser Lys Met Gly Ile Ser Thr Ile
         725 730 735
Ala Ser Tyr Arg Cys Ser Lys Leu Phe Glu Ala Val Gly Leu His Asn
       740 745 750
Glu Val Ala Asn Leu Cys Phe Gin Gly Val Val Ser Arg Ile Gly Gly
   755 760 765
Ala Gly Phe Ala Asp Phe Gln Gln Asp Leu Val Asn Leu Ser Lys Arg
 770 775 780
Ala Trp Leu Ala Arg Lys Pro Leu Glu Gln Gly Gly Leu Leu Lys Tyr
785 790 795 800
Val His Gly Gly Glu Tyr His Ala Tyr Asn Pro Asp Val Val Arg Thr
      805 810 815
Leu Gln Gln Ala Val Gln Ser Gly Glu Tyr Ser Asp Tyr Gln Gln Tyr
 820 825 830
Ala Glu Leu Val Asn Asn Arg Pro Ala Ala Thr Leu Arg Asp Leu Ile
835 840 845
Ala Leu Asn Pro Gly Glu Glu Ala Val Ser Ile Asp Glu Val Glu Pro
850 855 860
Ala Ser Glu Leu Phe Lys Arg Phe Asp Thr Ala Ala Met Ser Ile Gly
865 870 875 880
Ala Leu Ser Pro Glu Ala His Glu Ala Leu Ala Glu Ala Met Asn Ser
      885 890 895
Ile Gly Gly Asn Ser Asn Ser Gly Glu Gly Glu Asp Pro Ala Arg
900 905 910
Tyr Gly Thr Asn Lys Val Ser Arg Ile Lys Gln Val Ala Ser Gly Arg
915 920 925
Phe Gly Val Thr Pro Ala Tyr Leu Val Asn Ala Asp Val Ile Gln Ile
 930 935 940
Lys Val Ala Gln Gly Ala Lys Pro Gly Glu Gly Gly Gln Leu Pro Gly
945 950 955 960
Asp Lys Val Thr Pro Tyr Ile Ala Lys Leu Arg Tyr Ser Val Pro Gly 965 970 975
Val Thr Leu Ile Ser Pro Pro Pro His His Asp Ile Tyr Ser Ile Glu
   980 985 990
Asp Leu Ala Gln Leu Ile Phe Asp Leu Lys Gln Val Asn Pro Lys Ala
995 1000 1005
Met Ile Ser Val Lys Leu Val Ser Glu Pro Gly Val Gly Thr Ile Ala
1010 1015 1020
Thr Gly Val Ala Lys Ala Tyr Ala Asp Leu Ile Thr Ile Ala Gly Tyr
1025 1030 1035 1040
Asp Gly Gly Thr Gly Ala Ser Pro Leu Ser Ser Val Lys Tyr Ala Gly
          1045 1050 1055
Cys Pro Trp Glu Leu Gly Leu Val Glu Thr Gln Gln Ala Leu Val Ala
       1060 1065 1070
Asn Gly Leu Arg His Lys Ile Arg Leu Gln Val Asp Gly Gly Leu Lys
   1075 1080 1085
Thr Gly Leu Asp Ile Ile Lys Ala Ala Ile Leu Gly Ala Glu Ser Phe 1090 \hspace{1.5cm} 1095 \hspace{1.5cm} 1100 \hspace{1.5cm}
Gly Phe Gly Thr Gly Pro Met Val Ala Leu Gly Cys Lys Tyr Leu Arg
1105 1110 1115 1120
Ile Cys His Leu Asn Asn Cys Ala Thr Gly Val Ala Thr Gln Asp Glu
           1125
                          1130
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Lys Leu Arg Lys Asn His Tyr His Gly Leu Pro Phe Lys Val Thr Asn
  1140 1145 1150
Tyr Phe Asp Phe Ile Ala Arg Glu Thr Arg Glu Leu Met Ala Gln Leu
  1155 1160 1165
Gly Val Lys Arg Leu Val Asp Leu Ile Gly Arg Thr Asn Leu Leu Lys
 1170 1175
                                1180
Glu Leu Glu Gly Phe Thr Ala Lys Gln Gln Lys Leu Glu Leu Ser Lys
1185 1190
                             1195 1200
Leu Leu Glu Thr Ala Gln Pro His Pro Gly Lys Ala Val Tyr Cys Thr
      1205 1210 1215
Glu Asn Asn Pro Pro Phe Asp Asn Gly Val Leu Asn Ala Gln Leu Leu
   1220 1225 1230
Gln Gln Ala Lys Pro Tyr Val Asp Glu Lys Gln Ser Lys Thr Phe Trp
 1235 1240 1245
Phe Asp Ile Arg Asn Thr Asp Arg Ser Val Gly Ala Ser Leu Ser Gly
 1250 1255 1260
Tyr Ile Ala Gln Thr His Gly Asp Gln Gly Leu Ala Ser Asp Pro Ile
1265 1270 1275 1280
Thr Ala His Phe Ser Gly Thr Ala Gly Gln Ser Phe Gly Val Trp Asn 1285 \hspace{1cm} 1290 \hspace{1cm} 1295
Gly Lys Gly Met Ala Gly Gly Leu Leu Ala Val Arg Pro Pro Val Gly
1315 1320 1325
Ser Ala Phe Arg Ser His Glu Ala Ser Ile Ile Gly Asn Thr Cys Leu
1330 1340
Tyr Gly Ala Thr Gly Gly Arg Leu Phe Ala Ala Gly Arg Ala Gly Glu
1345 1350 1355 1360
Arg Phe Ala Val Arg Asn Ser Gly Ala Ile Thr Val Val Glu Gly Ile
1365 1370 1375
Gly Lys Thr Gly Val Asn Phe Gly Ala Gly Met Thr Gly Gly Phe Ala
 1395 1400 1405
Tyr Val Leu Asp Glu Asp Gly Glu Phe Arg Lys Arg Val Asn Pro Glu
 1410 1415 1420
Leu Val Glu Val Leu Asp Val Asp Thr Leu Ala Ile His Glu Glu His
1425 1430 1435 1440
Leu Arg Gly Leu Ile Thr Glu His Val Gln His Thr Gly Ser Ser Arg
1445 1450 1450
Gly Glu Glu Ile Leu Ala Asn Trp Pro Ala Phe Ser Ala Lys Phe Ala
       1460 1465 1470
Leu Val Lys Pro Lys Ser Ser Asp Val Lys Ala Leu Leu Gly His Arg
 1475 1480 1485
Ser Arg Ser Ala Ala Glu Leu Arg Val Gln Ala Gln
         1495
<210> 7881
<211> 476
<212> PRT
<213> Enterobacter cloacae
<400> 7881
Gly Ile Gln Met Ser Gln Asn Val Tyr Gln Phe Ile Asp Leu Gln Arg
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                             15
Val Asp Pro Pro Lys Lys Pro Leu Lys Ile Arg Lys Ile Glu Phe Val
                 25
                          30
      20
Glu Ile Tyr Glu Pro Phe Ser Glu Gly Gln Ala Lys Ala Gln Ala Asp
     35 40
Arg Cys Leu Ser Cys Gly Asn Pro Tyr Cys Glu Trp Lys Cys Pro Val
```

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His Asn Tyr Ile Pro Asn Trp Leu Lys Leu Ala Asn Glu Gly Arg Ile
              7.0
Phe Glu Ala Ala Glu Leu Ser His Gln Thr Asn Thr Leu Pro Glu Val
           85
                          90
Cys Gly Arg Val Cys Pro Gln Asp Arg Leu Cys Glu Gly Ser Cys Thr
                       105
Leu Asn Asp Glu Phe Gly Ala Val Thr Ile Gly Asn Ile Glu Arg Tyr
     115
                    120
Ile Asn Asp Lys Ala Phe Glu Met Gly Trp Arg Pro Asp Met Thr Gly
        135 140
Val Arg Gln Thr Asp Lys Arg Val Ala Ile Ile Gly Ala Gly Pro Ala
      150 155 160
Gly Leu Ala Cys Ala Asp Val Leu Thr Arg Asn Gly Val Lys Ala Val
          165 170 175
Val Phe Asp Arg His Pro Glu Ile Gly Gly Leu Leu Thr Phe Gly Ile
        180 185 190
Pro Ala Phe Lys Leu Glu Lys Glu Val Met Thr Arg Arg Arg Glu Ile
 195 200 205
Phe Thr Gly Met Gly Ile Glu Phe Lys Leu Asn Thr Glu Val Gly Arg
 210 215 220
Asp Val Gln Leu Asp Asp Leu Leu Lys Asp Tyr Asp Ala Val Phe Leu
225 230 235 240
Gly Val Gly Thr Tyr Gln Ser Met Arg Gly Gly Leu Glu Asn Glu Asp
        245 250 255
Ala Pro Gly Val Tyr Asp Ala Leu Pro Phe Leu Ile Ala Asn Thr Lys
       260 265 270
Gln Leu Met Gly Tyr Gly Glu Thr Ala Asp Glu Pro Phe Val Ser Met
275 280 285
Glu Gly Lys Arg Val Val Leu Gly Gly Gly Asp Thr Ala Met Asp
290 295 300
Cys Val Arg Thr Ser Ile Arg Gln Asn Ala Ala His Val Ile Cys Ala
305 310 315
Tyr Arg Arg Asp Glu Glu Asn Met Pro Gly Ser Lys Arg Glu Val Lys
     325 330 335
Asn Ala Arg Glu Glu Gly Val Glu Phe Gln Phe Asn Ile Gln Pro Leu
       340 345 350
Gly Ile Glu Val Asn Ala Asn Gly Lys Val Ser Gly Val Lys Met Ala
   355 360 365
Arg Thr Glu Met Gly Ala Pro Asp Ala Lys Gly Arg Arg Ala Glu
  370 375
                              380
Ile Val Ala Gly Ser Glu His Val Ile Pro Ala Asp Ala Val Val Met
385 390 395
Ala Phe Gly Phe Arg Pro His Ser Met Glu Trp Leu Ala Lys His Ser
     405 410
Val Glu Leu Asp Ser Gln Gly Arg Ile Ile Ala Pro Glu Gly Ser Asp
       420 425
                                     430
Asn Ala Phe Gln Thr Ser Asn Pro Lys Ile Phe Ala Gly Gly Asp Ile
    435 440 445
Val Arg Gly Ser Asp Leu Val Val Thr Ala Ile Ala Glu Gly Arg Lys
 450 455 460
Ala Ala Glu Gly Ile Met Asn Phe Leu Glu Val
              470
<210> 7882
<211> 555
<212> PRT
<213> Enterobacter cloacae
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<400> 7882

Thr Lys Phe Trp Glu Thr Met Ser Arg Phe Phe Phe Asn Asp Arg Lys $1 \ 5 \ 10 \ 15$

Gln Leu Val Asn Asp Ala Ile Glu Gly Ile Leu Leu Ser Ala Pro His Gly Asn Leu Val Lys Leu Asp Ile Asp Pro Ala Ile Arg Val Val Ala Arg Gly Asp Trp Asp Lys Ser Arg Val Ala Val Ile Ser Gly Gly Gly 5.5 60 Ser Gly His Glu Pro Ala His Ala Gly Phe Val Gly Lys Gly Met Leu 70 75 Thr Ala Ala Val Cys Gly Asp Leu Phe Ala Ser Pro Ser Val Asp Ala 8.5 90 Val Leu Asn Ala Ile Val Ala Val Thr Gly Asp Arg Gly Cys Leu Leu 100 105 110 Ile Val Lys Asn Tyr Thr Gly Asp Arg Leu Asn Phe Gly Leu Ala Ala 115 120 125 Glu Lys Ala Lys Arg Tyr Gly Leu Lys Val Glu Met Val Ile Val Ala 135 140 Asp Asp Ile Ala Leu Pro Asp Asn Lys Gln Pro Arg Gly Ile Ala Gly 150 155 Thr Ala Leu Val His Lys Ile Ala Gly Tyr Ala Ala Glu Gln Gly Lys 165 170 175 Ser Leu Asn Asp Val Arg Asp Ile Ala Gin Gin Ala Cys Asp Asn Leu 180 185 190 Trp Ser Leu Gly Val Ala Met Gln Thr Cys Asn Leu Pro Gly Ser Asp 195 200 205 Asp Glu Gly Gly Arg Ile Lys Gln Gly His Val Glu Leu Gly Leu Gly 210 215 220 Ile His Gly Glu Pro Gly Ala Ser Val Val Asp Thr Gln Asn Ser Lys 225 230 235 240Ala Ile Ile Asp Thr Leu Val Thr Pro Leu Arg Ala Gln Ala Gly Glu 245 250 255 Gly Arg Phe Ala Val Leu Ile Asn Asn Leu Gly Gly Val Ser Ala Leu 260 265 270 Glu Met Ala Leu Leu Thr Lys Glu Leu Ala His Ser Ala Leu Lys Glu 280 285 Asn Ile Ala Tyr Leu Ile Gly Pro Ala Pro Leu Val Ser Ala Leu Asp 295 300 Met Lys Gly Phe Ser Leu Thr Leu Leu Lys Leu Asn Asp Phe Phe Glu 310 315 Lys Ala Ile His Ala Glu Val Glu Thr Leu Gly Trp Gln Lys Pro Val 325 330 Ala Phe Ala Pro Leu Arg Thr Val Pro His Ser Ala Leu His Asp Arg 345 350 Val Glu Tyr Ala Pro Ser Asp Asn Thr Glu Val Ser Glu Ala Val Ala 355 360 365 Ser Val Thr Lys Thr Leu Ile Gln Leu Glu Asn Arg Leu Asn Ala Leu 375 380 Asp Ala Lys Val Gly Asp Gly Asp Thr Gly Ser Thr Phe Ala Gln Gly 390 395 Ala Arg Asp Ile Thr Gln Arg Leu Glu Glu Asn Asn Leu Pro Leu Asn 405 410 Asp Val Pro Thr Leu Leu Leu Val Gly Glu Arg Leu Ala Thr Val 420 425 430 Met Gly Gly Ser Ser Gly Val Leu Met Ser Ile Phe Phe Thr Ala Ala 435 440 Gly Gln Lys Leu His Asp Gly Gln Pro Leu Pro Glu Ala Leu Leu Ser 450 455 460 Gly Leu Ala Gln Met Lys Gln Tyr Gly Gly Ala Asp Leu Gly Asp Arg 465 470 475 Thr Leu Ile Asp Ala Leu Gln Pro Ala Leu Glu Ala Leu Gln Lys Gly 485 490 Asn Ile Gln Ala Ala Gln Ala Ala Gln Gln Gly Ala Glu Ala Thr

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505
Ala Lys Met Ala Lys Ala Gly Ala Gly Arg Ser Ser Tyr Val Asn Lys
     515
                    520
                                  525
Glu Asn Leu Asp Gly Val Met Asp Pro Gly Ala Val Ala Val Ala Glu
 530 535
Val Phe Lys Thr Met Val Asp Ala Lys Arg
<210> 7883
<211> 344
<212> PRT
<213> Enterobacter cloacae
<400> 7883
Lys Pro Ser Arg Ala Ile Asp Pro Gly His Arg Arg Gln Arg Leu Lys
                          1.0
Met Ala Gly Leu Ser Pro Phe Phe Gly Thr Val Tyr Gln Ile Met Gln
        20 25
Leu Gln Lys Leu Val Asn Met Phe Gly Gly Asp Leu Leu Gln Arg Tyr
35
          40
Gly Gln Lys Val His Lys Leu Thr Leu His Gly Gly Phe Ser Cys Pro
50 55 60
Asn Arg Asp Gly Thr Ile Gly Arg Gly Gly Cys Thr Phe Cys Asn Val
     70
                             75
Ala Ser Phe Ala Asp Glu Ala Gln Gln His Lys Ser Ile Ala Glu Gln
      8.5
                          90
Leu Ala His Gln Ala Ser Leu Val Asn Arg Ala Lys Gln Tyr Leu Ala
        100 105 110
Tyr Phe Gln Ala Tyr Thr Ser Thr Trp Ala Glu Val Gln Val Leu Arg
 115 120 125
Ser Met Tyr Gln Gln Ala Val Ala Gln Ala Asn Ile Val Gly Leu Cys
 130 135 140
Val Gly Thr Arg Pro Asp Cys Val Pro Asp Ala Val Leu Asp Leu Leu
145 150 155
Ser Glu Tyr Lys Glu Lys Gly Tyr Glu Ile Trp Leu Glu Leu Gly Leu
         165 170 175
Gln Thr Ala His Asp Lys Thr Leu His Arg Ile Asn Arg Gly His Asp
        180
                       185
                                       190
Phe Ala Cys Tyr Gln Arg Thr Thr Arg Leu Ala Arg Gln Arg Gly Leu
     195
                    200
                                    205
Lys Val Cys Ser His Leu Ile Val Gly Leu Pro Gly Glu Gly Arg Gln
210 215 220
His Gly Leu Glu Thr Leu Glu Lys Val Val Glu Thr Gly Val Asp Gly
225 230 235 240
Ile Lys Leu His Pro Leu His Ile Val Lys Gly Ser Ile Met Ala Lys
           245
                          250 255
Ala Trp Glu Ala Gly Arg Leu Cys Gly Ile Glu Leu Asp Asp Tyr Thr
        260
                       265
                                      270
Val Thr Ala Gly Glu Met Ile Arg His Thr Pro Pro Glu Ile Val Tyr
                     280
                                   285
His Arg Ile Ser Ala Ser Ala Arg Arg Pro Thr Leu Leu Ala Pro Leu
  290 295
                                 300
Trp Cys Glu Asn Arg Trp Thr Gly Met Leu Glu Ile Asn Arg Tyr Leu
305 310 315
Gln Glu Asn Gly Val Gln Gly Ser Ala Leu Gly Arg Pro Trp Val Pro
           325
                          330
Pro Leu Pro Ala Thr Ala Ala
        340
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<210> 7884 <211> 316

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<212> PRT
<213> Enterobacter cloacae
<400> 7884
Gln Thr Ser Gln His Ala Ala Tyr Tyr Leu Val Gly Asn Leu Thr Arg
Arg Ala Phe Cys His Gly Leu Asn His Ala Ile Ala Phe Ala Ala Ala
       20
                        25
                                        30
Trp Pro Gly Ala Ala Glu Gln Asn Ile Phe Gln Pro Ala Glu Asn Ala
 35
                4.0
                                    45
Val Val His Gly Asn Arg Leu Pro Phe Cys Gly Arg Arg Ile Leu Arg
 50 55
                                  60
Phe Gly Ser Arg Leu His Pro Phe Leu Gln His Leu Glu Arg Arg Phe
         70
                   7.5
Ala Ile His Leu Val Phe Ile Leu Ser Val His Arg Gly Val Val Asn
                           90
          85
Gln Ala Val Ala Phe Ile Val Arg Tyr Arg Thr His Ala Arg Ala Gly
        100
                        105
                                       110
Arg Asn His His Arg Ala Leu Asp Asn Cys Arg Ala Ala Phe Cys Ile
 115 120
Glu Glu Arg Asn Gln Arg Phe Thr Gly Ala Gln Arg Leu Asn Gly Gly
130 135 140
Phe Gly Ile Lys Gly Arg Ile Asp Thr His Gly Leu Arg Arg Gly Phe
                              155
145 150
His Arg Phe Leu Ile Phe Arg Arg Lys Gly Ala Gln Gly Val Leu His
      165
                           170 175
Ala Val Thr Gln Leu Pro Gln Tyr Val Val Arg Asn Ile Arg Arg Val
 180 185 190
Leu Arg His Lys Pro Asp Pro Asp Ala Phe Gly Ala Asp Gln Ala Asp
 195 200
Asn Leu Phe Asn Phe Ile Gln Gln His Leu Arg Arg Val Val Lys Gln
 210
                215 220
Gln Val Arg Phe Val Lys Glu Glu His Gln Phe Gly Phe Phe Gln Ile
225 230
                              235
Ala Cys Phe Arg Gln Leu Phe Val Gln Phe Arg Glu His Pro Gln Gln
           245
                           250 255
Ala Gly Gly Val Lys Leu Arg His Leu Val Glu Leu Leu Cys Ala Gln
       260
                        265 270
Asn Val Asp Asp Ala Phe Ala Ala Ala Val Gly Thr His Pro Val Phe
     275
                     280
Asp Ile Gln His Trp Leu Ala Glu Glu Val Phe Gly Ala Leu Leu Leu
 290 295 300
Gln Arg Gln Glu Pro Ala Leu Asn Gly Ala His
              310
<210> 7885
<211> 225
<212> PRT
<213> Enterobacter cloacae
<400> 7885
Gln Met Lys Lys Val Val Leu Ala Ser Met Leu Val Met Phe Val Ser
                            10
Ser Ala Phe Ala Ala Asp Thr Ala Val Leu Lys Val Thr Gly Val Leu
        20
                        25
                                        30
Thr Asn Ser Ser Cys Ile Pro Glu Ile Ser Gly Gly Gly Val Val Asp
   35
                    40
Tyr Gly Thr Ile His Leu Ser Ala Leu Asn Thr Thr Ala Ile Asn Gln
                5.5
Leu Gly Gln Lys Asp Phe Ser Leu Ser Ile Thr Cys Pro Ala Leu Thr
              7.0
```

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Lys Ala Gly Phe Ser Val Ser Asp Asp Arg Thr Gly Thr Ala Pro Asn
Ile Met Val Lys Asp Gly Ala Gly Asn Gly Asn Asp Ile Ile Gln Pro
          100
                            105
                                              110
Leu Asn Met Phe Gly Leu Asn Lys Thr Ala Gly Asn Val Asn Ile Gly
                      120
                             125
Asn Tyr Thr Ile Phe Val Lys Asn Asp Thr Ile Thr Ala Asp Gly Ala
   130
           135
                         140
Thr Val Gly Ala Ile Tyr Ser Ala Asp Asn Gly Thr Ser Trp Ser Asp
    150 155
Asn Gly Thr Leu Met Val Asn Asp Gly Ser Gln Ile Val Ser Val Ala
        165 170 175
Thr Val Gly Ser Thr Ala Pro Val Ala Phe Lys Asn Leu Val Ile Pro
          180 185 190
Met Ala Val Ser Ala Ala Ile Gln Asp Thr Asn Thr Leu Ala Ile Thr
  195 200
                              205
Asp Asp Thr Asn Met Asp Gly Gln Ala Thr Phe Thr Ile Lys Tyr Leu
225
<210> 7886
<211> 180
<212> PRT
<213> Enterobacter cloacae
<400> 7886
Leu Pro Gly Thr Gln Thr Ser Arg Gly Tyr Glu Ile Met Ser Thr Ala
                               10
Lys Leu Val Lys Thr Lys Ala Ser Asn Leu Leu Tyr Thr Arg Asn Asp
          20
                                             30
Val Ser Asp Ser Asp Lys Lys Ala Thr Ile Glu Leu Leu Asn Arg Gln
 3.5
                       4.0
                                         45
Val Val Gln Phe Ile Asp Leu Ser Leu Ile Thr Lys Gln Ala His Trp
                     55
                                      60
Asn Met Arg Gly Ala Asn Phe Ile Ala Val His Glu Met Leu Asp Gly
                                 75
                 70
                                                    80
Phe Arg Thr Ala Leu Val Thr His Leu Asp Thr Met Ala Glu Arg Ala
             85
                               90
Val Gln Leu Gly Gly Val Ala Leu Gly Thr Thr Gln Val Ile Asn Ser
          100
                            105
                                              110
Lys Thr Pro Leu Lys Ser Tyr Pro Leu Asp Ile His Thr Val Gln Asp
      115
                        120
His Leu Lys Glu Leu Ala Asp Arg Tyr Ala Ile Val Ala Asn Asp Val
                     135
                                      140
Arg Lys Ala Ile Gly Glu Ala Lys Asp Glu Asp Thr Ala Asp Ile Phe
                 150
                                   155
Thr Ala Ala Ser Arg Asp Leu Asp Gln Phe Leu Trp Phe Ile Glu Ser
              165
                               170
Asn Ile Glu
          180
<210> 7887
<211> 247
<212> PRT
<213> Enterobacter cloacae
<400> 7887
Lys Lys Asp Glu Asn Pro Val Ile Glu Phe Lys Asn Val Ser Lys His
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Phe Gly Pro Thr Gln Val Leu His Asn Ile Asp Leu Asn Ile Arg Gln

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Gly Glu Val Val Ile Ile Gly Pro Ser Gly Ser Gly Lys Ser Thr
     35
                    40
Leu Leu Arg Cys Ile Asn Lys Leu Glu Glu Ile Thr Ser Gly Asp Leu
                                60
Ile Val Asp Gly Leu Lys Val Asn Asp Pro Lys Val Asp Glu Arg Leu
                           75
Ile Arg Gln Glu Ala Gly Met Val Phe Gln Gln Phe Tyr Leu Phe Pro
           8.5
                     90
                              95
His Leu Thr Ala Leu Glu Asn Val Met Phe Gly Pro Leu Arg Val Arg
       100 105
Gly Ala Ser Lys Ala Ala Ala Glu Ala Leu Ala Lys Asp Leu Leu Ala
    115 120
                        125
Lys Val Gly Leu Ala Glu Arg Ala His His Tyr Pro Ser Glu Leu Ser
 130 135 140
Gly Gly Gln Gln Arg Val Ala Ile Ala Arg Ala Leu Ala Val Lys
145
    150 155
Pro Lys Met Met Leu Phe Asp Glu Pro Thr Ser Ala Leu Asp Pro Glu
        165 170 175
Leu Arg His Glu Val Leu Lys Val Met Gln Asp Leu Ala Glu Glu Gly
 180 185 190
Met Thr Met Val Ile Val Thr His Glu Ile Gly Phe Ala Glu Lys Val
195 200 205
Ala Ser Arg Leu Ile Phe Ile Asp Lys Gly Arg Ile Ala Glu Asp Gly
210 215
                     220
Asn Pro Gln Thr Leu Ile Ala Asn Pro Pro Ser Gln Arg Leu Gln Glu
225 230
                             235
Phe Leu Gln His Val Ser
           245
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<210> 7888 <211> 776 <212> PRT

<213> Enterobacter cloacae

<220> <221>UNSURE <222>(539)

<400> 7888 Pro His Thr Glu Pro Gly Met Pro Gly Phe Phe Met Pro Asp Cys Ser 10 Gln Lys Leu Pro Ser Ala Pro Arg Ala Leu Tyr Leu Ser Phe Cys Thr 25 Ile Phe Leu Ser Glu Asp Ala Val Pro Trp Ile Leu Leu Leu Phe 4.0 Ser Leu Phe Ser Ala Pro Ser Leu Ala Val Thr Leu Pro Gly Val Thr 55 Thr Gly Ala Thr Ala Ser Gln Gln Asn Ala Pro Pro Glu Pro Asp Ala 70 75 Glu Lys Lys Lys Ala Ala Tyr Gly Ala Leu Ala Asp Val Leu Glu Asn 8.5 90 Asp Thr Ser Arg Gln Glu Leu Ile Asp Gln Leu Arg Lys Val Ala Ala 100 105 Thr Pro Pro Gln Asp Pro Val Pro Ala Val Ala Pro Pro Glu Ala Glu 115 120 Glu Glu Lys Thr Val Leu Glu Asn Val Thr Asp Ile Ser Arg Arg Tyr 135 140 Gly Glu Ala Leu Ser Ser Arg Phe Ala Gln Leu Tyr Arg Asn Leu Val 150 155 Gly Thr Ser His Lys Pro Phe Asn Pro His Thr Phe Ser Ala Ala Ala

170 Thr Gln Phe Ala Ile Leu Ala Gly Ala Val Phe Ile Phe Tyr Trp Leu 180 185 190 Leu Arg Leu Ser Val Trp Pro Leu Tyr Arg Lys Met Gly Gln Trp Gly 195 200 205 Arg Lys Lys Asn Gln His Lys Ser Ser Trp Leu His Leu Pro Ala Met 215 220 Ile Thr Gly Ala Phe Val Ile Asp Leu Leu Leu Leu Ala Leu Thr Leu 230 235 240 Phe Val Gly Gln Leu Leu Ala Asp Arg Leu Asn Thr Gly Asn Lys Thr 245 250 255 Ile Ala Phe Gln Gln Gly Leu Phe Leu Asn Ala Phe Ala Leu Ile Glu 260 265 270 Phe Phe Lys Ala Leu Leu Arg Leu Ile Phe Cys Pro Arg Val Pro Asp 275 280 285 Leu Arg Pro Phe Ala Ile Ser Asp Gln Ser Ala Lys Tyr Trp Ala Val 290 295 300 Arg Leu Ser Val Leu Ser Gly Leu Ile Gly Tyr Gly Leu Leu Val Ala 305 310 315 Val Pro Ile Ile Ser Asn Gln Val Asn Val Gln Phe Gly Ala Leu Ala 325 330 335 Asn Val Leu Ile Met Leu Cys Ile Thr Val Trp Ala Leu Tyr Leu Ile 340 345 350 Phe His Asn Lys Lys Ala Ile Thr Asp Ser Leu Leu His Leu Ala Asp 355 360 365 Arg Ser Leu Ser Phe Phe Ser Leu Phe Ile Arg Ala Phe Ala Leu Val 370 375 380 Trp His Trp Leu Ala Ser Ala Tyr Phe Ile Val Leu Cys Phe Phe Ser 385 390 395 Leu Phe Asp Pro Gly Asn Ser Leu Lys Phe Met Met Gly Ala Thr Phe 405 410 Lys Ser Leu Ala Ile Ile Gly Ile Ala Ala Phe Val Ser GIy Leu Leu 420 425 430 Ser Arg Trp Leu Ser Lys Thr Ile Thr Leu Ser Pro Gln Val Gln Arg 435 440 445 Asn Tyr Pro Glu Leu Gln Lys Arg Val Asn Gly Trp Met Thr Val Ser 450 455 460 Leu Lys Val Ala Arg Ile Leu Thr Val Cys Val Ala Ile Met Leu Leu 465 470 475 Leu Asn Ala Trp Gly Leu Phe Asp Phe Trp Asn Trp Leu His Asn Gly 485 490 495 Ala Gly Glu Lys Thr Val Asp Ile Leu Ile Arg Ile Ala Leu Ile Leu 505 510 Phe Phe Ser Ala Val Gly Trp Thr Leu Leu Ala Ser Leu Ile Glu Asn 515 520 Arg Leu Val Ser Asp Val His Gly Arg Pro Xaa Pro Ser Ala Arg Ala 530 535 540 Arg Thr Leu Leu Thr Leu Cys Arg Asn Ala Leu Ala Val Ile Ile Ser 545 550 555 Thr Ile Thr Ile Met Ile Val Leu Ser Glu Ile Gly Val Asn Ile Ala 565 570 Pro Leu Leu Ala Gly Ala Gly Ala Leu Gly Leu Ala Ile Ser Phe Gly 590 580 585 Ser Gln Thr Leu Val Lys Asp Ile Ile Thr Gly Ile Phe Ile Gln Phe 595 600 Glu Asn Gly Met Asn Thr Gly Asp Leu Val Thr Ile Gly Pro Leu Thr 610 615 Gly Thr Val Glu Arg Met Ser Ile Arg Ser Val Gly Val Arg Gln Asp 625 630 635 Thr Gly Ala Tyr His Ile Ile Pro Trp Ser Ser Ile Thr Thr Phe Ala

650

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Asn Phe Val Arg Gly Ile Gly Ser Val Val Ala Asn Tyr Asp Val Asp
          660
                           665
Arg His Glu Asp Ala Asp Lys Ala Lys Gln Ala Leu Arg Asp Ala Val
                        680
Asn Glu Leu Met Glu Met Glu Asp Ile Arg Gly Leu Val Ile Gly Glu
 690 695
                                       700
Pro Ser Phe Ala Gly Ile Val Gly Leu Thr Asn Thr Ala Phe Thr Leu
                710
                                  715
Arg Val Ser Phe Thr Thr Gln Pro Leu Lys Gln Trp Thr Val Arg Phe
           725
                  730
                                   735
Ala Leu Asp Ser Met Val Lys Lys His Phe Asp Leu Ala Asn Val Arg
          740 745 750
Ala Pro Val Gln Thr Tyr Gln Val Leu Ser Pro Pro Ala Ser Pro Leu
   755 760
Pro Pro Gln Glu Pro Thr Leu
<210> 7889
<211> 100
<212> PRT
<213> Enterobacter cloacae
<400> 7889
Glu Glu Ser Pro Val Val Ser Pro Glu Asp Val Ile Met Lys Lys Tyr
                            10
Leu Thr Phe Ile Ile Ala Gly Ala Leu Ala Gly Ala Ser Phe Ser Ala
 20
                        25
Trp Ser Val Gln Pro Leu Thr Asp Ser Asn Asp Thr Ser Gln Leu Arg
35
                      40 45
Ala Ala Gly Thr Val Ser Val Ser Arg Ala Ser Asn Leu Asp Asp Leu
                  55
Gln Asn Lys Leu Ala Glu Lys Ala Arg Gln Glu Gly Ala Lys Gly Phe
          70 75
Val Val Asn Ala Ala Gly Gly Asp Asn His Met Tyr Gly Thr Ala Thr
Ile Tyr Lys
<210> 7890
<211> 861
<212> PRT
<213> Enterobacter cloacae
<400> 7890
Thr Arg Ser Leu Ile Val Leu Pro Gly Asn Lys Ile Ile Met Tyr Ser
                              1.0
                                              15
His Lys Lys Pro Phe Thr Cys Arg Phe Ser Ser Leu Leu Met Ala Ile
         20
                           25
Cys Cys Leu Ala Met Ala Ile Phe Ala Gln Gln Val Leu Ala Asp Asp
                        40
Tyr Phe Asn Pro Ala Leu Leu Asp Ile Asp Asn Pro Gln Gln Gly Lys
                    5.5
                            60
Thr Asp Leu Ser Val Tyr Glu Lys Gly Pro Gly Gln Ala Pro Gly Lys
                 70
                                  75
Tyr Gln Val Ala Ile Phe Ile Asn Asn Asn Lys Ile Asp Thr Arg Asp
             8.5
                               90
Val Thr Phe Asn Leu Val Lys Asp Pro Gln Gly Thr Ser Thr Leu Gln
         100
                           105
                                             110
Pro Cys Phe Thr Leu Asp Glu Leu Lys Ser Leu Gly Ile Lys Thr Gln
                       120
Lys Tyr Pro Gln Leu Arg Ala Lys Gly Gln Cys Ala Asp Leu His Ala
```

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135
Ile Pro Ser Ala Ser Ala Thr Phe Arg Val Arg Asn Gln Gln Leu Leu
        150
                155
Leu Ser Ile Pro Gln Lys Ala Leu Gly Gln Val Pro Arg Gly Tyr Ile
       165 170 175
Asp Pro Lys Glu Phe Asp Glu Gly Ile Asn Ala Gly Leu Leu Asn Tyr
    180 185 190
Ser Val Asn Ala Ser Gln Ser His Ala Arg Gln Gln Gly Glu Glu Asn
195 200 205
Ser Ser Ser Gln Tyr Val Asn Leu Arg Pro Gly Phe Asn Ile Gly Ala
210 215 220
Trp Arg Val Arg Asn Tyr Ser Thr Trp Asn Arg Ser Thr Thr Gly His
225 230 235 240
Glu Glu Glu Gln Lys Phe Thr Ser Val Tyr Thr Tyr Ala Gln Arg Asp
       245 250 255
Ile Val Ala Met Lys Ser Asp Val Thr Val Gly Gln Ser Thr Ser Pro
     260 265 270
Ser Asp Val Phe Asp Ser Val Pro Tyr Thr Gly Val Glu Leu Lys Ser
275 280
                      285
Asp Ser Asp Met Leu Pro Asp Ser Glu Lys Gly Tyr Ala Pro Ile Ile
290 295 300
Arg Gly Ser Ala His Ser Asn Ala Gln Val Val Val Arg Gln Asn Gly
305 310 315 320
Tyr Ile Ile Tyr Gln Asn Thr Val Ala Pro Gly Ala Phe Glu Ile Asn
       325 330 335
Asp Leu Tyr Pro Thr Gly Ser Ser Gly Asp Leu Gln Val Thr Val Lys
 340 345 350
Glu Thr Asp Gly Ser Glu Ser His Phe Val Val Pro Phe Ala Ser Val
355 360
                     365
Pro Val Leu Gln Arg Glu Lys Asn Leu Arg Tyr Ser Val Thr Ala Gly
370 375
                           380
Arg Tyr Arg Ser Tyr Asp Lys Asp Val Glu Lys Thr Pro Phe Ala Gln
385 390 395
Val Gln Gln Ser Asn His Tyr Gln Ser Gln Ala Ile Gly Ala Gly Lys
      420
           425
Asn Met Gly Asp Leu Gly Ala Phe Ser Ile Asp Val Thr Arg Ala Arg
435 440
                     445
Ala Leu Leu Lys Lys Gln Gln Ser Ser Lys Gly Gln Ser Trp Arg Ile
450 455 460
Arg Tyr Ser Lys Asp Phe Ala Gly Ser Gly Thr Asn Phe Thr Leu Ala
   470 475 480
465
Gly Tyr Arg Tyr Asn Ser Lys Gly Phe Tyr Thr Leu Asp Asp Thr Met
          485 490 495
Glu Ser Tyr Thr Arg Ser Asp Asn Trp Ser Ala Pro Gln Gln Arg Arg
       500 505 510
Ala Arg Thr Glu Ala Thr Ile Asp Gln Thr Leu Pro Glu Gly Trp Gly
                520 525
Ser Val Thr Leu Ser Met Val Lys Glu Thr Tyr Trp Ser Gln Ser Gln
     535
                             540
530
Asn Met Thr Ser Met Ser Val Ser Tyr Asn Asn Ser Trp His Gly Val
545 550 555
Ser Tyr Ser Leu Ser Tyr Ser Met Asn Lys Asn Thr Gln Asp Ser Asp
                                     575
          565
              570
Glu Asp Gly Asn Glu Val Thr Asn Asp Asn Gln Phe Ser Leu Ser Val
        580
           585 590
Ser Val Pro Leu Asp Arg Trp Met His Asn Thr Trp Ala Thr Tyr Asn
     595 600
                               605
Leu Asn Asn Thr Lys Asp Gly Thr Thr Gln Asn Ile Gly Leu Asn Gly
  610
               615
                             620
```

```
Thr Ala Leu Lys Glu Asp Asn Leu Asn Trp Asn Ile Gln Glu Gly Leu
                 635
   630
Ser Ser Thr Gly Ser Gly Asn Ser Thr Ser Ile Asn Ala Asp Tyr Lys
          645
                        650
Ala Thr Tyr Gly Glu Val Ser Ala Gly Val Ser Gln Asp Lys Tyr Gln
                     665
Gln Thr Leu Asn Val Gly Leu Gln Gly Gly Val Val Ala His Ala Asn
 675 680 685
Gly Ile Thr Leu Ser Gln Pro Leu Gly Asp Thr Ile Ala Leu Val Lys
690 695 700
Ala Pro Gly Thr His Gly Thr His Ile Thr Asn Gln Thr Gly Val Glu
705 710 715
Thr Asp Phe Arg Gly Tyr Thr Val Val Pro Phe Val Thr Ala Tyr Arg
    725 730 735
Arg Asn Thr Ile Ala Leu Asp Thr Glu Thr Leu Pro Asp Asn Ala Asp
  740 745 750
Val Thr His Ala Ala Gln Ile Val Thr Pro Thr Arg Gly Ala Val Val
755 760 765
Arg Ala Ser Phe Asn Thr Arg Val Gly Asn Arg Val Leu Met Thr Leu
770 775 780
Thr Gln Lys Gly Lys Pro Leu Pro Phe Gly Ala Thr Val Thr Thr Glu
785 790 795 800
Asp Lys Asp Ser Glu Phe Ile Val Gly Asn Asp Gly Gln Thr Tyr Leu
    805 810 815
Ser Gly Leu Pro Gln Gln Gly His Leu Tyr Val Ser Trp Gly Gln Gly
820 825 830
Ala Asn Glu His Cys Val Ala Asp Tyr Ala Leu Thr Asp Glu Lys Glu
835 840 845
Gln Thr Ser Ile Ile Asn Ala Ala Ala Gln Cys His
        855
```

<210> 7891 <211> 171 <212> PRT

<213> Enterobacter cloacae

<400> 7891 Val Thr Asn Met Lys Lys Thr Ile Ala Phe Leu Thr Met Gly Leu Leu 10 Ala Gln Ala His Ala Asp Asp Ile Gln Ile Gln Met Thr Gly Asn Ile 2.0 25 Tyr Ala Asn Thr Cys Ile Ile Asp Ser Ala Ser Arg Asn Leu Thr Val 40 Asp Leu Gly Gln Thr Val Ser Gly Ser Phe Lys Asp Val Gly Asp Thr 55 60 Gly Glu Trp Lys Asp Phe Ser Leu Ser Val Ser His Cys Pro Ala Thr 70 75 Leu Ala Leu Ala Thr Ala Phe Phe Tyr Gly Gln Ala Asp Ser Val His 85 90 Pro Thr Lys Phe Ala Asn Ile Gly Ser Ala Lys Gly Leu Ala Leu Glu 105 100 Leu Ala Asp Arg Gln Asp Lys Ile Leu Ile Ala Pro Gln Ala Ala Phe 115 120 125 Asn Ala Ala Ile Asn Pro Ser Asp His Thr Ala Thr Phe Leu Leu Ser 130 135 140 Ala Arg Tyr Tyr Ala Thr Ser Met Pro Val Thr Ala Gly Thr Phe Ser 150 155 Ser Val Ile Gln Val Thr Phe Thr Tyr Gln 165

<210> 7893 <211> 272 <212> PRT

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<211> 408
<212> PRT
<213> Enterobacter cloacae
<400> 7892
Lys Arg Arg Pro Pro Thr Thr Arg Ser Gln Thr Arg Pro Trp Ser Arg
Arg Leu Ser Pro Ser Ser Thr Thr Gly Ile Arg Arg Ile Leu Met Arg
      20
                      25
Ser Asn Ala Leu Ser Trp Arg Arg Val Arg Ala Leu Cys Val Lys Glu
  35
               40
Thr Arg Gln Ile Val Arg Asp Pro Ser Ser Trp Leu Ile Ala Val Val
 50 55
Ile Pro Leu Leu Leu Phe Ile Phe Gly Tyr Gly Ile Asn Leu Asp
65 70
                            75
Ser Ser Lys Leu Arg Val Gly Ile Leu Leu Glu Gln Gln Ser Glu Glu
               90 95
      8.5
Ala Leu Asp Phe Thr His Ala Met Thr Gly Ser Pro Tyr Ile Asp Ala
   100 105 110
Thr Ile Ser Asp Asn Arg Gln Glu Leu Ile Gln Lys Met Gln Ala Gly
115 120 125
Lys Ile Arg Gly Leu Ile Val Ile Pro Val Asp Phe Ala Ala Asn Met
 130 135 140
Ala Arg Ala Asn Thr Asp Ala Pro Ile Gln Val Ile Thr Asp Gly Ser
145 150 155 160
Glu Pro Asn Thr Ala Asn Phe Val Gln Gly Tyr Ala Glu Gly Ile Trp
         165 170 175
Gin Leu Trp Gln Met Gln Arg Ala Glu Asp Arg Gly Glu Glu Phe Glu
       180 185 190
Pro Leu Ile Asp Val Gln Thr Arg Tyr Trp Phe Asn Pro Ala Ala Ile
195 200 205
Ser Gln His Phe Ile Ile Pro Gly Ala Val Thr Ile Ile Met Thr Val
210 215 220
Ile Gly Ala Ile Leu Thr Ser Leu Val Ile Ala Arg Glu Trp Glu Arg
225 230
                            235 240
Gly Thr Met Glu Ala Leu Leu Ser Thr Glu Val Thr Arg Val Glu Leu
          245 250 255
Leu Leu Cys Lys Leu Ile Pro Tyr Tyr Phe Leu Gly Met Leu Ala Met
      260 265 270
Leu Leu Cys Met Leu Val Ser Val Phe Ile Leu Gly Val Pro Tyr Arg
 275 280 285
Gly Ser Leu Val Val Leu Phe Phe Ile Thr Ser Leu Phe Leu Leu Ser
 290 295
                              300
Thr Leu Gly Met Gly Leu Leu Ile Ser Thr Ile Thr Arg Asn Gln Phe
305 310 315
Asn Ala Ala Gln Val Ala Leu Asn Ala Ala Phe Leu Pro Ser Ile Met 325 330 335
Leu Ser Gly Phe Ile Phe Gln Ile Asp Ser Met Pro Ala Val Ile Arg
      340
                      345 350
Ala Val Thr Tyr Ile Ile Pro Ala Arg Tyr Phe Val Ser Thr Leu Gln
     355 360
Ser Leu Phe Leu Ala Gly Asn Ile Pro Val Val Leu Ile Ile Asn Thr
 370 375 380
Leu Phe Leu Met Ala Ser Ala Val Met Phe Ile Gly Leu Thr Trp Met
385 390
                            395
Lys Thr Lys Arg Arg Leu Asp
           405
```

<213> Enterobacter cloacae

```
<400> 7893
Asn Trp His Asp Phe Phe Ile Val Pro Glu Val Leu Ala Gly Asp Arg
Pro Val Asp Ile Lys Gly Asn Ala Met Lys Ser Val Leu Lys Val Ser
                        25
Leu Ala Ala Leu Thr Leu Ala Phe Ala Val Ser Ser Gln Ala Ala Asp
     35
                  40
Lys Leu Val Val Ala Thr Asp Thr Ala Phe Val Pro Phe Glu Phe Lys
                 55
                                 60
Gln Gly Asp Lys Tyr Val Gly Phe Asp Val Asp Leu Trp Ala Ala Val
               70
Ala Lys Glu Leu Lys Leu Asp Tyr Thr Leu Lys Pro Met Asp Phe Ser
          85
                         90
Gly Ile Ile Pro Ala Leu Gln Thr Lys Asn Val Asp Leu Ala Leu Ala
        100 105 110
Gly Ile Thr Ile Thr Glu Glu Arg Lys Lys Ala Ile Asp Phe Ser Asp
               120
     115
                          125
Gly Tyr Tyr Lys Ser Gly Leu Leu Val Met Val Lys Ala Asp Asn Asn
 130 135 140
Asp Val Lys Ser Val Lys Asp Leu Asp Gly Lys Val Val Ala Val Lys
    150 155
Ser Gly Thr Gly Ser Val Asp Tyr Ala Lys Ala Asn Ile Lys Thr Lys
           165 170 175
Asp Leu Arg Gln Phe Pro Asn Ile Asp Asn Ala Tyr Met Glu Leu Gly
        180 185 190
Thr Asn Arg Ala Asp Ala Val Leu His Asp Thr Pro Asn Ile Leu Tyr
195 200 205
Phe Ile Lys Thr Ala Gly Asn Gly Lys Phe Lys Ala Val Gly Asp Ser
210 215 220
Leu Glu Ala Gln Gln Tyr Gly Ile Ala Phe Pro Lys Gly Ser Asp Asp
225 230 235
Leu Arg Asn Lys Val Asn Gly Ala Leu Lys Thr Leu Lys Glu Asn Gly
      245 250 255
Thr Tyr Asn Glu Ile Tyr Lys Lys Trp Phe Gly Thr Glu Pro Lys
                        265
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<210> 7894 <211> 243 <212> PRT

<213> Enterobacter cloacae

<400> 7894

Arg Pro Val Ala Leu Thr Leu Thr Gly Pro Thr Phe Phe Val Phe His 10 His Gly Ile Gln Glu Tyr Ile Met Gln Phe Asp Trp Ser Ala Ile Trp 25 Pro Ala Ile Pro Leu Leu Glu Gly Ala Lys Met Thr Leu Trp Ile 4.0 4.5 Ser Val Leu Gly Leu Val Gly Gly Leu Ile Ile Gly Leu Val Ala Gly 5.5 60 Phe Ala Arg Thr Tyr Gly Gly Trp Ile Ala Asn His Ile Ala Leu Val 7.0 7.5 Phe Ile Glu Val Ile Arg Gly Thr Pro Ile Val Val Gln Val Met Phe 85 90 Ile Tyr Phe Ala Leu Pro Met Ala Phe Thr Asp Leu Arg Ile Asp Pro 1.00 105 110 Phe Ser Ala Ala Val Val Thr Ile Met Ile Asn Ser Gly Ala Tyr Ile 120 Ala Glu Ile Thr Arg Gly Ala Val Leu Ser Ile His Lys Gly Phe Ser

3785 135 Glu Ala Gly Leu Ala Leu Gly Leu Ser Arg Arg Glu Thr Ile Arg His 155 Val Ile Leu Pro Leu Ala Leu Arg Arg Met Leu Pro Pro Leu Gly Asn 165 170 Gln Trp Ile Ile Ser Ile Lys Asp Thr Ser Leu Phe Ile Val Ile Gly 180 185 190 Val Ala Glu Leu Thr Arg Gln Gly Gln Glu Ile Ile Ala Gly Asn Phe 195 200 205 Arg Ala Leu Glu Ile Trp Ser Ala Val Ala Val Val Tyr Leu Ile Ile 210 215 220 Thr Leu Val Leu Ser Phe Val Leu Arg Arg Leu Glu Arg Arg Met Lys 225 230 235 Ile Leu <210> 7895 <211> 194 <212> PRT <213> Enterobacter cloacae <400> 7895 Lys Arg Pro Gly Asn Val Phe Ala Arg Asn Ile Ser Gly Phe Thr Met 10 Asn Lys Val Ala Leu Gly Leu Phe Ile Ala Ala Thr Val Gly Cys Ser 20 2.5 Ala Ser Ala Phe Ala Ala Thr Asn Gly Glu Gly Gln Ile Asn Phe Thr 40 Gly Glu Ile Ile Asp Ser Ala Cys Gln Val Val Asn Gly Leu Ser Asn 50 55 Pro Leu Asp Val Gln Leu Gly Lys Val Ser Lys Thr Val Phe Thr Gly 70 75 Ala Gly Ser Thr Ser Thr Leu Thr Lys Phe Asp Ile Lys Leu Thr Asn 8.5 90 Cys Pro Glu Thr Val Thr Ser Ala Ala Ile Asn Phe Gly Gly Thr Pro 100 105 110 Asp Ala Asp Asn Asn Ala Ala Leu Ala Leu Thr Pro Asp Thr Asp Ala 120 125 Ala Thr Gly Val Ala Ile Gln Leu Val Asp Thr Ser Gly Gln Pro Val 135 140 Ser Leu Tyr Thr Pro Ser Lys Gln Tyr Pro Leu Ala Ser Gly Thr Ala 150 155 Val Asn Asp Leu Glu Phe Gly Ala Arg Tyr Ile Gln Thr Gln Ala Ala 165 170 175 Val Thr Ala Gly Pro Ala Asn Ser Val Ser Thr Phe Thr Val Ile Tyr 180 185 Asn <210> 7896 <211> 228 <212> PRT <213> Enterobacter cloacae

<400> 7896

Glu Ile Phe Met Arg His Gly Tyr Leu Leu Ser Ile Leu Leu Leu Val 10 15 Ala Ala Ser Ala Gln Ala Gly Val Val Ile Asn Gly Thr Arg Leu Val 20 25 Tyr Gln Gly Asp Lys Lys Glu Ser Ser Leu Gly Leu Ser Asn Pro Asp 4.0

Thr Thr Asp Tyr Leu Val Gln Ser Trp Val Asp Ser Gly Gly Lys Asn 55 Gln Ala Lys Ala Pro Phe Leu Ile Thr Pro Pro Leu Phe Arg Leu Asp 70 Ala Lys Glu Asp Asn Val Leu Arg Val Val Arg Thr Gly Gly Asn Leu 90 85 Pro Glu Asp Arg Glu Ser Leu Tyr Trp Leu Asn Ile Lys Ala Ile Pro 100 105 Ser Ser Lys His Val Glu Gly Val Asn Thr Leu Gln Ile Ala Ile Asn 115 120 Thr Arg Ile Lys Leu Leu Tyr Arg Pro Ser Ala Val Lys Gly Arg Pro 130 135 140 Glu Asp Val Ala Asp Lys Leu Glu Trp His Arg Glu Gly Asn Asp Leu 145 150 155 160 Val Val Asn Asn Pro Thr Pro Phe Phe Met Asn Phe Gln Thr Val Thr 165 170 175 Leu Asn Gly Gln Lys Val Lys Lys Ala Thr Trp Ala Val Pro Lys Thr 180 185 190 Glu Thr His Phe Ala Leu Pro Gly Asn Val Gly Gly Ser Thr Val Ala 195 200 205 Tyr Ser Ile Ile Thr Asp Tyr Gly Ser Ile Ser Gln Thr Trp Ser Lys 210 215 220 Pro Val His 225 <210> 7897 <211> 355 <212> PRT <213> Enterobacter cloacae <400> 7897 Arg Met Arg Lys Ser Lys Pro Ala Ser Leu Thr Leu Pro Arg Ser Val 1 5 10 Thr Asp Pro Pro Phe Arg Leu Thr Ile Met Gln Met Ile Lys Gln Cys 20 25 Phe Phe Leu Leu Val Leu Gly Thr Ala Ala Leu Phe Met Pro His Ala 35 40 45 Lys Ala Thr Cys Thr Thr Pro Asp Leu Pro Lys Met Ile Asn Met Ala 50 55 60 Ser Ile Ser Val Pro Thr Thr Leu Ala Val Gly Ala Thr Ile Pro Gly 65 70 75 Thr Glu Gln Ser Val His Val Ala Gly His Cys Asp Gln Ser Ile Asp 85 90 Ser Gly Leu Glu Ile Val Ser Cys Tyr Tyr Gly Thr Gly Ala Glu Ile 105 Pro Gly Leu Lys Gly Val Tyr Glu Ser Gly Val Pro Gly Val Gly Val 120 125 Ala Leu Met Asn Asp Gln Gly Gln Arg Ile Ser Gly Ala Gly Gly Val 130 135 140 Gln Cys Asp Ser Arg Gly Thr Pro Val Gly Tyr Val Ser Gly Asp Gly 145 150 155 160 Thr Gln Ser Phe Asn Phe Asp Val Thr Leu Glu Leu Val Lys Thr Ser 165 170 175 Asp Ala Val Thr Ser Gly Thr Leu Val Gln Ser Gln Thr Glu Phe Gly 180 185 190 Ile Gly Val Phe Gly His Glu Gly Ile Gly Ser Pro Asn His Ile Ala 200 205 195 Tyr Ala Gly Asn Val Ile Leu His Gln Val Thr Cys Ser Val Ser Pro 210 215 220 Lys Asn Leu Thr Val Asn Leu Gly Asp Phe Pro Val Ser Asp Phe Met

230

```
Ser Val Gly Phe Leu Ser Ser Pro Ala Gln Thr Phe Asn Ile Thr Val
            245
                            250
Asn Cys Asp Thr Thr Val Gln Pro Glu Leu Lys Ile Thr Ser Ala Asn
         260
                         265
Ser Tyr Glu Thr Ala Phe Glu Gly Val Ile Lys Leu Thr Lys Gln Thr
            280
                          285
      275
Gly Met Ala Thr Gly Val Gly Val Arg Met Leu Phe Asp Asp Arg Ile
                  295
Ala Thr Phe Asp Thr Tyr Val Asn Thr Gln Ser Gln Ala Val Ala Asn
      310 315
Glu Thr Leu Glu Ile Pro Phe Gln Val Arg Tyr Glu Gln Ile Ser Asp
        325 330 335
Val Val Thr Pro Gly Pro Ala Asn Thr Val Ala Thr Ile Thr Leu Ala
         340
               345
Tyr Lys
```

<210> 7898

<211> 345 <212> PRT

<213> Enterobacter cloacae

<400> 7898 Ser Asp Pro Ala Arg Leu Asn Ala Lys Glu Pro Glu Val Met Lys Lys 10 Pro Val Ala Ile Ile Leu Val Val Val Leu Leu Ala Ala Gly Thr 25 20 Gly Gly Trp Leu Trp Tyr Gln Ser Gln Gln Asp Arg Gly Leu Thr Leu 40 45 Tyr Gly Asn Val Asp Ile Arg Thr Val Asn Met Ser Phe Arg Val Gly 55 60 Gly Arg Leu Ala Ser Leu Asn Val Asp Glu Gly Asp Ala Ile Lys Ala 70 75 80 Gly Gln Thr Leu Gly Met Leu Asp Lys Ala Pro Phe Glu Asn Ala Leu 85 90 95 Met Gln Ala Lys Ala Gly Val Ser Val Ala Gln Ala Gln Tyr Asp Leu 100 105 110 Met Leu Ala Gly Tyr Arg Asp Glu Glu Ile Ser Gln Ala Ala Ala Ala 115 120 Val Lys Gln Ala Lys Ala Ala Tyr Asp Tyr Ala Gln Asn Phe Tyr Asn 130 135 140 Arg Gln Gln Gly Leu Trp Lys Ser Arg Thr Ile Ser Ala Asn Asp Leu 150 155 Glu Asn Ala Arg Ser Ser Arg Asp Gln Ala Gln Ala Thr Leu Lys Ser 165 170 175 Ala Gln Asp Lys Leu Ser Gln Tyr Arg Thr Gly Asn Arg Ala Gln Asp 185 Ile Ala Gln Ala Lys Ala Ser Leu Glu Gln Ala Gln Ala Gln Leu Ala 195 200 Gln Ala Glu Leu Asp Leu His Asp Thr Thr Leu Ile Ala Pro Ser Asp 215 220 Gly Thr Leu Met Thr Arg Ala Val Glu Pro Gly Ser Met Leu Ser Ala 230 235 Gly Ser Thr Val Leu Thr Leu Ser Leu Thr Arg Pro Val Trp Val Arg 245 250 Ala Tyr Ile Asp Glu Pro Asn Leu Gly Gln Met Gln Pro Gly Arg Glu 260 265 270 Leu Leu Leu Tyr Thr Asp Gly Arg Pro Asp Lys Pro Tyr His Gly Lys 275 280 285 Val Gly Phe Val Ser Pro Thr Ala Glu Phe Thr Pro Lys Thr Val Glu 290 295

```
Thr Pro Asp Leu Arg Thr Asp Leu Val Tyr Arg Leu Arg Ile Ile Val
305
                  310
                                     315
Thr Asp Ala Asp Asp Ala Leu Arg Gln Gly Met Pro Val Thr Val Thr
                                 330
              325
Leu Asn Asp Gly Glu Arg His Glu
           340
<210> 7899
<211> 95
<212> PRT
<213> Enterobacter cloacae
<400> 7899
Thr Asp Gln Glu Asn Met Met Ala Ser Gly Trp Ala Asn Asp Asp Ala
                                 10
             .5
Val Asn Glu Gln Ile Asn Ser Thr Ile Glu Asp Ala Val Ala Arg Ala
        20
                             25
                                                3.0
Arg Gly Glu Ile Pro Arg Gly Glu Ser Leu Thr Glu Cys Glu Glu Cys
      35
                      40
                                             45
Gly Asp Pro Ile Pro Glu Ala Arg Arg Lys Ala Ile Pro Gly Val Arg
 50 55 60
Leu Cys Ile Ala Cys Gln Gln Glu Lys Asp Ser Lys Asn Ala Thr His
                                     7.5
       70
Ser Gly Tyr Asn Arg Arg Gly Ser Lys Asp Ser Gln Leu Arg
<210> 7900
<211> 88
<212> PRT
<213> Enterobacter cloacae
<400> 7900
Pro Met Lys Thr Ile Lys Tyr Ala Val Ala Ala Val Ala Leu Ser Ala
                                 1.0
Leu Ser Phe Gly Ala Phe Ala Val Glu Pro Val Ser Ser Thr Gln Ala
 20
                             25
Gln Asp Leu Asn Lys Ile Gly Val Val Ser Ala Glu Gly Ala Thr Thr
     35
                         40
                                            4.5
Leu Asp Gly Leu Glu Ala Lys Leu Ala Glu Lys Ala Ala Ala Gly
                      55
                                        60
Ala Ser Gly Tyr Thr Ile Thr Ser Thr Asn Gly Asn Asn Lys Leu Ser
                  7.0
Gly Thr Ala Val Ile Tyr Lys
<210> 7901
<211> 232
<212> PRT
<213> Enterobacter cloacae
<400> 7901
Leu Ile Phe Asn Ala Ala Met Asn Thr Thr Pro Ala Thr Thr Lys Gly
                           10
Glu Gln Ala Lys Ser Gln Leu Ile Ala Ala Ala Leu Ala Gln Phe Gly
                             2.5
                                                30
Glu Tyr Gly Leu His Ala Thr Thr Arg Asp Ile Ala Ala Gln Ala Gly
      35
                          4.0
Gln Asn Ile Ala Ala Ile Thr Tyr Tyr Phe Gly Ser Lys Glu Asp Ser
                      55
Tyr Leu Ala Cys Ala Gln Trp Ile Ala Asp Phe Ile Gly Thr Ser Phe
                   7.0
                                     75
```

```
Arg Pro His Val Glu Glu Ala Thr Ala Leu Phe Ser Gln Pro Glu Pro
         85
Asp Arg Ala Ala Ile Arg Gln Leu Ile Leu Asn Ala Cys His Asn Met
        100
                     105
Ile Arg Leu Leu Thr His Asp Asp Thr Leu Asn Leu Ser Lys Phe Ile
     115
            120
                         125
Ser Arg Glu Gln Leu Ser Pro Thr Ala Ala Tyr Gln Leu Val His Asp
 130 135 140
Gln Val Ile Ala Pro Met His Ser His Leu Thr Arg Leu Ile Ala Ala
    150 155 160
Tyr Thr Gly Arg Asp Ala Ser Asp Thr Asp Thr Ile Leu His Thr His
      165 170 175
Ala Leu Leu Gly Glu Val Leu Ala Phe Arg Leu Gly Arg Glu Thr Ile
   180 185 190
Leu Leu Arg Thr Gly Trp Thr Glm Phe Asp Glu Asp Lys Ala Ala Gln
 195 200 205
Ile Ser Gln Val Ile Thr Cys His Val Asp Leu Ile Leu Gln Gly Leu
210 215
Thr Gln Arg Ser Gln Lys Ser
<210> 7902
<211> 585
<212> PRT
<213> Enterobacter cloacae
<400> 7902
Thr Thr Gly Asn Asp Met Asn Asp Ala Val Ile Gln Leu Asn Asn Leu
                         10
Val Lys Arg Phe Pro Gly Met Ala Lys Pro Ala Val Ala Pro Leu Asn
        20
Cys Thr Ile Gln Lys Gly Tyr Val Thr Gly Leu Val Gly Pro Asp Gly
 35 40
Ala Gly Lys Thr Thr Leu Met Arg Met Leu Ala Gly Leu Leu Lys Pro
               5.5
                     60
Asp Glu Gly Ser Ala Ser Val Leu Gly Leu Asn Pro Ile Lys Asp Asp
              70 75
Ala Ala Leu His Gly Ile Leu Gly Tyr Met Pro Gln Lys Phe Gly Leu
           85
                          90
Tyr Glu Asp Leu Thr Val Met Glu Asn Leu Asn Leu Tyr Ala Asp Leu
       100 105 110
Arg Ser Val Thr Gly Glu Thr Arg Glu Lys Thr Phe Ala Arg Leu Leu
   115 120
Glu Phe Thr Ser Leu Gly Pro Phe Thr Asp Arg Leu Ala Gly Lys Leu
 130 135
                                140
Ser Gly Gly Met Lys Gln Lys Leu Gly Leu Ala Cys Thr Leu Val Gly
145 150
                             155 160
Glu Pro Lys Val Leu Leu Asp Glu Pro Gly Val Gly Val Asp Pro
                              175
         165 170
Ile Ser Arg Arg Glu Leu Trp Gln Met Val His Glu Leu Ala Gly Asp
      180 185
                                      190
Gly Met Leu Ile Leu Trp Ser Thr Ser Tyr Leu Asp Glu Ala Glu Gln
     195 200
                                   205
Cys Arg Asp Val Leu Leu Met Asn Glu Gly Glu Leu Leu Tyr Gln Gly
  210 215
                                220
Glu Pro Thr Glu Leu Thr Gln Thr Met Ala Gly Arg Ser Phe Leu Leu
225 230
                             235
His Ser Ala Gln Glu Ser Asn Arg Thr Leu Leu Gln Arg Val Leu Lys
                          250
           245
Leu Pro Gln Val Ser Asp Gly Met Ile Gln Gly Arg Ser Val Arg Val
        260
                       265
```

```
Ile Leu Lys Lys Glu Ala Thr Ala Asp Asp Ile Arg Arg Ala Gln Gly
     275
                      280
 Met Pro Glu Ile Asp Met Thr Glu Tnr Ser Pro Arg Phe Glu Asp Ala
                   295
                              300
 Phe Ile Asp Leu Leu Gly Gly Ala Gly Thr Ser Glu Ser Pro Leu Gly
       310
                               315
 Ala Ile Leu His Thr Val Glu Gly Thr Pro Gly Glu Thr Val Ile Glu
         325 330 335
 Ala Lys Ser Leu Thr Lys Lys Phe Gly Asp Phe Ala Ala Thr Asp Asn
       340
              345 350
 Val Asn Phe Ala Val Lys Arg Gly Glu Ile Phe Gly Leu Leu Gly Pro
     355 360
                           365
 Asn Gly Ala Gly Lys Ser Thr Thr Phe Lys Met Met Cys Gly Leu Leu
  370 375 380
 Val Pro Thr Ser Gly Lys Ala Leu Val Leu Asn Met Asp Leu Lys Val
     390
                               395
 Ser Ser Gly Lys Ala Arg Gln His Leu Gly Tyr Met Ala Gln Lys Phe
            405 410 415
 Ser Leu Tyr Gly Asn Leu Thr Val Glu Gln Asn Leu Arg Phe Phe Ser
         420 425 430
 Gly Val Tyr Gly Leu Arg Gly Arg Ala Gln Asn Gln Lys Ile Gly Arg
   435 440 445
 Met Cys Asp Ala Phe Gly Leu Thr Asp Ile Ala Ser Gln Ala Thr Asp
   450 455
                                  460
 Ala Leu Pro Leu Gly Phe Lys Gln Arg Leu Ala Leu Ala Cys Ser Leu
 465 470 475
 Met His Glu Pro Asp Ile Leu Phe Leu Asp Glu Pro Thr Ser Gly Val
           485 490
 Asp Pro Leu Thr Arg Arg Glu Phe Trp Leu His Ile Asn Ser Met Val
          500
              505
                              510
 Glu Lys Gly Val Thr Val Met Val Thr Thr His Phe Met Asp Glu Ala
  515
                      520
 Glu Tyr Cys Asp Arg Ile Gly Leu Val Tyr Arg Gly Lys Leu Ile Ala
  530 535
                                  540
 His Gly Thr Pro Asp Asp Leu Lys Ala Gln Ala Ala Asp Asp Ser Gln
 545 550 555
 Pro Asp Pro Thr Met Glu Gln Ala Pae Ile Thr Leu Ile His Asp Trp
           565
                             570
 Asp Lys Glu Asn Thr His Ala Gln
 <210> 7903
 <211> 469
<212> PRT
 <213> Enterobacter cloacae
 <400> 7903
 Trp Ser Gly Arg Phe Gly Val Phe Met Ser Phe Asp Ser Leu Gly Leu
                            1.0
 Asn Pro Glu Ile Leu Arg Ala Ile Ala Glu Gln Gly Tyr Val Glu Pro
          20
                         25
                                         3.0
 Thr Pro Ile Gln Gln Gln Ala Ile Pro Ala Val Leu Gln Gly Arg Asp
    35
                      4.0
 Leu Met Ala Ser Ala Gln Thr Gly Thr Gly Lys Thr Ala Gly Phe Thr
                   55
                                  60
 Leu Pro Leu Leu Glu Leu Leu Val Lys Asn Gln Pro His Ala Lys Gly
```

7.5

90 Ala Gln Ile Gly Glu Asn Val Arg Glu Tyr Ser Arg Tyr Leu Asn Ile

Arg Arg Pro Val Arg Ala Leu Ile Leu Thr Pro Thr Arg Glu Leu Ala

105

70

85

```
Arg Ser Leu Val Val Phe Gly Gly Val Ser Ile Asn Pro Gln Met Met
            120
      115
Lys Leu Arg Gly Gly Val Asp Val Leu Val Ala Thr Pro Gly Arg Leu
                135
                                140
Leu Asp Leu Glu His Gln Asn Ala Val Lys Leu Asp Asn Ile Glu Ile
145 150 155
Leu Val Leu Asp Glu Ala Asp Arg Met Leu Asp Met Gly Phe Ile His
      165 170 175
Asp Ile Arg Arg Val Leu Ala Lys Leu Pro Thr Arg Arg Gln Asn Leu
        180 185 190
Leu Phe Ser Ala Thr Phe Ser Asp Glu Ile Lys Ala Leu Ala Glu Lys
 195 200 205
Leu Leu His Asn Pro Leu Glu Val Glu Val Ala Arg Arg Asn Thr Ala
 210 215 220
Ser Glu Gln Val Thr Gln His Val His Phe Val Asp Lys Lys Arg Lys
225 230 235
Arg Glu Leu Leu Ser Gln Met Ile Gly Gln Gly Asn Trp Gln Gln Val
      245 250 255
Leu Val Phe Thr Arg Thr Lys His Gly Ala Asn His Leu Ala Glu Gln
 260 265
                                       270
Leu Asn Lys Asp Gly Ile Arg Ser Ala Ala Ile His Gly Asn Lys Ser
 275 280 285
Gln Gly Ala Arg Thr Arg Ala Leu Ala Asp Phe Lys Ser Gly Asp Ile
 290 295 300
Arg Val Leu Val Ala Thr Asp Ile Ala Ala Arg Gly Leu Asp Ile Glu
              310
                             315
Glu Leu Pro His Val Val Asn Tyr Glu Leu Pro Asn Val Pro Glu Asp
           325
                           330 335
Tyr Val His Arg Ile Gly Arg Thr Gly Arg Ala Ala Ala Thr Gly Glu
        340
                      345
                                      350
Ala Leu Ser Leu Val Cys Val Asp Glu His Lys Leu Leu Arg Asp Ile
 355
                    360
                                    365
Glu Arg Leu Leu Lys Lys Glu Ile Pro Arg Ile Glu Thr Pro Gly Tyr
                 375
                                 380
Glu Val Asp Pro Ser Ile Lys Ala Glu Pro Ile Gln Asn Gly Arg Gln
              390
                             395
Gly Gly Gly Arg Gly Gln Gly Gly Gly Arg Gly Gln Gln Pro Arg
          405 410 415
Arg Ser Glu Gly Gly Ala Pro Lys Ser Ser Gly Lys Pro Pro Arg Arg
        420
                       425
                           430
Asn Asn Asp Ser Lys Pro Ala Gly Gly Asn Pro Trp Arg Ser Gly Glu
     435 440 445
Gly Lys Pro Ala Gly Glu Gly Gln Arg Arg Arg Pro Arg Lys Pro
 450
               455
Ala Asn Pro Gln
<210> 7904
<211> 103
<212> PRT
<213> Enterobacter cloacae
<400> 7904
Thr Ser Pro Ile Arg Ser Gln Tyr Ser Ala Ser Ser Ile Lys Trp Val
         5
                        10
Val Thr Ile Thr Val Thr Pro Phe Ser Thr Met Leu Leu Ile Cys Asn
                       25
        20
Gln Asn Ser Arg Arg Val Arg Gly Ser Thr Pro Asp Val Gly Ser Ser
 35
                 40
```

Arg Asn Arg Ile Ser Gly Ser Cys Ile Asn Glu Gln Ala Ser Ala Ser

5.5

Arg Cys Leu Lys Pro Ser Gly Ser Ala Ser Val Ala Cys Glu Ala Ile 7.0 75 Ser Val Arg Pro Lys Ala Ser His Met Arg Pro Ile Phe Trp Phe Cys 85 90 Ala Arg Pro Arg Arg Pro 100 <210> 7905 <211> 145 <212> PRT <213> Enterobacter cloacae <400> 7905 Pro Arg Cys Trp Arg Ala Leu Pro Glu Leu Thr Leu Arg Ser Met Phe Ser Thr Ser Ala Leu Pro Asp Val Gly Thr Ser Arg Pro His Ile Ile 20 25 3.0 Leu Lys Val Val Asp Phe Pro Ala Pro Phe Gly Pro Ser Arg Pro Asn 35 40 4.5 Ile Ser Pro Arg Phe Thr Ala Lys Leu Thr Leu Ser Val Ala Ala Lys 55 60 Ser Pro Asn Phe Leu Val Ser Asp Phe Ala Ser Met Thr Val Ser Pro 70 75 Gly Val Pro Ser Thr Val Cys Arg Met Ala Pro Ser Gly Asp Ser Glu 85 90 Val Pro Ala Pro Pro Ser Arg Ser Ile Asn Ala Ser Ser Lys Arg Gly 100 105 110 Glu Val Ser Val Met Ser Ile Ser Gly Ile Pro Cys Ala Arg Arg Ile 115 120 125 Ser Ser Ala Val Ala Ser Phe Leu Arg Ile Thr Arg Thr Glu Arg Pro 130 135 145 <210> 7906 <211> 752 <212> PRT <213> Enterobacter cloacae <400> 7906 Ser Arg Ala Phe Leu Phe Ala Ala Ala Glu Arg Lys Cys His Asn Ser 1.0 Gly Cys Leu Tyr Ser Ile Ser Gly Phe Pro Met Ala Leu Thr Ala Ala 20 25 Leu Lys Ala Gln Ile Gly Ala Trp Tyr Lys Ala Leu Gln Gln Gln Ile 40 Pro Asp Phe Ile Pro Arg Ala Pro Gln Arg Gln Met Ile Ala Asp Val 5.5 Ala Lys Thr Leu Ala Gly Asp Asp Gly Arg His Leu Ala Ile Glu Ala 70 75 Pro Thr Gly Val Gly Lys Thr Leu Ser Tyr Leu Ile Pro Gly Ile Ala 85 90 95 Ile Ala Arg Glu Glu Asp Lys Thr Leu Val Val Ser Thr Ala Asn Val 100 105 110 Ala Leu Gln Asp Gin Leu Phe Ser Lys Asp Leu Pro Leu Leu Arg Lys 115 120 125 Ile Ile Pro Asp Leu Arg Phe Thr Ala Ala Phe Gly Arg Gly Arg Tyr 135 140 Val Cys Pro Arg Asn Leu Ala Ala Leu Ala Ser Ser Glu Pro Ala Gln

155

Gln Asp Leu Leu Ala Phe Leu Asp Asp Glu Leu Thr Pro Asn Asn Lys

170 Ala Glu Gln Glu Gln Cys Ala Lys Leu Lys Ala Asp Leu Asp Ser Tyr 185 190 Arg Trp Asp Gly Leu Arg Asp His Thr Ser Gln Ala Ile Gly Asp Asp 195 200 Leu Trp Arg Arg Leu Ser Thr Asp Lys Ala Ser Cys Leu Asn Arg Asn 210 215 220 Cys His Tyr Tyr Arg Glu Cys Pro Phe Phe Val Ala Arg Arg Glu Ile 225 230 235 Gln Glu Ala Glu Val Val Val Ala Asn His Ala Leu Val Met Ala Ala 245 250 255 Leu Glu Ser Glu Ala Val Leu Pro Glu Pro Lys Asn Leu Leu Leu Val 260 265 270 Leu Asp Glu Gly His His Leu Pro Asp Val Ala Arg Asp Ala Leu Glu 275 280 285 Met Ser Ala Glu Ile Thr Ala Pro Trp Phe Arg Leu Gln Leu Asp Leu 290 295 300 Phe Cys Lys Leu Val Ala Thr Cys Met Glu Gln Phe Arg Pro Lys Thr 305 310 315 320 Thr Pro Pro Leu Ala Val Pro Glu Arg Leu Ser Glu His Cys Glu Glu 325 330 335 Val Tyr Gly Leu Ile Ala Ser Leu Asn Asn Ile Leu Asn Leu Tyr Leu 340 345 350 Pro Ala Thr Gln Glu Ala Glu His Arg Phe Ala Met Gly Glu Leu Pro 355 360 365 Gln Glu Val Met Glu Ile Cys Gln Gln Leu Ala Lys His Leu Glu Lys 370 375 380 Leu Arg Gly Leu Ala Glu Met Phe Leu Asn Asp Leu Ser Glu Lys Thr 385 390 395 400 Gly Thr His Asp Val Val Arg Leu His Arg Ile Leu Leu Gln Met Asn 405 410 415 Arg Ala Leu Gly Met Phe Glu Ala Gln Ser Lys Leu Trp Arg Leu Ala 420 425 430 Ser Met Ala Gln Ala Ser Gly Ala Pro Val Thr Lys Trp Ala Thr Arg 435 440 445 Glu Val Arg Asp Gly Gln Val His Leu Phe Phe His Cys Val Gly Ile 450 455 460 Arg Val Ala Asp Gln Leu Glu Lys Leu Ile Trp Arg Ser Val Pro His 470 475 480 Val Val Val Thr Ser Ala Thr Leu Arg Ser Leu Asn Ser Phe Ser Arg 490 495 485 Leu Gln Glu Met Ser Gly Leu Lys Glu Lys Ala Gly Asp Arg Phe Val 500 505 510 Ala Leu Asp Ser Pro Phe Asn His Cys Glu Gln Gly Lys Leu Val Ile 515 520 525 Pro Arg Met Asn Tyr Glu Pro Leu Ile Asp Asn Glu Glu Gln His Ile 535 540 530 Ala Glu Met Ala Ala Tyr Phe Arg Glu Gln Val Glu Ser Lys Lys Tyr 545 550 555 560 Pro Gly Met Leu Val Leu Phe Ala Ser Gly Arg Ala Met Gln Arg Phe 565 570 575 Leu Glu His Val Thr Asp Leu Arg Leu Leu Leu Val Gln Gly Asp 585 580 Gln Pro Arg Tyr Arg Leu Val Glu Thr His Arg Lys Arg Ile Asp Asn 600 605 595 Gly Glu Arg Ser Val Leu Val Gly Leu Gln Ser Phe Ala Glu Gly Leu 615 620 Asp Leu Lys Gly Asp Tyr Leu Thr Gln Val His Ile His Lys Ile Ala 630 635 Phe Pro Pro Ile Asp Ser Pro Val Val Ile Thr Glu Gly Glu Trp Leu 645 650

```
Lys Ser Leu Asn Arg Tyr Pro Phe Glu Val Gln Ser Leu Pro Ala Ala
                      665
                                     670
      660
Ser Phe Asn Leu Ile Gln Gln Val Gly Arg Leu Ile Arg Ser His Gly
 675
                  680
                                    685
Cys Trp Gly Glu Val Val Ile Tyr Asp Lys Arg Leu Leu Thr Lys Asn
 690 695
                                 700
Tyr Gly Gln Arg Leu Leu Asn Ala Leu Pro Ile Phe Pro Ile Glu Gln 705 710 715 720
Pro Glu Val Pro Glu Val Lys Lys Arg Pro Ala Lys Pro Ser Ala Gly
    725 730 735
Arg Thr Lys Ser Ile Arg Ala Lys Arg Arg Gly Pro Thr Gly Lys
              745
<210> 7907
<211> 332
<212> PRT
<213> Enterobacter cloacae
<400> 7907
Gln Asp Asp Ala Val Arg Arg Asn Val Val Asp Tyr Arg Lys Ile Ile
                      1.0
Lys Glu Val Gly Arg Gly Lys Asn His Ala Arg Asp Leu Asp Gln Glu
                   25
                             30
Thr Ala Arg Ala Leu Tyr Thr His Met Leu Asn Gly Asp Val Pro Glu
                   40 45
35
Leu Glu Met Gly Gly Ile Leu Ile Ala Leu Arg Ile Lys Gly Glu Gly
                55
Glu Ala Glu Met Arg Gly Phe Tyr Glu Ala Met Gln Ser Gln Thr Met 65 70 75 80
Arg Leu Thr Pro Pro Val Thr Lys Pro Met Pro Met Pro Ile Val Ile
          8.5
                90 95
Pro Thr Tyr Asn Gly Ala Arg Lys Gln Ala Asn Leu Thr Pro Leu Leu
        100
                      105 110
Ala Ile Leu Leu Gln Lys Leu Gly Phe Pro Val Val Wal His Gly Val
 115 120 125
Ser Glu Asp Pro Thr Arg Val Leu Thr Glu Thr Ile Leu Glu Leu Leu
 130 135 140
Gly Ile Glu Pro Thr Leu His Ala Gly Gln Ala Gln Ala Lys Leu Glu
145 150 155 160
Gly Asn Gln Pro Val Tyr Ile Pro Val Arg Ala Leu Cys Pro Pro Leu
          165 170 175
Glu Lys Gln Leu Asp Met Arg Trp Arg Met Gly Val Arg Asn Ser Ala
        180 185 190
His Thr Leu Ala Lys Leu Ala Thr Pro Phe Ala Glu Asp Ala Ala Leu
                     200 205
      195
Arg Leu Ser Ser Val Ser His Pro Glu Tyr Val Thr Arg Val Gly Gln
                  215
                                  220
   210
Phe Phe Ala Glu Ile Gly Gly Arg Ala Leu Leu Met His Gly Thr Glu
      230
                              235 240
Gly Glu Val Tyr Ala Asn Pro Gln Arg Cys Pro Gln Leu Met Leu Ile
                           250
            245
Glu Pro Ala Gly Thr Arg Val Val Leu Glu Arg Gly Glu Glu Asn Cys
                        265 270
         260
Asp Val Ile Leu Pro Glu Ser Lys Asp Pro Gln Val Thr Ala His Trp
                         285
                      280
      275
Ile Val Gln Cys Leu Ala Gly Lys Val Pro Val Pro Gln Ser Ile Lys
 290
                  295
                      300
Leu Gln Met Ala Cys Cys Leu Leu Ala Ala Gly Glu Val Ala Ser Val
                    315
               310
Glu Ala Gly Leu Gln Arg Val Ala Gln Ser Phe
```

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<210> 7908
<211> 342
<212> PRT
<213> Enterobacter cloacae
<400> 7908
Gln Ile Ile Asp Ile Gln Val Ala Asp Phe Cys Arg Phe Phe Val Arg
                          10
Leu Arg Gln Leu Phe Thr Pro Ala Pro Ser Gln Gly Ile Leu Arg Gly
       20
                      25
Cys Leu Lys Glu Asn Ala Met Thr Ser Gln Lys Pro Gly Leu His Pro
     35
               40 45
Arg Asn Arg His Arg Ser Arg Tyr Asp Met Lys Ala Leu Cys Leu Ser
 5.0
      55
Cys Pro Glu Leu Gln Asp Phe Ile Val Gln Thr Pro Ala Gly Glu Pro
    70 75
Ser Val Asn Phe Ala Asp Pro Leu Ala Val Lys Thr Leu Asn Lys Ala
         85 90
Leu Leu Ala His Phe Tyr Gly Val Thr His Trp Asp Ile Pro Asp Gly
      100 105 110
Phe Leu Cys Pro Pro Val Pro Gly Arg Ala Asp Tyr Val His His Leu
115 120
Ala Asp Leu Leu Ala Asp Asp Asn Gly Gly Val Val Pro Lys Gln Ala
130 135 140
Thr Val Leu Asp Ile Gly Thr Gly Ala Asn Leu Ile Tyr Pro Leu Ile
145 150 155 160
Gly Ala His Glu Tyr Gln Trp Arg Phe Thr Gly Ser Glu Ile Gly Ala
           165 170 175
Glu Ala Phe Ala Ser Ala Gln Ala Ile Ile Asn Ala Asn Pro Gly Leu
      180 185 190
Ser Arg Ala Val Arg Leu Arg Arg Gln Lys Asp Ala Ala Ile Phe
    195 200 205
Asn Gly Ile Ile His Lys Asn Glu Gln Tyr Asp Ala Thr Leu Cys Asn
210 215 220
Pro Pro Phe His Asp Ser Ala Ala Ser Ala Arg Ala Gly Ser Glu Arg
225 230 235
Lys Arg Arg Asn Leu Gly Gln Ala Glu Asp Gly Ala Leu Asn Phe Gly
         245 250 255
Gly Gln Gln Glu Leu Trp Cys Glu Gly Glu Val Ala Phe Ile
                      265 270
Leu Arg Met Ile Thr Glu Ser Lys Gly Phe Gly Arg Gln Val Lys Trp
                    280
                                   285
Phe Thr Thr Leu Val Ser Arg Gly Asp Asn Leu Pro Pro Leu Tyr Arg
               295 300
Ala Leu Thr Asp Val Gly Ala Val Lys Val Val Lys Lys Glu Met Ala
305 310
                             315
Gln Gly Gln Lys Gln Ser Arg Phe Ile Ala Trp Ser Phe Met Asp Asp
           325
                           330
                                          335
Asn Lys Arg Arg Lys
        340
<210> 7909
<211> 148
<212> PRT
<213> Enterobacter cloacae
<400> 7909
Gly Thr Tyr Leu Ile Ile Arg Arg Pro Gln Ile Glu Thr Pro Ser Pro
                          10
Gly Thr Arg Asn Thr Gly Arg Glu Leu Thr Thr Pro Thr Ile Lys Glu
```

25 Leu Ile Met Ala Asp Ser His Ser Thr Pro Asp Thr Asp Gln Ser Gly 3.5 4.0 Thr Glu Arg Ser Leu Ile Val Gly Tyr Arg Pro Asn Val Phe Asp Lys 55 Ser Thr Pro Lys Ile Ile Leu Ser Gly Lys Trp Leu Arg Ala Ala Gly 70 75 Phe Asp Thr Gly Gln Gln Val Thr Val Lys Val Met Lys Gly Cys Ile 85 90 Val Leu Val Ala Tyr Asn Glu Gln Glu Gln Arg Leu Gln Asp Asp Tyr 100 105 Lys Arg Thr Lys Ala Lys Leu Ile Glu Ile Glu Lys Ala Leu Ala Ala 120 125 115 Ile Gln Ile Pro His Ala Gly Lys Arg Leu Ala Lys Ser Asn Thr Asn 130 135 His Leu Ala 145 <210> 7910 <211> 245 <212> PRT <213> Enterobacter cloacae <400> 7910 Ile Asn Ser Asp Tyr Leu Phe Ile Gly Arg Arg Ile Val Gly Leu His 10 Tyr Ala Ile Arg His Cys Phe Glu Asn Thr Gly Asp Asn Leu Ile Asn 20 25 Asn Ser Pro Asp Tyr Tyr Tyr Lys Ser Arg Asn Asn Met Thr Asn Asn 45 40 Ser Gln Ile Thr Gln His Ile Thr Val Ala Leu Met Gly Gly Asp His 50 55 60 Tyr Ala Arg Asn Gly Ile Lys Tar Leu Leu Ser Ser Ile Arg Asp Asp 7.0 75 Leu His Ile Ile Ile Glu Gly Gly Tyr Gln Gln Leu Asp Lys Ala 85 90 95 Leu Ser Ser Ile Arg Ile Asp Ile Leu Phe Ile Ser Gly Ala Glu Lys 100 105 110 Tyr His Thr Gly Tyr Asp Ser Leu Lys Tyr Leu Lys Lys Ile Lys Ala 115 120 Thr Gln Pro Glu Val Met Ile Cys Leu Tyr Ser Thr Ser Ala His Ser 130 135 140 Leu Leu Trp Val Arg Glu Asp Iie Asp Ala Tyr Ile Ser Leu Gln Asn 150 155 160 Thr Val Tyr Gln Trp Arg Ile Lys Leu Ala Lys Met Val Asp Ser His 165 170 175 Tyr Arg Pro Gln Lys Gln Pro Ala Ala Leu Ser Leu Thr Pro Gly Glu 180 185 190 Arg Arg Val Leu Lys Glu Leu Arg Asn Gly Leu Asp Ile Arg Tyr Ile 195 200 205 Ala Glu Leu Glu Lys Leu Ser Tyr Arg Arg Val Ser Ala Leu Lys Ser 210 215 220 Ser Ala Ile Arg Lys Leu Gly Leu Arg Asn Lys Thr Asp Leu Leu Val 230 235 240 Phe Leu Thr Ser 245

<210> 7911

<211> 257

<212> PRT

<213> Enterobacter cloacae

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<400> 7911
Cys Gln Arg Gly Arg His Leu His Arg Asp Leu Phe Val Ile Phe Arg
Pro Gly Leu Leu Ala Gly Ser Asp Ser Ala Phe Arg Arg Arg Thr Met
Arg Val Asn Thr Trp Ile Cys Leu Ala Gly Thr Leu Cys Ser Ser Ala
      35
Val Tyr Ala Gly Gly Val Gly Leu Gly Ala Thr Arg Leu Val Tyr Ala
 5.0
                  5.5
Gly Ala Ala Thr Gln Thr Met Met Gln Val Arg Asn Thr His Pro Asp
   70
                               75
Ala Thr Phe Leu Ile Gln Ser Trp Met Glu Asp Glu Lys Gly Ser Arg
                         90
       8.5
Thr Asn Asp Phe Val Ile Thr Pro Pro Leu Tyr Val Met Lys Pro Ala
        100 105
Ser Glu Ser Ala Val Lys Ile Met Phe Ser Gly Asn Ala Leu Pro Ser
     115 120 125
Asp Arg Glu Thr Leu Tyr Trp Met Thr Val Lys Ala Ile Pro Gln Gln
                135 140
Val Lys Asn Gly Ser Gly Asn Ser Leu Gln Phe Ala Ser Ala Asn Arg
145 150 155 160
Ile Lys Val Phe Tyr Arg Pro Glu Arg Leu Arg Glu Gly Ala Gly Glu
                 170 175
           165
Ala Trp Lys Asn Leu Ala Gly Ala Tyr Arg Ala Gly Lys Val Thr Leu
         180 185 190
Thr Asn Pro Thr Pro Tyr Tyr Leu Thr Thr Ile Asn Val Lys Ile Asp
 195 200 205
Gly Arg Pro Val Ser Pro Val Met Val Pro Pro Lys Ala Ser Val Thr
 210 215 220
Leu Ala Asp Thr Phe Ser His Ala Ser Ser Met Ser Tyr Gln Thr Ile
          230 235 240
225
Asn Asp Tyr Gly Ala Trp Thr Pro Val Thr Arg Thr Ser Leu Ser Gln
                           250
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```
<210> 7912
<211> 370
<212> PRT
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<400> 7912 Gln Arg Lys Asn Asp Leu Leu Cys Ala Thr Gly Arg His Gly Cys Ala Gly Gln Cys Arg Arg Arg Phe Gly Ser Gly Asp Leu Asp Asp Gly Val 25 20 Ser Ile Met Arg Leu Leu Phe Leu Ala Leu Phe Phe Met Ser Ser Gln 4.0 35 Ala Leu Ala Leu Ser Trp Thr Ser Asp Ile Thr Leu Ser Pro Thr Pro 55 50 Met Ser Trp Ser Gly Pro Ala Asp Ser Ile Val Pro Gly Lys Thr Ile 75 7.0 Gly Ser Glu Trp Ser Ala Ser Ala Ser Val Ser Glu Val Phe Trp Cys 90 8.5 Gly Leu Val Phe Thr Cys Ser Lys Gly Thr Leu Glu Pro Ser Ser Ser 105 Ile Thr Ala Thr Gly Ile Thr Val Ile Leu Asp Gly Ala Asn Tyr Met 125 115 120

<213> Enterobacter cloacae

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Asp Tyr Asn Gly Thr Thr Tyr Val Pro Met Gln Thr Gly Ile Thr Gln
                        155
      150
Ser Tyr Pro Ala Asp Gly Thr Asn Gly Tyr Ala Thr Ala Leu Gly Trp
         165
                         170
Ser Ala Lys Val Thr Phe Ile Lys Thr Gly Val Pro Leu Lys Ser Gly
        180
                      185
Val Tyr Gln Thr Pro Thr Ile Asn Ser Ala Ile Leu Thr Ala Tyr Asn
     195
                    200
                        205
Asn Glu Val Lys Thr Ala Gln Val Ile Ile Asn Pro Thr Thr Ile Thr
 210 215
                     220
Val Thr Ala Ser Gly Cys Thr Val Gly Thr Lys Ser Ala Asn Val Asp
225 230 235
Leu Gly Thr Ile Asp Val His Thr Leu Pro Ser Val Gly Ser Thr Ser
         245 250 255
Pro Ser Gly Glu Phe Asn Val Ser Leu Thr Cys Asp Glu Asn Val Ala
       260 265 270
Val Asn Ala Val Met Thr Asp Gln Thr Thr Pro Ser Asn Thr Ser Ser
 275 280 285
Val Val Thr Leu Thr Gly Asp Ser Thr Ala Ser Gly Ile Gly Val Gln
 290 295 300
Phe Phe Tyr Asn Gly Thr Gly Pro Leu Met Met Gly Pro Asp Ser Ser
305 310 315 320
Ala Ala Gly Thr Thr Gly Gln Phe Phe Ile Gln Thr Thr Ser Ala Ala
         325 330 335
Gln Thr Leu Ser Leu Pro Phe Gln Ala Gln Tyr Ile Arg Thr Gly Asp
       340 345 350
Leu Val Pro Gly Ser Ala Asn Ala Leu Ala Ser Ile Thr Phe Ser Tyr
            360
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<210> 7913 <211> 403 <212> PRT

<213> Enterobacter cloacae

<400> 7913

Pro Thr Glu Ala Gln Ser Cys Thr Pro Phe Arg Arg His Pro His Cys 1 5 10 15 Arg Leu Phe Phe Ala Pro Ser Val Lys Tyr Cys Asn Ser Val Gln Val 2.5 Lys Arg Ala Gln Arg Ser Asn Pro Met Ile Lys Asn Leu His Ile Gln 35 40 Asn Tyr Arg Ser Ile Arg Asp Met Ser Leu Glu Leu Glu Gln Leu Asn 55 Ile Val Phe Gly Pro Asn Gly Thr Gly Lys Ser Asn Ile Tyr Lys Ala 70 7.5 Ile Tyr Leu Met His Ser Ala Ala Gln Gly Gln Phe Ser Gln Ala Leu 8.5 90 Ala Asn Glu Gly Gly Ile Leu Lys Val Phe Trp Ala Gly Lys Thr Arg 105 100 Ser Asp Gln Leu Arg Arg Met Asn Leu Ala Val Glu Thr Glu Thr Tyr 115 120 125 Glu Tyr Glu Leu Gln Val Gly Phe Val Glu Lys Leu Pro Tyr Pro Ser 130 135 140 Gln Phe Gln Leu Asp Pro Val Ile Lys Glu Glu Ser Ile Trp Leu Ser 155 160 145 150 Gly Gln His Arg Arg Pro Ser Ser Gln Leu Met Lys Arg Lys Asn Gln 170 175 165 Ala Val Phe Leu Asn Asn Val His His Glu Lys Val Thr His Ser Gly 185

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Thr Leu Tyr Glu Asn Glu Ser Val Phe Gly Gln Leu Gly Glu Pro His
195 200
Leu Tyr Pro Glu Val Ser Gln Met Arg Glu Ser Leu Arg Asn Trp Arg
               215
                                 220
Phe Tyr His Glu Phe Ser Val Ser Ser Gly Ser Ala Ile Arg Ala Pro
     230
                              235
Gln Val Gly Phe Arg Ser Pro Val Leu Ala Ser Asp Gly Ala Asn Leu
           245
                           250 255
Ala Ala Ala Phe Gln Thr Ile Val Glu Ile Gly Asp Glu Leu Leu Leu
        260
                        265
Met Arg Ile Leu Asp Gln Ala Phe Pro Gly Cys Val Phe Tyr Ser Asp
    275 280 285
Asn Thr Gly Gly Arg Phe Arg Met Met Gln Arg Glu Gly Leu Ser
      295 300
Arg Pro Leu Glu Pro Ala Glu Phe Ser Asp Gly Thr Leu Arg Phe Leu
305 310 315
Cys Leu Ala Val Ala Leu Leu Ser Pro Arg Pro Pro Ala Phe Ile Ala
   325 330 335
Leu Asn Glu Pro Glu Asn Ser Leu His Pro Gln Met Leu Pro Ala Leu
 340 345 350
Ala Ser Leu Ile Ala Glu Ala Ser Arg Tyr Ser Gln Ile Trp Leu Thr
355 360 365
Ser His Ser Pro Glu Leu Ala His Leu Ile Glu Lys His Arg Ser Phe
370 375 380
Ser Leu Tyr Gln Leu Leu Met Ala Glu Gly Glu Thr Arg Met Glu Arg
              390
                              395
Leu Gly
```

<400> 7914 Lys Glu Ile Glu Met Ala Ile Pro Val Tyr Leu Trp Leu Glu Asp Asp 10 Ala Gly Arg Lys Ile Asn Gly Ser Val Asp Ile Lys Asp Arg Glu Gly 20 25 Ser Ile Glu Val Ile Glu Phe Met His Ser Ile Glu Gln Ser Ile Glu 40 Lys Phe Ser Gly Lys Ile Thr Ser Lys Arg Ile Cys Ser Thr Tyr Ala 55 60 Phe Met Lys Glu Ile Asp Ser Ser Ser Ser Tyr Leu Tyr Lys Ala Leu 70 75 Ser Thr Gly Gln Thr Leu Thr Arg Ala Glu Phe Ile Phe Tyr Arg Ile 90 Asn Tyr Asn Gly Leu Glu Glu Ala Tyr Phe Lys Thr Thr Leu Glu Asn 100 105 110 Ala Arg Val Val Gln Ile Glu Pro Leu Met Phe Asp Ile Lys Leu Pro 115 120 125 Gln Asn Glu Arg Tyr Thr His Cys Glu Tyr Val Asp Leu Thr Tyr Glu 140 135 Lys Ile Thr Trp His Tyr Ile Asp Gly Asn Ile Ile His Ser Asp Thr 145 150 155 Trp Lys Glu Arg Ala 165

<210> 7915 <211> 215

<210> 7914

<211> 166

<212> PRT

<213> Enterobacter cloacae

<211> 215 <212> PRT

<213> Enterobacter cloacae

<400> 7915 Pro Val Arg Pro Ala Ala Phe Arg Ala Asn Leu Val Ile Lys Lys Pro Arg Asn Tyr Glu Met Lys Ala Arg Leu Thr Cys His Ser Leu Leu Ala Leu Ser Ile Ala Ala Leu Leu Pro Ala Gly Ser Ala Leu Ala Ala Thr 4.0 Thr Ser Gly Gly Thr Val Asn Phe Ser Gly Lys Val Val Thr Ser Ala 55 60 Cys Ala Ile Ser Ala Gly Ser Ala Asn Ile Asp Val Asp Met Gly Glu 70 7.5 Val Arg Thr Ala Thr Leu Ala Ala Ala Gly Ser Glu Ala Ser Thr Ala 85 90 Lys Ala Phe Ser Ile Thr Leu Glu Asp Cys Glu Ile Ala Asp Thr Ser 100 105 110 Ala Ser Thr Glu Asn Asn Pro Ile Ala Ala Thr Thr Val Ala Ile Thr 115 120 125 Phe Thr Gly Thr Pro Asp Ser Thr Asp Val Asn Ser Leu Ala Ala Gly 130 135 140 Val Asn Gly Gly Ala Gly Ser Ala Gln His Val Ala Ile Arg Leu Tyr 145 150 155 Asp Glu Gln Gly Asn Val Val Arg Leu Gly Glu Pro Ala Ala Ala Ile 165 170 175 Pro Leu Arg Ala Gly Ala Asn Thr Leu Asn Phe Ser Ala Lys Tyr Tyr 180 185 190 Ser Pro Leu Gly Asn Ala Thr Ala Gly Asp Ala Ser Ala Val Ala Thr 195 200

Tyr Thr Val Thr Tyr Ser 210 21

<210> 7916

<211> 231 <212> PRT

<213> Enterobacter cloacae

<400> 7916 Gln Ser Gln Arg Tyr Arg Arg Arg Arg Gln Arg Val Ser Asp Arg 10 Pro Val Ser Ala Gly Asn Leu Ala Cys Arg Met Gly Thr Arg Gln Arg 25 Pro Ala Leu His Asp Pro Leu Cys Val Glu Pro Ala Glu Leu Ser Arg 40 4.5 Pro His Arg Ala Leu Phe Pro Gly Gly His Met Ser Val Thr Val Arg 55 60 Phe Leu Pro Leu Ile Leu Leu Met Val Ile Thr Val Pro Ala Arg Gly 70 7.5 Tyr Asp Val Leu Val Ser Val Thr Gly Asn Val Ile Gly Asn Thr Cys 85 90 Ile Val Ser Glu Asp Ser Lys Glu Gln Asn Val Pro Leu Gly Thr Leu 100 105 110 Gly Val Lys Gln Phe Ser Glu Ala Gly Ala Val Ser Asn Ile Lys Thr 120 125 115 Pro Phe Thr Leu Thr Leu Glu Ala Cys Gly Pro Thr Phe Ala Gly Val 130 135 140 Lys Ile Arg Phe Ser Gly Thr Pro Asp Asp Glu Asn Pro Gln Leu Leu 150 155 160 Lys Val Ala Asp Gly Gly Ala Thr Gly Val Ala Val Gln Ile Leu Asp 165 170 Lys Asp Ser Val Leu Ile Pro Leu Asp Thr Gln Thr Ala Ala Tyr Gly

```
180
                         185
Ala Ala Gly Asp Asp Ser Val Lys Met Thr Phe Tyr Ala Arg Leu Ala
 195 200
                                    205
Ala Thr Gly Ala Pro Val Asn Ala Gly Asp Val Ser Ala Val Ala Thr
 210 215
Trp Thr Thr Glu Tyr Gln
<210> 7917
<211> 251
<212> PRT
<213> Enterobacter cloacae
<400> 7917
Asp Asn Ser Phe Ser Ser Asp Ala Asp Met Ala Tyr Ser Ile Gly Glu
Phe Ala Arg Leu Ser Gly Ile Thr Ala Thr Thr Leu Arg Ala Trp Gln
                         2.5
                                          3.0
        20
Arg Arg Tyr Gly Leu Leu Lys Pro Glu Arg Thr Asp Gly Gly His Arg
      35
               40
Leu Tyr Ser Asp Glu Asp Val Gln Gln Ala Leu Lys Ile Leu Asp Trp
 50 55
                       60
Val Lys Lys Gly Val Pro Ile Gly Gln Val Lys Ser Leu Leu Glu Arg
                       75
      70
65
Pro Ala Pro Arg Arg Ala Asn Asn Trp Gln Thr Leu Gln Gln Ala Met
                          90 95
            8.5
Met Gln Lys Leu Gln Glu Gly Lys Ile Glu Ser Leu Arg Gln Met Ile
         100 105 110
Tyr Asp Ala Gly Arg Glu Tyr Pro Arg Pro Glu Leu Val Thr Asn Val
                      120 125
     115
Leu Arg Pro Leu Arg Ser Gln Ile Ser Ala Asn Val Ala Ala Ala Met
                   135
                                  140
 130
Thr Leu Arg Glu Ile Leu Asp Gly Ile Leu Ile Ala Tyr Thr Ser Phe
                                155
                150
Cys Leu Glu Gly Asp Lys Lys Ala Pro Gly Asp Asn Val Leu Ile Ser
             165 170 175
Gly Trp Tyr Leu Asn Asp Pro Cys Glu Ile Trp Leu Glu Ala Leu Thr
                          185 190
          180
Arg Thr Gly Gln Gly His Arg Ile Asp Ile Leu Pro Val Pro Pro Ala
                      200 205
      195
Ala Leu Ala Pro Glu Ile Phe Pro Asp Arg Lys Trp Leu Leu Val Thr
                    215 220
 210
Ser Gly Lys Leu Thr Ala Ala Arg Lys Lys Gln Val Ala Gln Trp Gln
              230 235
Gln Gln Val Ser Leu Glu Val Ile Ile Leu
             245
<210> 7918
<211> 158
<212> PRT
<213> Enterobacter cloacae
<400> 7918
Ile Phe Phe Arg Ala Ala Ser Ala Asn Val Phe Leu Ser Pro Thr Thr
                          10
Gln Gln Glu Asn Thr Met Lys Lys Thr Leu Pro Leu Met Met Leu Ala
                                    3.0
        20
                         25
Ala Met Ala Phe Ala Pro Ala Ala Phe Ser Ala Pro Ala Gly Thr Leu
    35
                    40
                             4.5
Ser Val His Val Leu Asp Gln Gln Thr Gly Met Pro Pro Ala Asp Val
```

5.5

Thr Val Thr Leu Glu Lys Gln Glu Gln Asp Lys Trp Thr Pro Ile Ala Ser Gly Lys Thr Asp His Asp Gly Arg Ile Lys Ser Leu Tyr Pro Gln 85 Asp Gln Asp Met Ala Pro Gly Val Tyr Lys Val Thr Phe Lys Thr Ala 100 105 110 Asp Tyr Phe His Gly Lys Lys Leu Asp Ser Phe Phe Pro Glu Val Pro 115 120 125 Val Leu Phe Thr Val Thr Arg Thr Asn Glu Lys Leu His Ile Pro Leu 130 135 140 Leu Leu Ser Gln Tyr Gly Tyr Ser Thr Tyr Lys Gly Ser 150 <210> 7919 <211> 326 <212> PRT <213> Enterobacter cloacae <400> 7919 Asp Arg Glu Val His Thr Met Thr Thr Lys Pro Val Leu Gly Ile Ser 1.0 Gly Cys Leu Thr Gly Ser Ala Val Arg Phe Asp Gly Gly His Lys Arg 25 Met Gly Phe Val Met Asp Glu Leu Ala Gln Trp Val Ala Phe Arg Pro 35 40 45 Val Cys Pro Glu Met Ser Ile Gly Leu Pro Thr Pro Arg Pro Ala Leu 50 55 60 Arg Leu Val Met Thr Thr Gly Gly Glu Thr Glu Met Arg Phe Ser Lys 70 75 Ala Pro His Asp Asp Val Thr Gln Lys Met Ala Ala Phe Thr Ala Asp 85 90 Tyr Leu Pro Lys Ile Gly Asp Leu Ser Gly Phe Ile Val Cys Ala Lys 100 105 110 Ser Pro Ser Cys Gly Met Glu Arg Val Arg Leu Tyr Asp Glu Asn Gly 115 120 125 Asn Arg Gly Arg Lys Glu Gly Val Gly Leu Phe Thr Ala Ala Leu Leu 130 135 Glu Thr Phe Pro Trp Leu Pro Val Glu Glu Asp Gly Arg Leu His Asp 145 150 155 Pro Val Leu Arg Glu Asn Phe Val Glu Arg Val Phe Ala Leu His Glu 165 170 175 Leu Asn Val Met Arg Lys Asn Gly Leu Thr Arg Arg Ala Leu Leu Asp 180 185 190 Phe His Ser Arg Tyr Lys Leu Gln Leu Leu Ala His His Gln Ala Gly 195 200 205 Tyr Arg Glu Ile Gly Pro Phe Val Ala Ser Leu His Glu Trp Asp Asp 210 215 220 Leu Asp Ala Phe Phe Val Ala Tyr Arg Asp Lys Leu Met Thr Ile Leu 225 230 235 240 Lys Lys Pro Ala Ser Arg Lys Asn His Thr Asn Val Leu Met His Ile 245 250 Gln Gly Tyr Phe Arg Asn Gln Leu Asn Ser Arg Gln Arg Gly Glu Leu 265 270 Arg Asp Val Ile Leu His Tyr Arg Asp Gly Leu Leu Pro Ile Leu Ala 275 280 285 Pro Leu Thr Leu Leu Lys His Tyr Leu Ala Glu Tyr Pro Asp Arg Tyr 290 295 300 Leu Met Thr Gln Asn Tyr Phe Asp Pro Tyr Pro Asp Asp Leu Gly Leu 305 310 315 320 Arg Leu Ala Val Thr

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<210> 7920
<211> 84
<212> PRT
<213> Enterobacter cloacae
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<400> 7920 Pro Pro Pro Val Pro Ser Ala Pro Val Ala Pro Ile Ser Thr Ser Thr 10 Trp Gly Lys Cys Val Pro Pro Arg Trp Leu Pro Gln Ala Val Lys Pro 20 25 30 Val Pro Gln Lys Pro Ser Pro Ser Arg Trp Arg Ile Ala Lys Ser Pro 40 45 Ile Pro Pro Arg Pro Arg Lys Ile Thr Pro Ser Pro Gln Arg Pro Trp 55 50 60 Leu Ser Pro Ser Pro Val Arg Arg Thr Val Pro Met Ser Ile Ala Trp 7.0 Pro Arg Glu

<210> 7921 <211> 866 <212> PRT <213> Enterobacter cloacae <400> 7921 Arg Leu Trp Gly Leu Asp Ala Arg His Pro His Val Ile Val Pro Ile 10 Ile Lys Thr Val Arg Arg Asp His Met Lys Ile Lys Ile Leu Cys Ala 25 Thr Ala Ile Ala Leu Val Ile Arg Gln Ala Val Ala Ala Glu Ser Glu 35 40 Leu Gln Phe Asn Pro Ala Phe Leu Asn Gly Glu Arg Ala Asn Ser Ala 50 55 60 Asp Leu Ala Trp Val Asn Ala Gly Ser Ala Leu Pro Pro Gly Glu Tyr 65 70 75 Asn Leu Asn Val Tyr Ile Asn Thr Gln Phe Ala Phe Thr Gly Asn Val 85 90 Thr Phe Arg Val Ala Glu Ser Thr Ala Gly Glu Ala Leu Pro Cys Leu 100 105 110 Thr Pro Ala Gln Phe Ala Ala Leu Gly Ile Asp Ser Arg Gln Ala Lys 115 120 125 Gly Gly Glu Leu Pro Pro Ala Gln Arg Cys Ile Phe Leu Thr Gln Ser 135 140 Phe Ala Asp Thr Arg Phe Asp Phe Asp Gln Arg Thr Leu Thr Leu Asn 150 155 Phe Thr Val Pro Gln Ser Ala Met Arg Ala Leu Pro Arg Gly Tyr Val 165 170 Ser Pro Glu Ser Trp Glu Ser Gly Ile Pro Ala Ala Trp Leu Asn Tyr 180 185 190 Val Val Asn Gly Ala Asn Asn Asp Tyr Arg Gly Glu Thr Arg Thr Arg 195 200 205 Glu Gln Gln Leu Phe Val Ser Leu Asn Ser Gly Ala Asn Leu Gly Ala 210 215 220 Trp Arg Leu Arg Asp Phe Thr Thr Trp Thr Lys Glu Ser Asn Glu Leu 230 235 240 Thr His Val Gln Thr Trp Leu Gln Arg Asp Ile Arg Ala Leu Arg Ala 245 250 255 Gln Val Tyr Ala Gly Glu Thr Phe Thr Ser Ser Gln Val Phe Asp Ala 265 270 Val Gly Leu Arg Gly Ile Ala Leu Lys Thr Asp Asp Asn Met Leu Pro

280 Ala Ser Leu Ser Gly Tyr Ala Pro Glu Val Arg Gly Ile Ala Arg Ser 290 295 300 Asn Ala Thr Val Thr Val Arg Gln Asn Gly Asn Val Ile Tyr Gln Thr 310 315 Ser Val Pro Pro Gly Ala Phe Val Leu Lys Asp Leu Tyr Pro Thr Ser 325 330 Ser Gly Gly Asp Leu Ala Val Thr Ile Gln Glu Ser Asp Gly Ser Gln 340 345 350 Thr Gln Tyr Thr Leu Pro Phe Ala Ser Val Pro Asn Leu Val Arg Asn 355 360 365 Gly Gln Val Lys Tyr Ala Leu Gly Ala Gly Lys Tyr Arg Pro Ala Gly 375 Asn Gln Ile Ser Pro Ser Phe Ala Gln Gly Glu Leu Phe Leu Gly Trp 390 395 400 Arg Tyr Gly Leu Thr Phe Tyr Gly Gly Ala Gln Phe Ser Asp Arg Tyr 405 410 415 Thr Gly Leu Ala Phe Gly Ile Gly Gln Asn Leu Gly Arg Phe Gly Ala 420 425 430 Tyr Ser Leu Asp Leu Thr His Ala Arg Ser Gln Leu Ala Asp Asn Gln 435 440 445 His Tyr Thr Gly Asp Ser Val Arg Leu Arg Tyr Ser Lys Leu Leu Asn 450 455 460 Asp Ile Gly Thr Arg Val Asn Phe Phe Ser Leu Arg Tyr Ser Thr Ala 465 470 475 480 Gly Phe Tyr Thr Leu Ser Asp Thr Thr Tyr Lys Gly Met Ala Gly Gly 485 490 495 Ala Pro Glu Gln Thr Val Glu Asp Asp Gly Thr Val Thr Thr His Tyr 500 505 510 Asp Thr Val Tyr Asn Leu His Met Ser Arg Lys Ala Lys Asn Gln Leu 515 520 525 Leu Leu Ser Gln Pro Met Gly Glu Tyr Gly Ala Leu Ser Leu Ser Trp 530 535 540 Asp Gln Gln Thr Tyr Trp Asn Thr Ser Lys Thr Thr Gln Ser Leu Gln 545 550 555 560 Phe Ala Trp Asn Ala Thr Phe Arg Asn Leu Ser Leu Gly Ile Ser Ala 565 570 575 Gln Arg Ser Ser Gly Leu Tyr Asp Asn Lys Lys Asp Asn Ile Leu Ala 580 585 590 Leu Ser Leu Ser Val Pro Leu Gly Asn Pro Ala Leu Ser Thr Arg Leu 595 600 605 Arg Phe Thr Ala Thr His Ala Asp Pro Ala Gly Thr Thr Ala Ser Thr 610 615 620 Gly Val Ser Gly Tyr Leu Pro Gly Gln Glu Asn Leu Phe Tyr Ser Val 625 630 635 640 Asn Gln Arg Tyr Ser Ala Gln Gln His Tyr Gly Gly Asp Ala Ala Leu $645 \hspace{1.5cm} 650 \hspace{1.5cm} 650 \hspace{1.5cm} 655$ Gln Tyr Glu Gly Ala Trp Gly Asp Tyr Asn Leu Gly Tyr Ser Tyr Ala 660 665 670 Gly Asp Ser Arg Asn Leu Ser Tyr Gly Met Ser Gly Gly Ala Val Leu 675 680 685 His Glu Asp Gly Leu Thr Leu Ser Gln Pro Leu Gly Asn Thr Asn Ile 690 700 Leu Val Lys Ala Pro Gly Ala Ser His Val Ala Val Leu Asn His Lys 705 710 715 720 Gly Ile Lys Thr Asp Ser Arg Gly Tyr Ala Val Ile Pro Tyr Ala Thr 725 730 735 Pro Tyr Arg Val Asn Gln Val Ala Leu Asp Val Thr Thr Val Gly Asn 740 745 750 Asp Val Glu Leu Glu Asn Ala Ile Ala Asn Lys Ile Pro Thr Asp Gly 760

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Ala Leu Val Arg Ala Thr Leu Thr Thr Arg Gln Gly Ala Lys Ala Met
 770
                   775
Phe Ile Val Arg His Ala Lys Asp Val Leu Pro Phe Gly Thr Leu Val
            790
                               795
Ser Ser Glu Asp Asp Lys Ala Ser Gly Ile Val Gly Asp Gly Gly Ser
           805
                           810 815
Val Tyr Leu Thr Gly Leu Ser Ala Gln Gly Thr Leu His Ala Val Trp
        820 825
                             830
Gly Arg Asp Ser Ala Gln Arg Cys Thr Ile Arg Tyr Ala Leu Asn Pro
  835 840 845
Gln Asn Tyr His Ala Arg Thr Gly Leu Tyr Ser Gln Glu Ala Ile Cys
        855
                         860
Gln
865
<210> 7922
<211> 261
<212> PRT
<213> Enterobacter cloacae
<400> 7922
Pro Met Asn Ile Thr Gln Ile Arg Asn Ala Thr Gln Leu Ile Thr Tyr
                          10
Ala Gly Lys Arg Phe Leu Ile Asp Pro Met Leu Ala Pro Lys Gly Thr
        20
                        25
                                        30
Tyr Pro Gly Phe Pro Gly Thr Ala Arg Ala Asp Ile Arg Asn Pro Met
                   40
Val Glu Leu Pro Val Asp Val Gln Thr Leu Leu Asp Ala Asp Ala Val
                 5.5
                     60
Ile Val Thr His Thr His Ala Asp His Trp Asp Gln Tyr Ala Val Glu
                             75
65 70
Leu Ile Ala Lys Gly Lys Pro Ile Tyr Val Gln Asn Asp Ser Asp Ala
          8.5
                          90 95
Ala Leu Leu Arg Ser Gln Gly Phe Thr Asn Leu Thr Ile Met Thr Gly
      100 105 110
Glu Thr Thr Tyr Gly Asp Ile Arg Ile Val Lys Thr His Gly Gly Gln
     115 120
                                      125
His Gly Thr Asp Arg Ala Tyr Ala Val Pro Glu Leu Ala Glu Phe Leu
130 135
                                  140
Gly Glu Ala Cys Gly Val Val Phe Arg His Pro Asp Glu Lys Thr Leu
145 150 155 160
Tyr Ile Ala Gly Asp Thr Ile Trp Arg Asp Ala Val Ala Ala Asp Leu
           165 170
                                         175
Gln Lys His Gln Pro Asp Ile Val Val Leu Asn Ala Gly Tyr Ala His
        180 185
                             190
Val Ile Gly Phe Gly Pro Ile Ile Met Gly Glu Glu Asp Leu Leu Asn
                                     205
    195
                     200
Val His Phe Leu Leu Pro Gln Ala Lys Ile Val Ala Thr His Met Glu
210
                 215
                                   220
Ala Ile Asn His Cys Leu Leu Thr Arg Arg Ala Leu Arg Glu Tyr Val
              230
                               235
Asp Ala Asn Glu Ile Ser Asp Ala Val Ser Ile Pro Gln Asp Gly Glu
            245
                            250
Thr Val Ile Phe
         260
<210> 7923
<211> 168
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<211> 168 <212> PRT

<213> Enterobacter cloacae

```
<400> 7923
Lys Arg Arg Phe Gly Tyr Gly Met Gly Asp Ala Ala Ser His Ile Ile
Phe Asp Asn Val Met Leu Tyr Met Met Phe Phe Tyr Thr Asp Ile Phe
         20
                           25
Gly Ile Pro Ala Gly Phe Val Gly Thr Met Phe Leu Leu Ala Arg Ala
                       40
Leu Asp Ala Ile Ser Asp Pro Cys Met Gly Leu Ile Ala Asp Arg Thr
                 5.5
Arg Ser Arg Trp Gly Gln Val Pro Ser Met Asp Phe Val Trp Arg Tyr
              70
                                 75
Pro Val Arg His Arg Leu Arg Ala Gly Val Tyr His Ala Gly Pro Glu
                  90
            85
Pro Gln Arg Gln Asn Gly Leu Arg Arg Tyr Leu His Pro Ala Asp
                        105
         100
Pro Ala Leu Tyr Arg Gly Gln His Pro Val Leu Arg Ala Gly Arg Arg
     115 120 125
Asp His Gln Arg Pro Asp Ala Ala Tyr Leu Pro Pro Val Leu Ala Leu
 130 135 140
Cys Ala Gly Asp Gly Gly Arg Tyr Ala Leu Tyr Gly Ala Asp Asp Ala
145 150
Ala Gly Glu Pro Asp Trp Arg
<210> 7924
<211> 419
<212> PRT
<213> Enterobacter cloacae
<400> 7924
His Ile Val Lys Leu Lys Asn Arg Ser Gly Gln Arg Arg Ala Leu Ile
                              10
Pro His His Phe Ser Lys Ser Tyr His Ile Asn Ala Pro Arg Leu Lys
Ala Val Leu Thr Leu Phe Ile Ala Phe Phe Leu Cys Leu Leu Val Phe
                       40
Ala Ile Val Phe Asn Phe Ser Glu Thr Thr Leu Ala Arg Gly Val Leu
       55
                                     60
Ile Pro Ala Gln Gly Asp Val Glu Val Arg Ala Arg Glu Ser Gly Thr
                 70
                                  75
Leu Val Asp Phe Ala Val Arg Pro Gly Gln Tyr Val Lys Glu Asn Asp
                              90
Pro Leu Phe Thr Val Ser Gln Asp Tyr Gly Gly Lys Gln Gly Ser Val
         100
                         105
                                             110
Val Gln Phe Asp Arg Gln Gln Met Glu Ala Glu Lys Lys Arg Ser Glu
      115
                       120
                                         125
Gln Arg Ile Gln Ala Ile Glu Asp Ser Ile Ala Ser Tyr Arg Lys Asn
   130
                    135
                                     140
Leu Ala Gln Gln Leu Ala Leu Thr Asp Lys Gln Ile Ala Val Ser Arg
                 150
                                  155
Asp Lys Val Lys Lys Leu Arg Ala Leu Leu Lys Asn Ser Thr Asp Thr
             165
                              170 175
Tyr Glu Ala Trp Lys Ser Val Ser Gly Lys Gly Tyr Val Ser Arg Val
          180
                           185
                                             190
Asp Leu Asp Lys Ser His Asn Asp Val Leu Asn Ala Gln Leu Asn Leu
                        200
                                         205
      195
Thr Leu Glu Glu Ser Thr Ile Leu Glu Leu Glu Ala Arg Lys Thr Ser
                    215
                                     220
 210
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Leu Thr Asp Ser Thr Gln Ser Gln Ile Asp Ser Leu Ser Glu Glu Gln

Leu Tyr Val Lys Asn Arg Ile Ser Glu Ile Asp Arg Asn Leu Ser Ser

235

250 245 Arg Gly Ser Ser Thr Met Ala Met Leu Ala Pro Ser Asp Gly Tyr Val 265 260 Val Ala Ile Asn Phe Pro Pro Gly Arg Ala Ile Thr Gln Asn Ser Glu 280 Val Val Val Ile Arg Lys Asn Thr Ala Ala Thr Met Glu Gly Tyr 295 300 Leu Tyr Val Pro Ala Thr Gly Val Gly Arg Val Ala Lys Gly Asp Lys 305 310 315 Val Lys Leu Arg Phe Asp Ser Trp Pro Val Asp Lys Tyr Gly Ser Val 325 330 335 Glu Ala Thr Leu Ser Asp Phe Tyr Glu Val Asn Ile Asp Ala His Ser 340 345 350 Ala Leu Ile Pro Leu Gln Glu Gly Gln Asn Tyr Tyr Leu Ala Lys Val 355 360 365 Arg Val Pro Ser Trp Phe Thr Asp Pro Asp Lys Lys Arg Met Leu Met Gly Gly Met Thr Val Asn Ala Asp Ile Val Ile Asp Arg Lys Pro 385 390 395 400 Leu Ile Asn Leu Leu Ile Ala Pro Leu Glu Arg Val Arg Lys Arg Phe 405 Ile Asp <210> 7925 <211> 335 <212> PRT <213> Enterobacter cloacae <400> 7925 Arg Gly Lys Glu Arg Gln Met Pro Leu Val Asn Val Ala Ile Val Ala 1.0 Val Asp Gly Phe Ser Pro Phe His Tyr Ser Val Pro Cys Ile Leu Phe 25 Gly Asp Thr Val Ser Gly Glu Lys Arg Phe Asn Val Thr Ile Cys Ala 40 Glu Lys Pro Gly Phe Leu Thr Ser Lys Asp Gly Phe Ala Leu His Ala 55 Thr Gln Asp Phe Ser Ala Ile Ala Ser Ala Glu Ile Val Val Pro 70 7.5 Tyr Trp Gln His Val Leu Glu Arg Pro Pro Gln Thr Leu Leu Asp Ser 85 90 95 Leu Val Gln Ala Arg Asp Asn Gly Ala Glu Ile Val Gly Leu Cys Leu 100 105 Gly Ser Phe Val Leu Gly Tyr Ala Gly Ile Leu Ser Gly Lys Arg Ala 115 120 125 Ala Thr His Trp Glu Phe Glu His Gln Phe Gln Thr Leu Phe Pro Asp 130 135 140 Val Arg Leu Asp Ile Asn Ala Leu Tyr Val Asp Asp Gly Asn Val Ile 150 155 Thr Ser Ala Gly Thr Ala Ala Ala Leu Asp Cys Cys Leu Tyr Ile Ile 165 170 Arg Gln Arg Phe Gly Ser Val Val Ala Asn Gln Ile Ala Arg Arg Met 180 185 190 Ile Val Pro Pro His Arg Glu Gly Gly Gln Ala Gln Phe Ile Ala Gln 195 200 205 Pro Val Pro Lys Asp Thr Arg Asp Gly Arg Ile Asn Cys Leu Ile Asp 215 220 Tyr Leu Gln Gln His Ile Ser Glu Pro His Asn Leu Asp Ser Leu Ala

235

Asp Val Val Ser Met Ser Arg Arg Thr Leu Thr Arg His Phe Ile Lys

245 250 Ala Thr Gly Met Ser Val Ala Asp Trp Leu Thr Ala Glu Arg Leu Arg 265 260 Arg Ser Gln Ile Leu Leu Glu Ser Gly Ser Leu Pro Ile Glu Ser Val 280 285 . 275 Ala Glu Gln Val Gly Phe Leu Ser Ala Val Thr Tyr Arg Gln Gln Phe 300 295 290 Lys Ala Arg Phe Gly Val Ser Pro Ala Glu Trp Arg Lys Thr Phe Arg 305 310 315 Val Lys Pro Tyr Ala Ala Lys Asn Asn Ala Gly Ala Met Glu 330 <210> 7926 <211> 285 <212> PRT <213> Enterobacter cloacae <400> 7926 Met Ser Ser His Thr Cys Gly Asp Pro Gly Ser Thr Ser Val Asn Arg 10 Arg Ile His Thr Ala Pro Met His Lys His Tyr Ile Ile Asn Asn Ile 25 30 Val Glu Phe His Pro Ala Ala Ser Thr Leu Arg Asp Ile Asn Asn Pro 35 40 4.5 Asp Arg Val Val Leu Asn Ser Pro Ala Gly Arg Cys Leu Leu Leu 50 55 60 Leu Ile Asp Arg Ala Gly Ser Ile Val Thr Gln Gln Glu Phe Leu Asp 65 70 75 Ile Val Trp Gln Ser His Gly Met Leu Val Ser Ser Asn Thr Tyr Tyr 85 90 95 Gln Asn Ile Ser Ile Leu Arg Lys Gly Leu Lys Lys Ile Gly Phe Glu 100 105 110 Thr Asp Pro Ile Val Thr Ile Pro Arg Ile Gly Leu Thr Leu Ala Ser 115 120 125 Asp Thr Gln Ile Thr Val Arg Glu Ser Ser Pro Val Ala Pro Gln Pro 130 135 140 Ala Glu Glu Gln Cys Val Glu Ala Pro Ala Ile Glu Glu Val Ser Ala 145 150 155 160 Ser Ser Ala Pro Ala Thr Pro Val Ala Arg Lys Pro Thr Arg Trp Leu 165 170 175 Ala Val Val Met Gly Leu Leu Ile Val Leu Ala Gly Ala Gly Val Thr 180 185 190 Gly Tyr Met Asn Ala Thr Glu Asn Arg Phe Val Glu Asp Tyr Arg Phe 195 200 205 Ala Ala Ser Val Gly Ala Cys Arg Val Tyr Leu Ala Asn Asp Ile Gln 215 220 Thr His Ala Glu Arg Ala Ser Ala Leu Thr Tyr Val Glu Gln Phe Lys 230 235 Ala Glu Cys Ala Gln Tyr Pro Trp Val Tyr Ile Ser Trp Tyr Ala Leu 245 250 255 Leu Pro Arg Ala Ser Val Ile Arg Cys Asp Arg Pro Met Lys Glu Pro 260 265 Asn Arg Cys Ile Ser Asp Tyr Phe Leu Lys Asp Ser 280

<210> 7927

<211> 330

<212> PRT

<213> Enterobacter cloacae

<400> 7927

```
Met Lys Ser Val Phe Asp Ser Ser Asp Gly Gly Lys Ser Val Pro Glu
Lys Cys Leu His Ile Gly Leu Ile Leu Trp Pro Arg Tyr Ser Leu Leu
        20
Ala Val Ser Gly Leu Leu Glu Ala Leu Arg Tyr Ala Ala Lys Ala Gln
Asp Lys Leu Ala Phe Lys Ile Ser Leu Ile Ser Glu Phe Pro Asp Ile
       - 55
Pro Ile Ile Ser Asn Ala Gly Ile Ile Met Arg Pro Asp Ser Thr His
      70
Ala Pro Pro Asp Ser Phe Asn Tyr Leu Ala Val Ile Gly Gly Glu Leu
                            9.0
          85
Gln Tyr Leu Asp Leu Gly Tyr Gln Gly Asp Lys Ala Tyr Leu Ala His
        100 105
Ala His His Ala Gly Val Pro Leu Ile Gly Ile Gly Thr Gly Ser Phe
      115 120
                                     125
Val Leu Ala Gln Glu Gly Leu Leu Asn Glu Arg Arg Ala Ser Ile His
       135 140
Pro Phe His Leu Asp Ala Phe Arg Gln Ala Phe Pro Leu Val Tyr Ala
      150 155
Glu Gln Gly Tyr Asp Phe Ile Asp Asp Gly Asp Val Leu Thr Cys Pro
            165 170 175
Gly Gly Ile Ser Thr Leu Thr Leu Ala Thr Glu Leu Ile Arg Ala His
             185 190
         180
Ala Gly Asp Asp Ile Ala Ser Thr Thr Cys Gln Arg Leu Ser Leu Val
                      200 205
      195
Pro His Glu Ile Ala Thr Pro Arg Pro Ala Asn Leu Ala Leu Ile Pro
                215 220
Asp Ser Arg Leu Arg Arg Ala Val Met Leu Ile Glu Gln Phe Leu Thr
                230 235 240
Arg Pro Leu Thr Thr Ala Gly Leu Ala Arg Glu Val Ala Leu Ser Glu
                           250 255
            245
Arg Gln Leu Asn Arg Leu Phe His Ala Glu Phe Gly Lys Thr Ala Arg
                        265 270
         260
Glu Phe Ile Arg Ser Ala Arg Leu Arg Tyr Ala Cys Trp Leu Leu Lys
                      280 285
      275
Asn Ser Gln Gln Ser Val Thr Asp Ile Ala Gln Arg Met Gly Phe Ser
                   295 300
  290
Asp Cys Ala His Phe Ile Arg His Phe Gln Thr Glu Tyr Gly Cys Thr
             310
Pro Gly Val Trp Arg Thr Ser Gln Ser
```

```
<210> 7928
<211> 164
<212> PRT
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<213> Enterobacter cloacae

325

 Ser Arg Gly Lys Gly Ile Gly Lys Met Leu Leu Gln Tyr Ala Ile Ala
 100
 105
 110

 Glu Phe Gly Val Asn Glu Val Asp Val Asn Glu Gln Asn Pro Gln Gly 115
 120
 125
 125

 Val Ala Phe Tyr Arg His Met Gly Phe Glu Gln Val Gly Arg Ser Glu 130
 135
 140
 141

 Leu Asp Gly Gln Gly Asn Pro Phe Pro Leu Leu His Met Arg Leu Ser 145
 150
 155
 160

 Gly Gln Ala
 160
 160
 160
 160
 160

<210> 7929 <211> 387 <212> PRT <213> Enterobacter cloacae

<400> 7929 Leu Pro Thr Ala Pro Ala Ala Ala Gly Gly Lys Phe Arg Pro Trp Ile 1.0 Leu Phe Gly Ala Ile Pro Phe Gly Ile Val Cys Val Leu Ala Tyr Thr 25 Thr Pro Asp Leu Ser Leu Asn Gly Lys Met Val Tyr Ala Ala Val Thr 45 40 Tyr Thr Leu Leu Thr Leu Leu Tyr Thr Val Val Asn Ile Pro Tyr Cys 60 55 Ala Leu Gly Gly Val Ile Thr Asn Asp Pro Thr Gln Arg Ile Ser Leu 75 70 Gln Ser Trp Arg Phe Val Leu Ala Thr Ala Gly Gly Met Leu Ser Thr 85 90 Val Leu Met Met Pro Leu Val Asn Leu Ile Gly Gly Asp Asp Lys Ala 100 105 110 Phe Gly Phe Gin Gly Gly Ile Ala Val Leu Ser Val Val Ala Phe Leu 120 125 115 Met Leu Ala Phe Cys Phe Phe Thr Thr Lys Glu Arg Ile Gln Val Pro 135 140 Pro Ser Thr Thr Ser Met Arg Glu Asp Met Arg Asp Ile Trp Gln Asn 150 155 Asp Gln Trp Arg Ile Val Gly Val Leu Thr Ile Leu Asn Ile Leu Ala 165 170 175 Val Cys Val Arg Gly Gly Ala Met Met Tyr Tyr Cys Thr Trp Ile Met 180 185 190 Gly Ser Pro Glu Val Phe Val Ala Phe Leu Thr Thr Tyr Cys Val Gly 200 205 195 Asn Leu Ile Gly Ser Ala Leu Ala Lys Pro Leu Thr Asp Trp Lys Cys 215 220 210 Lys Val Ser Ile Phe Trp Trp Thr Asn Ala Ala Leu Ala Val Val Ser 230 235 225 Val Ala Met Phe Phe Val Pro Met His Ala Thr Val Leu Met Phe Gly 245 250 255 Phe Ile Phe Arg Tyr Arg Arg Ala Ala Pro Ala Gly Asp Ala Asp Ser 265 270 260 Val Gly Asn Asp Val Arg Tyr Arg Arg Ile Arg Arg Met Asp Gln Arg 280 275 Gln Thr Pro Asp Arg His Gln Leu Cys Gly His Ala Val Arg Ala Glu 295 300 290 Ala Arg Pro Gly Ala Gly Arg Gly Asp Asp Arg Leu Asp Ala Gly Arg 310 315 305 Arg Arg Leu Arg Arg Gly Gly Gln Asn Pro Glu Gln Arg Asp His Gln 330 325 Tyr His Tyr Arg Ser Val Tyr Ala Gly Ala Ser Asp Leu Leu Arg Ala 340

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Glu Arg His His Arg Gln Thr Leu Leu His Ala Glu Asn Pro Phe Pro
                    360
Asp Gln Asn Pro Ala Arg Ala Gly Ala Gly Cys Ala Pro Gln Ser Ala
        375
                                380
Glv Val
385
<210> 7930
<211> 400
<212> PRT
<213> Enterobacter cloacae
<400> 7930
Tyr Val Tyr Leu Arg Pro Leu Val Lys Thr Leu Leu Thr Met Leu Leu
                         10
Met Gly Val Phe Phe Leu Ile Arg Phe Ser Leu Ile Gly Pro Tyr Gln
                      25
      20
                                 30
Arg Ala Val Asp Asp Ser Ile Glu Arg Thr Ala Gln Tyr Glu Ser Leu
 35 40
                        4.5
Leu Val Glu Thr Gln Lys Gly Ile Ile Thr Leu Lys Ala Asn Asn Met
                     60
50 55
Glu Gln Ala Arg Asp Ala Val Met Asp Lys Ser Gln Arg Glu His Ile
65 70 75
Ala Gly Leu Met Arg Lys Glu Arg Leu Leu Ala Arg Phe Asp Val Ala
         85 90 95
Ser Leu Leu Val Ile Asn Ala Glu Gln Leu Leu Val Val Cys Phe Gly
   100 105 110
Ala Trp Leu Ile Leu Glu Gly Gln Met Ser Ile Gly Met Leu Tyr Ala 115 120 125
Tyr Ile Ser Tyr Lys Arg Tyr Phe Ser Asp Ala Met Val Gln Val Ala
 130 135 140
Gln Lys Leu Leu Asp Lys Asn Ala Leu Lys Gly Pro Leu Asp Arg Val
145 150 155 160
Glv Asp Leu Leu Phe Ala Pro Ser Glu Thr Ser Gln Phe Gly Lys Arg
         165 170 175
Ile Val Thr Ser Pro Val Cys Leu Gln Phe Glu Asp Val Ser Phe Ala
        180 185 190
Tyr Pro Gly Arg Glu Ala Thr Leu Gln His Ile Asn Met Thr Leu Lys
    195 200 205
Gln Gly Glu Glu Ala Val Ile Val Gly Gln Ser Gly Ser Gly Lys Thr
 210 215 220
Thr Leu Leu Arg Leu Ile Ser Gly Met Leu Leu Ala Ser Ser Gly Thr
225 230 235
Leu Arg Ile Asn Lys Ile Pro Ile Glu Glu Cys Asp Leu Ser Ser Leu
          245
                          250 255
Arg Gln His Ile Arg Ile Val His Ala Asp Asp Ile Leu Phe Thr Gly
        260 265 270
Ser Ile Leu Asp Asn Ile Ala Cys Phe Asp Ser Ala Pro Asp Lys Glu
 275 280 285
Gln Val Ile Ala Ala Cys Arg Leu Ala Glu Val Asp His Val Val Ala
                 295 300
Arg Leu Pro His Gly Tyr Glu Thr Glu Met Leu Pro Gly Asn Thr Phe
            310 315
Phe Ser Ala Gly Glu Met Gln Arg Leu Val Leu Ala Arg Ala Leu Tyr
           325 330
Ser Gln Pro Lys Leu Leu Cys Asp Glu Val Thr Ala Asn Leu Asp
        340 345 350
Lys Thr Thr Ala Gln Lys Val Leu Ala Asn Leu Arg Ser Leu Gly Ile
                360
                                   365
Gly Leu Val Phe Val Thr His Ser Pro Asp Val Val Gly Cys Gln Gly
```

Lys Lys Glu

```
Arg Leu Tyr Thr Met Glu Asn Gly Thr Leu Arg Glu Ser Glu Gln
                 390
                                   395
<210> 7931
<211> 180
<212> PRT
<213> Enterobacter cloacae
<400> 7931
Met Lys Gly Val Leu Met Arg Leu Trp Pro Val Val Thr Gly Val Ala
                               1.0
Ile Ala Leu Thr Leu Val Ala Cys Lys Ser Pro Thr Pro Pro Lys Gly
        20
                           2.5
Val Gln Pro Ile Thr Gly Phe Asp Ala Ser Arg Tyr Leu Gly Lys Trp
                      40
      35
                                         4.5
Tyr Glu Val Ala Arg Leu Glu Asn Arg Phe Glu Arg Gly Leu Glu Gln
                  55
                                    60
Val Thr Ala Thr Tyr Gly Lys Arg Ser Asp Gly Gly Ile Ser Val Leu
                70
                               75
Asn Arg Gly Tyr Asp Pro Val Lys Asn Lys Trp Asn Glu Ser Glu Gly
                         90
             85
Lys Ala Tyr Phe Thr Gly Glu Pro Thr Thr Ala Ala Leu Lys Val Ser
          100 105
                                          110
Phe Phe Gly Pro Phe Tyr Gly Gly Tyr Asn Val Ile Lys Leu Asp Asp
                        120 125
Lys Tyr Gln Tyr Ala Leu Val Ser Gly Pro Asn Arg Asp Tyr Leu Trp
 130 135 140
Ile Leu Ser Arg Thr Pro Thr Ile Pro Asp Ala Val Lys Gln Asp Tyr
              150 155
Leu Asn Thr Ala Arg Gly Leu Gly Phe Arg Val Asp Gln Leu Val Trp
                               170
Val Lys His
          180
<210> 7932
<211> 164
<212> PRT
<213> Enterobacter cloacae
<400> 7932
Arg Ile Ala Ser Met Thr Arg Phe Arg Gln Met Leu Tyr Ile Ile Val
                               1.0
Thr Gly Leu Val Met Ala Gly Val Leu Thr Gly Tyr Tyr Leu Trp His
         20
                            2.5
Arg Thr Tyr Val Gln Pro Phe Ser Cys Gln Ala Asn Leu Val Gln His
                      40
                                4.5
His Pro Asp Glu Thr Leu Thr Val Trp Leu Asn Tyr Thr Phe Asp Gly
                    5.5
                                       60
Lys Phe Gly Thr Leu Ser Met Asn Gly Arg Ala Lys Ser Asp Pro Gly
                 70
                                  7.5
Lys Thr Ile Asp Arg Lys Ile Ser Phe Arg Val Glu Arg Gln Asp His
              8.5
                   90
Leu Tyr Leu Leu Thr Ser Glu Lys Asn Met Thr Phe Pro Asp Asp Asn
          100
                           105
                                             110
Val Asp Asp Ser Trp Leu Glu Lys Tyr Glu Pro Gln Phe Phe Val Tyr
                        120
       115
                                          125
Pro Gly Lys Ser Ile Tyr Met Arg Ile Asn Glu Gln His Asn Gly Asn
                                      140
                     135
Tyr Ile Phe Thr Leu Gly Tnr Leu Pro Thr Tyr Val Cys Arg Gly Ser
145
                 150
                                   155
```

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<210> 7933
<211> 145
<212> PRT
<213> Enterobacter cloacae
<400> 7933
Cys Ser Ala Ser Ser Phe Val Ile Gly Val Leu His Gln Leu Val Thr
                          10
Pro Ile Gln Trp Val Met Met Ser Asp Thr Val Glu Tyr Gly Glu Trp
         20
                           25
Thr Asn Gly Lys Arg Leu Thr Gly Ile Ser Phe Ala Gly Thr Leu Phe
                        40
                                         4.5
Val Leu Lys Leu Gly Leu Ala Leu Gly Gly Ala Met Ile Gly Trp Met
                  55
                          60
Leu Ala Gly Gly Gly Tyr Asp Ala Ala Ala Lys Thr Gln Asn Ser Ala
                 70
                      75
Thr Ile Ser Ile Ile Ile Gly Leu Phe Thr Leu Ala Pro Ala Ile Cys
             8.5
                        90 95
Tyr Val Leu Ser Ala Ile Ile Ala Lys Arg Tyr Tyr Thr Leu Lys Thr
         100 105
                                 110
Pro Phe Leu Thr Lys Ile Leu Arg Glu Leu Ala Gln Gly Ala Arg Arg
                             125
 115 120
Asn Gln Glu Phe Glu Asn Leu Pro Val Ser Lys Glu Leu Gln Asn
                     135
                                       140
145
<210> 7934
<211> 793
<212> PRT
<213> Enterobacter cloacae
<400> 7934
Glu Asp Glu Ser Met Lys Ile Ser Asp Gly Asn Trp Leu Ile Gln Pro
                              10
Gly Leu Asn Val Thr Tyr Pro Val Gln Val Phe Asp Val Glu Gln Gln
                           25
         20
Gly Asn Asp Leu Val Val Tyr Val Ala Pro Arg Asp Val Arg Glu Arg
      3.5
                        40
                                         4.5
Thr Trp Gln Leu Asp Thr Leu Met Phe Thr Val Arg Leu Phe Ala Pro
                    55
Gln Glu Gly Ile Val Gly Val Arg Ile Glu His Phe Gln Gly Ala Leu
                            7.5
65
                 70
Asn Lys Gly Pro His Tyr Pro Leu Asn Val Leu Lys Asp Val Lys Val
                              90
              8.5
Glu Ile Glu Asn Asn Ala Glu Phe Ala Glu Leu Lys Ser Gly Ser Val
                           105
          100
Ser Val Arg Val Thr Lys Gly Glu Phe Trp Ala Leu Asp Phe Leu Arg
                        120
                                         125
       115
Asn Gly Gln Arg Ile Thr Gly Ser Gln Leu Lys Asn Asn Gly Tyr Val
                     135
  130
Gln Asp Asn Asn Thr Asp Arg Asn Tyr Val Phe Glu Arg Leu Asp Leu
                  150
                                155
Gly Val Gly Glu Thr Val Tyr Gly Leu Gly Glu Arg Phe Thr Ala Leu
                            170 175
              165
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Val Arg Asn Gly Gln Thr Val Glu Thr Trp Asn Arg Asp Gly Gly Thr

Ser Thr Glu Gln Ser Tyr Lys Asn Ile Pro Phe Tyr Leu Thr Asn Arg

200

185

180

195

190

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Gly Tyr Gly Val Leu Val Asn His Pro Glu Asn Val Ser Phe Glu Val
            215
  210
Gly Ser Glu Lys Val Ser Lys Val Gln Phe Ser Val Glu Gly Glu Tyr
                            235
              230
Leu Glu Tyr Phe Val Ile Asp Gly Pro Thr Pro Lys Glu Val Leu Asn
          245 250
Arg Tyr Thr Arg Phe Thr Gly Arg Pro Ala Leu Pro Pro Ala Trp Ser
                      265 270
Phe Gly Leu Trp Leu Thr Thr Ser Phe Thr Thr Asn Tyr Asp Glu Ala
                  280
     275
Thr Val Asn Ser Phe Ile Asp Gly Met Ala Glu Arg Asp Leu Pro Leu
      295
                               300
His Val Phe His Phe Asp Cys Phe Trp Met Lys Ala Phe Gln Trp Cys
                            315
305
    310
Asp Phe Glu Trp Asp Pro Val Thr Phe Pro Asp Pro Glu Gly Met Ile
      325 330
Arg Arg Leu Lys Glu Lys Gly Leu Lys Val Cys Val Trp Ile Asn Pro
       340
                      345 350
Tyr Ile Gly Gln Lys Ser Pro Ile Phe Arg Glu Leu Lys Glu Lys Gly
    355 360 365
Tyr Leu Leu Lys Arg Pro Asp Gly Ser Leu Trp Gln Trp Asp Lys Trp
 370 375 380
Gln Pro Gly Leu Ala Ile Tyr Asp Phe Thr Asn Pro Asp Ala Cys Arg
385 390
                            395
Trp Tyr Ala Asp Lys Leu Lys Gly Leu Val Glu Ile Gly Val Asp Cys
     405 410
Phe Lys Thr Asp Phe Gly Glu Arg Ile Pro Thr Asp Val Gln Trp Phe
       420 425 430
Asp Gly Ser Asp Pro Gln Lys Met His Asn His Tyr Ala Tyr Ile Tyr
 435 440 445
Asn Glu Leu Val Trp Asn Val Leu Lys Glu Thr Val Gly Glu Glu Glu
 450 455 460
Ala Val Leu Phe Ala Arg Ser Ala Ser Val Gly Ala Gln Gln Phe Pro
465 470 475 480
Val His Trp Gly Gly Asp Cys Tyr Ala Asn Tyr Glu Ser Met Ala Glu
          485 490 495
Ser Leu Arg Gly Gly Leu Ser Ile Gly Leu Ser Gly Phe Gly Phe Trp
        500 505 510
Ser His Asp Ile Gly Gly Phe Glu Asn Thr Ala Pro Ala His Val Tyr
     515 520 525
Lys Arg Trp Cys Ala Phe Gly Leu Phe Ser Ser His Ser Arg Leu His
  530 535 540
Gly Ser Lys Ser Tyr Arg Val Pro Trp Ala Tyr Asp Asp Glu Ser Cys
            550 555 560
Asp Val Val Arg His Phe Thr Gln Leu Lys Cys Gln Leu Met Pro Tyr
           565 570 575
Leu Tyr Arg Gln Ala Ala Leu Ala Arg Glu Phe Gly Thr Pro Met Leu
                      585
                                   590
Arg Ala Met Met Leu Glu Phe Pro Asp Asp Pro Ala Cys Asp Tyr Leu
     595 600 605
Asp Arg Gln Tyr Met Leu Gly Asp Ser Met Met Val Ala Pro Val Phe
                615 620
Ser Glu Ala Gly Asp Val Gln Phe Tyr Leu Pro Glu Gly Arg Trp Thr
              630
                            635
His Leu Trp His Asn Asp Glu Ile Glu Gly Ser Arg Trp His Lys Gln
           645
                         650 655
Gln His Asp Phe Met Ser Leu Pro Val Tyr Val Arg Asp Asn Thr Leu
                      665
Leu Ala Leu Gly Asn Asn Asn Gln Lys Pro Asp Tyr Ala Trp His Glu
            680
Gly Thr Ala Phe Gln Leu Phe Asn Leu Ser Asp Gly Ala Thr Ala Val
```

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695
Ser Glu Val Pro Ala Ala Asp Gly Ser Val Leu Phe Thr Leu Lys Ala
         710
                           715
Ser Arg Gln Gly Asp Val Val Thr Phe Thr Gly Thr Gly Asp Ala Gln 725 730 735
            725
Asn Trp Ser Val Cys Leu Arg Asn Val Gln Lys Val Gly Gly Val Lys
        740
                    745
Gly Gly Ser His Ala Gly Ser Glu Trp Gly Val Val Lys Ala Glu
           760
     755
                             765
Gly Asp Glu Val Met Val His Leu Cys Ala Val Phe Thr Ser Glu Arg
 770 775
Pro Ile Arg Asp Tyr Leu Pro Gln
<210> 7935
<211> 339
<212> PRT
<213> Enterobacter cloacae
<400> 7935
Gly Phe Leu Thr Met Gln Pro Ile Ser Gly Thr Pro Pro Arg Pro Pro
                  10
Gly Glu Gly Pro Val Thr Pro Asn Thr Pro Gly Glu Gln Pro Leu Ser
 20
                25
                                      30
Thr Gln Gln Arg Thr Val Leu Glu Arg Leu Ile Thr Arg Leu Ile Ala
          40
                           45
Leu Thr Ser Gln Gln Asn Ala Glu Val Trp Ala Gly Val Lys His Asp
50 55
                     60
Leu Gly Val Arg Asn Asp Ala Gln Leu Gln Ser Arg His Phe Pro Ala
65 70 75
Ala Glu Gln Asn Leu Asn Gln Arg Leu Thr Ser Ala Gln Gln Gln His
         85 90
Thr Thr Arg Gln Ile Ile Ser Gln Leu Thr Glu Leu Leu Gly Gln Gly
 100 105 110
Asn Asn Arg Gln Ala Val Ser Asp Phe Ile Arg Gln Gln Tyr Gly His
115 120 125
Thr Ala Leu Ser Gln Leu Ser Pro Glu Gln Leu Lys Thr Val Leu Thr
 130 135 140
Leu Leu Gln Ser Asn Gln Leu Ser Ile Pro Gln Pro Gln Gln Arg Pro
145 150 155
Ser Thr Glu Arg Pro Leu Gln Pro Ala Glu His Asn Thr Leu Lys Gln
          165 170 175
Met Val Thr Lys Leu Ala Ala Ala Thr Gly Glu Pro Thr Lys Leu Ile
        180 185 190
Trp Gln Ser Met Leu Glu Leu Ser Gly Val Lys Ala Gly Glu Met Ile
    195 200 205
Pro Ala Lys Gln Phe Thr His Leu Val Thr Trp Leu Gln Ala Arg Gln
                 215 220
Thr Leu Ser Thr Gln Ser Ala Pro Thr Leu His Ser Val Gln Ala Ala
              230 235
Leu Lys Gln Pro Leu Glu Pro His Glu Phe Asp Thr Ile Arg Asp Tyr
           245
                          250 255
Ala Gln Gln Ser Trp Gln Ala Thr Pro Gln Thr Val Leu Thr Thr Ala
        260
                       265 270
Gln Val Gln Asp Val Leu Asn Gln Ile Phe Val Arg Arg Ala Glu Arg
                         285
     275
                    280
Glu Gly Gly Val Pro Glu Val Arg Asn Ile Gln Pro Ile Tyr Asn Pro
                 295
                                300
Leu Phe Ala Pro Val Val Asp Thr Phe Lys Thr Leu Ser Ala Arg Pro
              310
                             315
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Gly Leu Met Leu Ile Ala Leu Val Ile Ala Leu Ala Ile Phe Trp Leu

<210> 7936 <211> 339

<212> PRT <213> Enterobacter cloacae

<220> <221>UNSURE <222>(314)

<400> 7936

1.15

10

11

13

111

10

Leu Asn Glu Val Met Val Met Ser Gln Lys Thr Leu Phe Lys Gln Thr 1 5 10 15 15 15 16 Ala Leu Ala Val Ala Val Ala Ile Val Ser Thr Ser Ala Trp Ser Ala

20 25 30

Gly Phe Gln Leu Asn Glu Phe Ser Ser Ser Gly Leu Gly Arg Ala Tyr 35 40 45

Ser Gly Glu Gly Ala Ile Ala Asp Asp Ala Gly Asn Ala Ser Arg Asn 50 60

Pro Ala Leu Ile Met Met Phe Asp Arg Pro Thr Phe Ser Ala Gly Ala 65 70 75 80

Val Tyr Ile Asp Pro Asp Val Asn Ile Ser Gly Lys Ser Gln Phe Thr 85 90 95 Gly Ala Asp Leu Lys Ala Asp Asn Ile Ala Pro Thr Ala Trp Val Pro

100 105 110 Asn Leu His Phe Val Ala Pro Ile Asn Glu Gln Phe Gly Trp Gly Ala

115 120 125 Ser Val Thr Ser Asn Tyr Gly Leu Ala Thr Glu Phe Asn Asn Asn Tyr 130 135 140

Pro Ala Gly Glu Tyr Gly Gly Lys Thr Asp Leu Thr Thr Leu Asn Leu 145

Asn Leu Ser Gly Ala Tyr Arg Leu Asn Asp Asn Trp Ser Phe Gly Leu 165 170 175

Gly Phe Asp Ala Val Tyr Ala Asp Ala Lys Ile Glu Arg Tyr Ser Gly
180 185 190

Glu Gln Thr Ala Ala Leu Pro Lys Asn Ser Asn Lys Ile Ala Ser Leu 195 200 205

Lys Gly Asp Glu Trp Gly Tyr Gly Trp Asn Ala Gly Ile Leu Tyr Glu 210 215 220

Leu Asp Lys Asn Asn Arg Trp Gly Leu Thr Tyr Arg Ser Glu Val Lys 225 230235235

Ile Asp Phe Asp Gly Asp Tyr Lys Ser Gly Ile Leu Ser Pro Val Asn 245 250 255

Gly Met Val Pro Gly Ala Gly Thr Thr Ile Pro Trp Gly Thr Ser Asn $260 \hspace{1.5cm} 265 \hspace{1.5cm} 270 \hspace{1.5cm}$

Gln Thr Val Pro Gly Ser Leu Ser Leu His Leu Pro Lys Met Trp Glu 275 280 Val Ser Gly Tyr Asn Arg Val Ala Pro Gln Trp Ala Ile His Tyr Ser

290 295 300 Leu Ala Tyr Thr Ser Trp Asn Gln Phe Xaa Glu Leu Lys Ser Thr Gly

305 Ser Asn Gly Gln Thr Leu Phe Tyr Lys Glu Glu Lys Leu Thr Met Leu 325 330 335

Tyr Leu Ser

<210> 7937 <211> 61

145

150

155

Phe Pro Leu Thr Ala His Asp Leu Arg Leu Ala His Gln Arg Trp Pro

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<212> PRT
<213> Enterobacter cloacae
<400> 7937
Leu Phe Val Ala Arg Arg Glu Gly Ser Ser Asp Gly Ala Ala Ala Ser
                                 10
Pro Ala Arg Thr Ser Ser Ala Ala Pro Ser Gly Gly Trp Ala Gly Ser
           20
                              25
                                                 3.0
Ala Cys Val Ala Ala Gly Ser Ile Ser Gly Ser Ser Arg Ser Pro Gly
  35
            40
Leu Gly Thr Ser Gly Met Ala Ala Asn Ser Ser Trp
 50 55
<210> 7938
<211> 101
<212> PRT
<213> Enterobacter cloacae
<400> 7938
Pro Pro Ser Ala Val Pro Arg Thr Cys Gly Ala Thr Arg Phe Thr Thr
                                 10
Ser Thr Pro Ser Ala Gly Lys Ile Ser Glu Gln Pro Gln Pro Val Asn
          20
                             25
Ala Ala Pro Ser Ser Ala Thr Asp Ala Glu Gly Ala Cys Gln Ser Ser
                        4.0
Thr Arg Pro Thr Val Ser Met Thr Ser Asp Asp Thr Ala Thr Phe Thr
                   55
Pro Pro Lys Arg Ser Ser Ile Gln Pro Asn Ser Thr Arg Ile Asn Thr
                 7.0
                       75
Asn Ala Pro Pro Lys Ala Val Ser Val Lys Pro Ala Ile Ala Gln Pro
Arg Leu Met Lys
<210> 7939
<211> 724
<212> PRT
<213> Enterobacter cloacae
<400> 7939
Ser Leu His Val Ser Phe Asn Thr Ser Val Ser Arg Thr Ile Lys Ser
                                 10
Phe Glu Ser His Asn Ser Val His Leu Tyr Ala Glu Gln Val Arg Ser
          20
                              25
                                                 30
Ala Ile Phe Cys Gly Asn Leu His Arg Trp Ala His Ile Ala Lys Ile
    35
                         4.0
                                             4.5
Val Pro Leu Pro Val Gly Arg Val Thr Tyr Val Lys Gln Asn Ala Ile
                      55
                                         60
Gln Pro Ala Asn Leu Glu Phe Asn Ala Glu Gly Thr Pro Val Ser Arg
                  7.0
                                     75
Asp Phe Asp Asp Val Tyr Phe Ser Asn Asp Asn Gly Leu Glu Glu Thr
              85
                                 90
                                                    95
Arg Tyr Val Phe Leu Glu Gly Asn His Leu Ser Thr Arg Phe Pro Glu
           100
                              105
His Pro Arg Arg Leu Phe Val Val Ala Glu Ser Gly Phe Gly Thr Gly
                          120
                                             125
       115
Leu Asn Phe Leu Thr Leu Trp Gln Ala Phe Asp Cys Phe Arg Ala Ala
                     135
                                         140
Tyr Pro Glu Ala Thr Leu Gln Arg Leu His Phe Ile Ser Phe Glu Lys
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170 165 Glu Leu Ala His Trp Ala Glu Gln Leu Gln Thr Gln Trp Pro Pro Ala 185 Ile Gly Gly Cys His Arg Leu Ile Leu Asp Asp Gly Arg Val Thr Leu 200 195 Asp Leu Trp Leu Gly Asp Ile Asn Asp Leu Thr Asp Lys Leu Asp Asp 215 Ser Met Asn Gln Lys Val Asp Ala Trp Phe Leu Asp Gly Phe Ala Pro 230 235 Ala Lys Asn Pro Asp Met Trp Ser Pro His Leu Phe Ser Ala Met Ala 245 250 255 Arg Leu Ala Arg Pro Gly Ala Thr Leu Ala Thr Phe Thr Ser Ala Gly 260 265 270 Phe Val Arg Arg Gly Leu Gln Glu Ala Gly Phe Thr Met Arg Lys Thr 275 280 285 Lys Gly Phe Gly Arg Lys Arg Asp Met Leu Val Gly Val Met Glu Gln 295 300 Asp Leu Ala Ile Pro Ala Gln Ala Pro Trp Phe Ala Arg Arg Ala Ser 305 310 315 320 Thr Ser Arg Glu Val Ala Ile Val Gly Gly Gly Ile Ala Ser Ala Leu 325 330 335 Leu Ser Leu Ala Leu Leu His Arg Gly Trp Gln Val Thr Leu Tyr Cys 340 345 350 Ala Asp Glu Ala Pro Ala Thr Gly Ala Ser Gly Asn Arg Gln Gly Ala 355 360 365 Leu Tyr Pro Leu Leu Ser Ser His Asp Pro Ala Leu Phe Gln Phe Phe 370 375 380 Pro Ala Ala Phe Thr Phe Ala Arg Arg Leu Tyr Asp Ser Leu Pro Val 385 390 395 400 Ala Phe Asp His Asp Trp Cys Gly Val Thr Gln Leu Gly Trp Asp Glu 405 410 415 Lys Ser Gln Gln Lys Ile Thr Gln Met Leu Ser Leu Gly Leu Pro Glu 420 425 430 Asp Ile Ala His Ala Val Thr Ala Gln Gln Val Thr Glu Thr Thr Gly 435 440 445 Val Asp Thr Gly Cys Gly Gly Ile Gln Tyr Pro Leu Gly Gly Trp Leu 450 455 460 Cys Pro Ala Glu Leu Thr Ser Ala Ala Ile Ala Leu Gly Gln Ser Arg 465 470 475 480 Gly Leu Thr Val His Tyr Ala His Lys Val Gln Ser Leu Ser Arg Thr 485 490 495 Ala His Trp Lys Leu Arg Phe Ala Asp Gly Lys Glu Ala Gln His Ala 500 505 510 Ser Val Val Leu Ala Asn Gly His His Ile Thr Gln Phe Thr Gln Thr 515 520 525 Ala Ser Leu Ala Val Tyr Pro Val Gly Gly Gln Val Ser His Ile Pro 530 535 540 Thr Ala Pro Gln Leu Ser Lys Leu Arg Gln Val Leu Cys Tyr Asp Gly 545 550 555 Tyr Leu Thr Pro Gln Asn Pro Ser Asn Gly His His Cys Ile Gly Ala 565 570 575 Ser Tyr His Arg Gly Glu Thr Asp Met Gln Tyr Ser Glu Ala Asp Gln 580 585 Gln Gln Asn Arg Gln Arg Leu Val Asp Cys Phe Pro Asp Ala Ser Trp 595 600 605 Ala Lys Glu Val Asp Val Ser Glu Gly Gln Ala Arg Cys Gly Val Arg 610 615 620 Cys Ala Thr Arg Asp His Leu Pro Met Ala Gly Asn Val Pro Asp Tyr 625 630 635 Asp Ala Thr Leu Glu Val Tyr Gln Asp Leu Ala Asp Ser Lys Glu Thr 650

```
Ala Val Ser Ala Pro Val His Pro Glu Leu Phe Met Leu Gly Gly Leu
        660
                 665
Gly Ser Arg Gly Leu Cys Ser Ala Pro Leu Leu Ala Glu Ala Leu Ala
       675
                        680
Ala Gln Met Ser Asp Glu Pro Val Pro Leu Asp Arg Val Thr Leu Ala
 690 695
Gly Leu Asn Pro Asn Arg Leu Trp Val Arg Lys Leu Leu Lys Gly Lys
705 710
Met Val Lys
<210> 7940
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 7940
Arg Met Lys Lys Lys Thr Ser Leu Ser Glu Glu Asp Gln Ala Leu Phe
                         10
Arg Gln Leu Met Thr Gly Thr Arg Gln Ile Thr His Asp Thr Ile Val
  20
                          25
His Arg Pro Gln Arg Lys Lys Ile Ser Glu Val Pro Val Lys Arg Leu
 35
                  40
Leu Gln Glu Gln Ala Asp Asn Ser His Tyr Phe Ser Asp Glu Phe Gln
                   55
Pro Leu Leu Ser Thr Gln Gly Ala Val Lys Tyr Val Arg Glu Asp Val
              70
                                75
Ser His Phe Glu Leu Lys Lys Leu Arg Arg Gly Asp Tyr Ser Pro Glu
           8.5
                              90
Leu Phe Leu Asp Leu His Gly Leu Thr Gln Met Gln Ala Lys Gln Glu
      100
                        105
Leu Gly Ala Leu Ile Ala Ala Cys Arg Arg Glu His Val Phe Cys Ala
 115
                     120 125
Cys Val Met His Gly His Gly Lys His Ile Leu Lys Gln Gln Thr Pro
 130
                 135
                                   1.40
Leu Trp Leu Ala Gln His Pro His Val Met Ala Phe His Gln Ala Pro
145 150
                                 155
Lys Glu Tyr Gly Gly Asp Ala Ala Leu Leu Val Leu Ile Glu Val Glu
          165 170
Glu Trp Gln Pro Pro Glu Leu Pro
         180
<210> 7941
<211> 167
<212> PRT
<213> Enterobacter cloacae
<400> 7941
Gln Lys Arg Cys Asn Met Gln Val Phe Ile Met Arg His Gly Asp Ala
                              10
Ala Leu Asp Ala Ala Ser Asp Ser Val Arg Pro Leu Thr Val Cys Gly
 20
                           25
                                            3.0
Cys Asp Glu Ser Arg Gln Met Ala Thr Trp Leu Lys Gly Gln Lys Val
                        4.0
Asp Ile Glu Arg Val Leu Val Ser Pro Phe Leu Arg Ala Glu Gln Thr
                    55
Leu Asp Val Val Gly Glu Cys Met Asn Leu Pro Ser Ser Val Asp Val
                70
                                                   80
Leu Pro Glu Leu Thr Pro Cys Gly Asp Val Gly Leu Val Ser Ala Tyr
                              9.0
Leu Gln Ala Leu Cys Asn Glu Gly Val Ala Ser Ala Leu Val Ile Ser
```

```
100
                       105
His Leu Pro Leu Val Gly Tyr Leu Val Ser Glu Leu Cys Pro Gly Glu
                   120
                              125
Thr Pro Pro Met Phe Thr Thr Ser Ala Ile Ala Asn Val Thr Leu Asp
               135
                        140
Glu Thr Gly Lys Gly Val Phe Asn Trp Gln Met Ser Pro Cys Asn Leu
145 150
                     155
Lys Met Ala Lys Ala Ile
            165
<210> 7942
<211> 274
<212> PRT
<213> Enterobacter cloacae
<400> 7942
Ala Cys Thr Leu Met Asp Asn Phe Val Asp Leu Phe Met Val Ser Pro
                        10
Leu Leu Leu Ala Val Leu Phe Phe Val Ala Met Leu Ala Gly Phe Ile
                       25
                                      30
Asp Ala Leu Ala Gly Gly Gly Leu Leu Thr Val Pro Ala Leu Leu
 35
                    40
                                 4.5
Ala Ala Gly Met Ser Pro Ala Gln Ala Leu Ala Thr Asn Lys Leu Gln
            55
Ala Cys Gly Gly Ser Leu Ser Ser Leu Tyr Phe Ile Arg Arg Lys
    70 75
Val Val Asn Leu Ala Asp Gln Lys Leu Asn Ile Leu Met Thr Phe Ile
         85 90 95
Gly Ser Thr Ala Gly Ala Leu Leu Val Gln His Val Gln Ser Asp Ile
   100 105 110
Leu Arg Gln Ile Leu Pro Leu Leu Val Ile Cys Ile Gly Leu Tyr Phe
 115 120
                                   125
Leu Leu Met Pro Lys Leu Gly Glu Glu Asp Arg Gln Arg Arg Leu His
 130 135 140
Gly Leu Pro Phe Ala Leu Ile Ala Gly Gly Cys Val Gly Phe Tyr Asp
145 150 155
Gly Phe Phe Gly Pro Gly Ala Gly Ser Phe Tyr Ala Leu Ala Phe Val
      165 170 175
Thr Leu Ala Gly Phe Asn Leu Ala Lys Ser Thr Ala His Ala Lys Val
 180 185 190
Leu Asn Ala Thr Ser Asn Val Gly Gly Leu Leu Leu Phe Ile Ile Gly
 195 200 205
Gly Lys Val Ile Trp Ala Thr Gly Phe Val Met Met Ala Gly Gln Phe
 210 215 220
Leu Gly Ala Arg Ala Gly Ser Arg Leu Val Leu Ser Lys Gly Gln Lys
225 230 235 240
Leu Ile Arg Pro Met Ile Val Val Val Ser Ala Val Met Ser Ala Lys
     245 250 255
Leu Leu Tyr Asp Ser His Gly Gin Glu Ile Leu Thr Trp Leu Gly Met
       260
                       265
Asn
<210> 7943
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<210> /943
<211> 122
<212> PRT
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<213> Enterobacter cloacae

<400> 7943

Ser Arg Leu Tyr Arg Ile Ile Thr Thr Arg Arg Arg Ser Arg Arg Asn
1 10 15

Ala Ser Arg Gly Arg Lys Ile Phe Asn Arg Gly Lys Lys Met Ile Ala 20 25 Glu Phe Glu Ser Arg Ile Leu Ala Leu Ile Asp Asp Met Val Glu His 35 Ala Ser Asp Asp Glu Leu Phe Ala Ser Gly Tyr Leu Arg Gly His Leu 55 Thr Leu Ala Val Ala Ala Leu Glu Ala Gly Asp Asp His Ser Ala Asp 7.0 7.5 Ala Val His Ala Glu Val Thr Arg Ser Leu Glu Asn Ala Ile Gln Ala 8.5 90 Gly Glu Leu Ser Pro Arg Asp Gln Ser Leu Val Leu Gly Met Trp Asp 100 105 Asn Leu Phe Gln Gln Ala Lys Ala Lys

<211> 406 <212> PRT <213> Enterobacter cloacae

<210> 7944

<400> 7944 Met Lys Arg Ala Val Ile Thr Gly Leu Gly Ile Val Ser Ser Ile Gly 5 10 Asn Asn Gln Glu Val Leu Ala Ser Leu Arg Glu Gly Arg Ser Gly 20 25 Ile Thr Phe Ser Glu Glu Phe Lys Asp Ser Gly Met Arg Ser His Val 40 Trp Gly Asn Val Lys Leu Asp Thr Thr Gly Leu Ile Asp Arg Lys Val 55 Val Arg Phe Met Asn Asp Ala Ser Ile Tyr Ala Tyr Leu Ser Met Gln 70 75 Glu Ala Ile Lys Asp Ser Gly Leu Ser Glu Asp Val Tyr Gln Asn Asn 85 90 Pro Arg Val Gly Leu Ile Ala Gly Ser Gly Gly Ser Ser Lys Ala Gln 100 105 110 Val Phe Gly Ala Asp Ala Met Arg Ser Pro Arg Gly Leu Lys Ala Val 115 120 Gly Pro Tyr Val Val Thr Lys Ala Met Gly Ser Ala Val Ser Ala Cys 135 140 Leu Ala Thr Pro Phe Lys Ile His Gly Val Asn Tyr Ser Ile Ser Ser 150 155 Ala Cys Ala Thr Ser Ala His Cys Ile Gly Asn Ala Val Glu Gln Ile 165 170 Gln Leu Gly Lys Gln Asp Ile Val Phe Ala Gly Gly Gly Glu Glu Leu 180 185 Gly Trp Glu Met Ala Cys Glu Phe Asp Ala Met Gly Ala Leu Ser Thr 200 205 Lys Tyr Asn Glu Thr Pro Asp Lys Ala Ser Arg Thr Tyr Asp Ala His 215 220 Arg Asp Gly Phe Val Ile Ala Gly Gly Gly Met Val Val Val Glu 230 235 Glu Leu Glu His Ala Leu Ala Arg Gly Ala His Ile Tyr Ala Glu Ile 245 250 Val Gly Tyr Gly Ala Thr Ser Asp Gly Ala Asp Met Val Ala Pro Ser 260 265 270 Gly Glu Gly Ala Val Arg Cys Met Lys Met Ala Met His Gly Val Asp 275 280 285 Thr Pro Ile Asp Tyr Leu Asn Ser His Gly Thr Ser Thr Pro Val Gly 295 300 Asp Val Lys Glu Leu Gly Ala Ile Arg Glu Val Phe Gly Asp Asn Ser 310

Pro Ala Ile Ser Ala Thr Lys Ala Met Thr Gly His Ser Leu Gly Ala 325 330 Ala Gly Val Gln Glu Ala Ile Tyr Ser Leu Leu Met Leu Glu Asn Gly 340 345 Phe Ile Ala Pro Ser Ile Asn Ile Glu Glu Met Asp Glu Gln Ala Ala 360 Gly Leu Asn Ile Val Thr Glu Thr Thr Glu Arg Glu Leu Thr Thr Val 375 380 Met Ser Asn Ser Phe Gly Phe Gly Gly Thr Asn Ala Thr Leu Val Met 385 390 Arg Lys Leu Lys Ala <210> 7945 <211> 334 <212> PRT <213> Enterobacter cloacae <400> 7945 Cys Ala Thr Phe Met Val Cys Trp Arg Gln Lys Trp His Tyr Ser Pro 10 Leu Thr Ala Lys Leu Ala Tyr Asp Gln Val Gln Ala Glu Arg Leu Ser 20 25 Met Ser Trp Ile Glu Arg Ile Lys Ser Asn Ile Thr Pro Thr Arg Lys 35 40 45 Ala Ser Ile Pro Glu Gly Val Trp Thr Lys Cys Asp Ser Cys Gly Gln 5.5 Val Leu Tyr Arg Ala Glu Leu Glu Arg Asn Leu Glu Val Cys Pro Lys 70 75 Cys Asp His His Met Arg Met Ser Ala Arg Asn Arg Leu His Ser Leu 85 90 95 Leu Asp Glu Gly Ser Leu Val Glu Leu Gly Ser Glu Leu Glu Pro Lys 100 105 110 Asp Val Leu Lys Phe Arg Asp Ser Lys Lys Tyr Lys Asp Arg Leu Ala 115 120 125 Ser Ala Gln Lys Glu Thr Gly Glu Lys Asp Ala Leu Ile Val Met Lys 130 135 140 Gly Thr Leu His Glu Met Pro Val Val Ala Ala Ala Phe Glu Phe Ser 145 150 155 160 Phe Met Gly Gly Ser Met Gly Ser Val Val Gly Ala Arg Phe Val Arg 165 170 175 Ala Val Glu Gln Ala Leu Glu Asp Asn Cys Pro Leu Ile Cys Phe Ser 180 185 190 Ala Ser Gly Gly Ala Arg Met Gln Glu Ala Leu Met Ser Leu Met Gln 195 200 205 Met Ala Lys Thr Ser Ala Ala Leu Ala Lys Met Gln Glu Arg Gly Leu 215 220 Pro Tyr Ile Ser Val Leu Thr Asp Pro Thr Met Gly Gly Val Ser Ala 230 235 240 Ser Phe Ala Met Leu Gly Asp Leu Asn Ile Ala Glu Pro Lys Ala Leu 245 250 Ile Gly Phe Ala Gly Pro Arg Val Ile Glu Gln Thr Val Arg Glu Lys 260 265 Leu Pro Pro Gly Phe Gln Arg Ser Glu Phe Leu Ile Glu Lys Gly Ala 275 280 285 Ile Asp Met Ile Val Arg Arg Pro Glu Met Arg Leu Lys Leu Ala Ser 290 295 300 Ile Leu Ala Lys Leu Met Asn Leu Pro Ala Pro Asn Pro Asp Glu Pro 315

Arg Glu Gly Val Val Pro Asp Gln Glu Pro Glu Ala

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<210> 7946
<211> 124
<212> PRT
<213> Enterobacter cloacae
<400> 7946
Asn Gln Ile His Leu His Gly Ser Arg Arg Arg Ala Ala Gly Tyr
                              1.0
Arg Leu Cys Val Arg Leu Arg Ser Arg Asn Ala Asp Leu Pro Val Arg
         20
                          25
Pro Ala Leu Ile Leu Phe Ala Arg Ala Tyr Asp Arg Val Gly Arg Val
                       40
                                      45
Arg Gln Arg Arg Asn Pro Ala Thr Asn Leu Thr Asn Ala Ser Ala Met
                    55
                               60
Gln Gly His Phe Leu Phe Leu Cys Ala Leu Ala Arg Asn Phe Ser
                7.0
                     75
Leu Pro Arg Leu Ala Gln Cys Lys Lys Ile Val Lys Thr Ile Ile Arg
            85
                        90
Ser Asp His Leu Met Cys Ala Gln Asn Phe Phe Thr Gly Glu Cys Tyr
        100 105
Glu Ser Gly Ile Thr Ala Tyr His Pro Thr Arg
<210> 7947
<211> 717
<212> PRT
<213> Enterobacter cloacae
<400> 7947
Ile Met Glu Thr Thr Ser Ala Phe Asn Leu Ala Val Arg Leu Asp Asn
Val Ala Val Ile Thr Ile Asp Val Pro Asp Glu Lys Met Asn Thr Leu
   20
                          25
Lys Ala Glu Phe Gly Val Gln Val Arg Ala Met Leu Arg Gln Ile Arg
 35
                      40
Glu Asn Lys Ala Ile Arg Gly Leu Val Phe Ile Ser Ala Lys Pro Asp
                    55
Asn Phe Ile Ala Gly Ala Asp Ile Asn Met Ile Ala Arg Ala Lys Ser
                70
                                 7.5
Ala Gln Glu Ala Glu Asp Leu Ala Arg Gln Gly Gln Gln Val Met Ala
            8.5
                              90
Glu Ile His Ala Leu Ser Ile Pro Val Val Ala Ala Ile His Gly Ala
         100
                          105
Cys Leu Gly Gly Leu Glu Leu Ala Leu Ala Cys His Ser Arg Ile
                       120
     115
                                      125
Cys Thr Asp Asp Ala Lys Thr Val Leu Gly Leu Pro Glu Val Gln Leu
                   135
                                    140
Gly Leu Leu Pro Gly Ser Gly Gly Thr Gln Arg Leu Pro Arg Leu Val
               150
                                155
Gly Val Ser Thr Ala Leu Glu Met Ile Leu Thr Gly Lys Gln Leu Arg
            1.65
                              170 175
Ala Arg Gln Ala Leu Lys Ala Gly Leu Val Asp Glu Val Val Pro His
         180
                          185
                                           190
Ala Ile Leu Leu Glu Ala Ala Val Glu Arg Ala Leu Lys Gly Arg Gln
      195
                       200
                                        205
Ala Lys Arg Pro Leu Pro Val Arg Glu Arg Ile Leu Ala Gly Pro Leu
  210 215
                                    220
Gly Arg Thr Leu Leu Phe Asn Met Val Gly Lys Lys Thr Glu Gln Lys
                        235
      230
Thr Lys Gly Asn Tyr Pro Ala Ala Thr Arg Ile Leu Lys Val Ile Glu
```

245 250 Thr Gly Leu Ser Gln Gly Ser Ser Ser Gly Tyr Ala Ala Glu Ala Lys 265 Ala Phe Gly Glu Leu Ala Met Thr Pro Gln Ser Gln Ala Leu Arg Gly 275 280 285 Ile Phe Phe Ala Ser Thr Glu Val Lys Lys Asp Pro Gly Ser Glu Ala 295 Glu Pro Ala Pro Leu Arg Ala Ile Gly Val Leu Gly Gly Gly Leu Met 310 315 Gly Gly Gly Ile Ala Phe Val Thr Ala Ser Lys Gly Lys Leu Pro Val 325 330 Arg Ile Lys Asp Ile Asn Pro Lys Gly Ile Asn His Ala Leu Gln Tyr 345 350 340 Ser Trp Gln Asn Leu Asp Arg Lys Val Lys Arg Arg His Ile Lys Ala 360 365 Ser Glu Arg Asp Lys Thr Leu Ala Met Ile Thr Gly Ala Thr Asp Tyr 370 375 380 Ser Gly Phe Ala His Arg Asp Leu Val Ile Glu Ala Val Phe Glu Asp 385 390 395 400 Leu Ala Leu Lys Gln Gln Met Val Ala Asp Val Glu Gln His Cys Ala 405 410 415 Pro His Thr Ile Phe Ala Ser Asn Thr Ser Ser Leu Pro Ile Gly Asp 420 425 430 Ile Ala Ala Lys Ala Val Arg Pro Glu Lys Val Ile Gly Leu His Tyr 435 440 445 Phe Ser Pro Val Glu Lys Met Pro Leu Val Glu Val Ile Pro His Ala 450 455 460 Thr Thr Ser Pro Gln Thr Ile Ala Thr Val Val Lys Leu Ala Lys Lys 465 470 475 480 Gln Gly Lys Thr Pro Ile Val Val Ala Asp Lys Ala Gly Phe Tyr Val 485 490 495 Asn Arg Ile Leu Ala Pro Tyr Ile Asn Glu Ala Met Arg Leu Leu Thr 500 505 510 Glu Gly Glu Lys Ile Glu His Val Asp Asp Ala Leu Val Lys Phe Gly 515 520 525 Phe Pro Val Gly Pro Ile Gin Leu Leu Asp Glu Val Gly Ile Asp Thr 530 535 540 Gly Thr Lys Ile Ile Pro Val Leu Glu Ala Ala Tyr Gly Asp Arg Phe 545 550 555 560 Ala Pro Pro Ala Asn Phe Val Ser Ala Ile Leu Lys Asp Asp Arg Lys 565 570 575 Gly Arg Lys Asn Glu Arg Gly Phe Tyr Leu Tyr Ala Ala Lys Gly Arg 580 585 590 Lys Ser Lys Lys Gln Val Asp Pro Ser Val Tyr Ala Leu Ile Pro Val 595 600 605 Thr Gly Gln Ala Lys Leu Ser Ala Val Gln Cys Ala Glu Arg Cys Val 610 615 Met Met Met Leu Asn Glu Ala Ala Arg Cys Phe Gly Glu Gln Val Ile 625 630 635 Lys Ser Ala Arg Asp Gly Asp Ile Gly Ala Val Phe Gly Ile Gly Phe 645 650 655 Pro Pro Phe Leu Gly Gly Pro Phe Arg Tyr Met Asp Thr Leu Gly Ala 660 665 Gly Glu Val Val Ala Ile Leu Gln Arg Leu Ala Ser Gln Tyr Gly Pro 675 680 685 Arg Phe Thr Pro Cys Asp Glu Leu Leu Gln Met Ala Glu Arg Gly Gln 690 695 700 Thr Phe Trp Pro Val Arg Glu Thr Asp Cys Val Asn 710

```
<211> 72
<212> PRT
<213> Enterobacter cloacae
<400> 7948
Lys Ile Val Ala Val Ile Gly Leu Leu Glu Gln Thr Phe Asp Arg
Asn Leu Ala Asp Phe Phe Thr Leu Arg Ala Met Asp Asn Gly Val Val
         2.0
                        25
                                      3.0
Arg Asp Leu Thr Arg Pro Gly His Gln Leu Ala Glu Glu Ser Leu Ile
      35
                 40
                               4.5
Leu Leu Ala Glu Arg Cys Phe Leu Phe His Ser Ser Phe Ser Ser Arg
50
                  55
Ile Ser Asp Ser Val Pro Asp
<210> 7949
<211> 325
<212> PRT
<213> Enterobacter cloacae
<400> 7949
Asp Asp His Gln Arg Ala Ser Arg Ser Val Arg Gly Asp Pro Arg Gly
                             10
Thr Asp Arg Arg Ser Asp Ala Gly Asp Arg Ala Asp Gly Ser Leu Pro
        20
                           25
Ala Pro Ala Arg Ala Glu Cys Gly Cys Asp Asp His His Ser Thr Leu
                       40
Val Thr Met Lys Lys Thr Ala Ile Ala Leu Leu Ala Leu Leu Val Ser
                 5.5
Gly Ala Ser Leu Ala Ala Thr Pro Trp Gln Lys Ile Thr His Pro Val
                7.0
                                  75
Ala Gly Ser Ala Gln Ser Ile Gly Ala Phe Ser Asn Gly Cys Ile Val
             85
                              90
Gly Ala Gln Glu Leu Pro Leu Gln Ser Asp Thr Tyr Gln Val Met Arg
         100 105
                               110
Thr Asp Gln Arg Arg Tyr Phe Gly His Pro Asp Leu Val Leu Phe Ile
                     120 125
Gln Arg Leu Gly Asn Gln Val His Asn Leu Gly Leu Gly Thr Met Leu
 130 135
                                     140
Ile Gly Asp Met Gly Met Pro Ala Gly Gly Arg Phe Asn Gly Gly His
                150 155
Ala Ser His Gln Thr Gly Leu Asp Val Asp Ile Phe Leu Gln Leu Pro
            165
                              170
                                               175
Lys Thr Arg Trp Ser Ser Ala Gln Leu Leu Lys Pro Gln Ala Leu Asp
         180
                          185
                                            190
Leu Val Ser Ala Asp Gly Lys Arg Val Val Ala Ser Arg Trp Ser Pro
      195
                       200
                                         205
Glu Ile Ser Ser Met Ile Lys Leu Ala Ala Glu Asp Asn Asp Val Thr
                    215
                                     220
Arg Ile Phe Val Asn Pro Ala Ile Lys Gln Gln Leu Cys Leu Asp Ala
                230
                                 235
Gly Thr Asp Arg Asp Trp Leu Arg Lys Val Arg Pro Trp Phe Gln His
             245
                              250
Arg Ala His Met His Val Arg Leu Arg Cys Pro Ala Asn Ser Leu Glu
          260
                           265
                                            270
Cys Glu Asp Gln Pro Leu Pro Pro Pro Gly Asp Gly Cys Gly Tyr Glu
                       280
                                        285
```

Leu Gln Ser Trp Phe Glu Pro Ala Lys Pro Gly Thr Ser Lys Pro Glu

Lys Lys Thr Pro Pro Pro Leu Pro Pro Ser Cys Gln Ala Leu Leu Asp

300

305 310 315 320 Glu His Val Leu 325 <210> 7950 <211> 304 <212> PRT <213> Enterobacter cloacae <400> 7950 Ala Gly Ala Val Leu Val Cys Cys Arg Gln Arg Ala Phe Arg Arg Arg 1.0 Ala Asp Gly Gly Gln Asn Arg Gly Lys Thr Gly Ala Gly Val Ser Val 20 25 Leu Met Ser Asp Val Glu Gln Lys Pro Val His Arg Ile Ala Leu Gly 35 4.0 4.5 Ile Glu Tyr Asp Gly Ser Lys Tyr Tyr Gly Trp Gln Arg Gln Asn Glu 5.5 Val Arg Ser Val Glu Glu Lys Leu Glu Lys Ala Leu Ser Gln Val Ala 7.0 7.5 Asn Glu Pro Ile Ser Val Phe Cys Ala Gly Arg Thr Asp Ala Gly Val 85 90 95 His Gly Thr Gly Gln Val Val His Phe Asp Thr Thr Ala Val Arg Lys 100 105 110 Asp Ala Ala Trp Thr Leu Gly Val Asn Ala Asn Leu Pro Gly Asp Ile 115 120 125 Ala Val Arg Trp Val Lys Ala Val Pro Asp Asp Phe His Ala Arg Phe 130 135 140 Ser Ala Thr Ala Arg Arg Tyr Arg Tyr Val Ile Tyr Asn Gln Arg Leu 150 155 160 Arg Pro Ala Val Leu Ser Gln Gly Val Thr His Phe Tyr Glu Pro Leu 165 170 175 Asp Ala Glu Arg Met Gln Arg Ala Ala Gln Cys Leu Ile Gly Glu Asn 180 185 190 Asp Phe Thr Ser Phe Arg Ala Val Gln Cys Gln Ser Arg Thr Pro Trp 195 200 205 Arg Asn Val Met His Ile Asn Val Ser Arg Tyr Gly Ala Tyr Val Val 210 215 220 Val Asp Ile Lys Ala Asn Ala Phe Val His His Met Val Arg Asn Ile 225 230 235 Val Gly Ser Leu Met Glu Val Gly Ala Gly His Gln Pro Glu Ser Trp 245 250 255 Ile Ala Glu Leu Leu Ala Ala Lys Asp Arg Thr Leu Ala Ala Ala Thr 265 270 Ala Lys Ala Glu Gly Leu Tyr Leu Val Ser Val Asp Tyr Pro Asp Arg 275 280 285 Phe Asp Leu Pro Lys Pro Pro Met Gly Pro Leu Phe Leu Ala Asp 290 295 <210> 7951 <211> 427 <212> PRT <213> Enterobacter cloacae <400> 7951 Gln Pro Gly Ile Met Glu Asn Lys Ser Ile Pro Gln Ala Thr Ser Pro 10 Leu Ala Ala Trp Leu Ser Tyr Leu Glu Asn Leu His Ser Lys Thr Ile 20 25 Asp Met Gly Leu Glu Arg Val Ser Gln Val Ala Ala Arg Leu Asp Val

```
Leu Lys Pro Ala Pro Phe Val Phe Thr Val Ala Gly Thr Asn Gly Lys
          55
Gly Thr Thr Cys Arg Thr Leu Glu Ser Val Leu Met Ala Ala Gly Tyr
              70
                            75
Lys Val Gly Val Tyr Ser Ser Pro His Leu Val Arg Tyr Thr Glu Arg
           85
                         90
Val Arg Val Gln Asn Thr Glu Leu Ala Glu Ser Ala His Thr Ala Ser
        100
                      105 110
Glu Tyr Gly Thr Leu Ser Ala Leu Trp Leu Phe Lys Gln Ala Gln Leu
      135
                               140
Asp Val Val Ile Leu Glu Val Gly Leu Gly Gly Arg Leu Asp Ala Thr
      150 155
Asn Met Val Asp Ala Asp Val Ala Val Val Thr Ser Ile Ala Leu Asp
          165 170 175
His Thr Asp Trp Leu Gly Pro Asp Arg Glu Ser Ile Gly Arg Glu Lys
        180 185 190
Ala Gly Ile Phe Arg Ala Asn Lys Pro Ala Val Val Gly Glu Pro Asp
 195 200 205
Met Pro His Thr Ile Ala Glu Val Ala Lys Glu Lys Gly Ala Arg Leu
210 215 220
Leu Arg Arg Gly Val Asp Trp Gln Tyr Glu Val Gln Asp Asn Gly Trp
225 230 235 240
Arg Phe Ser Asp Ala Gln Gly Val Leu Glu Ser Leu Pro Leu Ser Gln 245 \phantom{000}255
Val Pro Gln Pro Asn Ala Ala Thr Ala Leu Ala Ala Leu Arg Ala Ser
 260 265 270
Gly Leu Ala Val Ser Glu Gln Ala Ile Arg Asp Gly Ile Gln Asn Ala
275 280 285
Leu Leu Pro Gly Arg Phe Gln Ile Val Ser Glu Ser Pro Arg Leu Ile
290 295
                               300
Leu Asp Val Ala His Asn Pro His Ala Ala Ala Tyr Leu Ala Gly Arg
305 310
                            315
Leu Lys Ser Leu Pro Lys Thr Gly Arg Val Leu Ala Val Ile Gly Met
     325 330 335
Leu His Asp Lys Asp Ile Gly Gly Thr Leu Ala Cys Met Glu Ser Val
        340 345 350
Val Asp Ser Trp Tyr Cys Ala Pro Leu Glu Gly Pro Arg Gly Ala Thr
 355 360
                                  365
Ala Glu Gln Leu Met Glu His Leu Gly Lys Gly Glu Ile Tyr Ser Ser
 370 375
Val Val Ser Ala Trp Arg Ala Ala Met Ala Glu Ala Lys Pro Glu Asp
385 390 395 400
Thr Val Leu Val Cys Gly Ser Phe His Thr Val Ala His Val Met Glu
    405 410
Val Met Asp Ala Gly Arg Thr Gly Gly Glu
```

<210> 7952

<211> 96

<212> PRT

<213> Enterobacter cloacae

<400> 7952

Ala Met Ser Lys Cys Ser Ala Asp Glu Thr Pro Val Cys Cys Cys Met 1 5 10 15 Asp Val Gly Thr Ile Met Asp Asn Thr Asp Cys Thr Ala Ser Tyr Ser 20 25 30 Arg Val Phe Pro Asn Arg Ala Glu Ala Glu Glu Thr Leu Ala Ala Leu

Ser Gln Arg Ala Arg Glu Val Glu Ser Asp Pro Cys Glu Ile Lys Ser 5.5 Thr Phe Thr Glu Val Glu Gly Gly Val Gln Leu Asp Ile Asp Phe Val 7.0 75 Phe Ala Cys Glu Ala Glu Thr Leu Ile Phe Gln Leu Gly Leu Arg

<210> 7953 <211> 448 <212> PRT

<213> Enterobacter cloacae

<400> 7953

Cys Ala Arg Lys Ile Phe Leu Gln Gly Ser Val Met Ser Gln Ala Leu Pro Leu Ile Thr Arg His Gly Asp Arg Ile Ala Ile Ile Ser Gly Leu 2.0 2.5

Arg Thr Pro Phe Ala Arg Gln Ala Thr Ala Phe His Gly Ile Pro Ala

35 4.0 45 Val Asp Leu Gly Lys Met Val Val Gly Glu Met Leu Ala Arg Ser Glu 5.5 60

Ile Pro Pro Glu Val Ile Glu Gln Leu Val Phe Gly Gln Val Val Gln 65 70 75 Met Pro Glu Ala Pro Asn Ile Ala Arg Glu Ile Val Leu Gly Thr Gly

85 90 Met Asn Val His Thr Asp Ala Tyr Ser Val Ser Arg Ala Cys Ala Thr 100 105 110

Ser Phe Gln Ala Val Ala Asn Val Ala Glu Ser Leu Met Ala Gly Thr 115 120 125

Ile Arg Ala Gly Ile Ala Gly Gly Ala Asp Ser Ser Ser Val Leu Pro 135 140

Ile Gly Val Ser Lys Gln Leu Ala Arg Ile Leu Val Asp Ala Asn Lys 145 150 155 160

Ala Arg Thr Thr Gly Ala Lys Leu Lys Leu Phe Ser Arg Leu Arg Leu 165 170 175 Arg Asp Leu Met Pro Val Pro Pro Ala Val Ala Glu Tyr Ser Thr Gly

180 185 190 Leu Arg Met Gly Asp Thr Ala Glu Gln Met Ala Lys Thr Tyr Gly Ile 195 200 205

Thr Arg Glu Gln Gln Asp Ala Leu Ala His Arg Ser His Gln Leu Ala 210 215 220

Ala Lys Ala Trp Ser Glu Gly Lys Leu Ala Asp Glu Val Met Thr Ala 225 230 235 Tyr Ile Pro Pro Phe Arg Glu Pro Leu Val Glu Asp Asn Asn Ile Arg

245 250 255 Gly Thr Ser Thr Leu Glu Asp Tyr Ala Lys Leu Arg Pro Ala Phe Asp 260 265

Arg Lys His Gly Thr Val Thr Ala Ala Asn Ser Thr Pro Leu Thr Asp 275 280 285 Gly Ala Ala Ala Val Ile Leu Met Thr Glu Ser Arg Ala Lys Glu Leu

295 300 Gly Ile Thr Pro Leu Gly Tyr Leu Arg Ser Tyr Ala Phe Thr Ala Ile 305 310 315

Asp Val Trp Gln Asp Met Leu Leu Gly Pro Ala Trp Ser Thr Pro Leu 325 330

Ala Leu Glu Arg Ala Gly Leu Thr Leu Ala Asp Leu Thr Leu Ile Asp 340 345 350 Met His Glu Ala Phe Ala Ala Gln Thr Leu Ala Asn Ile Gln Leu Leu

355 360 Ala Ser Glu Arg Phe Ala Arg Asp Val Leu Gly Arg Ala His Ala Thr 375

```
Gly Glu Val Asp Gln Ser Lys Phe Asn Val Leu Gly Gly Ser Ile Ala
          390
                            395
Tyr Gly His Pro Phe Ala Ala Thr Gly Ala Arg Met Ile Thr Gln Thr
         405
                         410
Leu His Glu Leu Arg Arg Gly Gly Gly Phe Gly Leu Val Thr Ala
            425 430
        420
Cys Ala Ala Gly Gly Leu Gly Ala Ala Met Val Leu Glu Ala Glu
          440 445
<210> 7954
<211> 341
<212> PRT
<213> Enterobacter cloacae
<400> 7954
Pro Gln Ala Thr Arg Val Ile Ala Asp Leu Ser Pro Ser Ser Trp Gln
                10 15
Thr Ser Arg Arg Lys Leu Cys Glu His Ala Leu Glu Glu Arg Val Asp
 20
            25 30
Lys Ile Phe Val Asp Glu Ala Val Asn Glu Leu His Thr Ile Gln Asp
35 40 45
Met Leu Arg Trp Ser Val Ser Arg Phe Ser Ala Ala Asn Ile Trp Tyr
50 55 60
Gly His Gly Thr Asp Asn Pro Trp Asp Glu Ala Val Gln Leu Val Leu
65 70 75 80
Pro Ser Leu Tyr Leu Pro Leu Asp Ile Pro Glu Asp Met Arg Thr Ala
         85 90 95
Arg Leu Thr Ser Ser Glu Lys His Arg Ile Val Glu Arg Val Ile Arg
   100 105 110
Arg Val Asn Glu Arg Ile Pro Val Ala Tyr Leu Thr Asn Lys Ala Trp
   115 120 125
Phe Cys Gly His Glu Phe Tyr Val Asp Glu Arg Val Leu Val Pro Arg
130 135 140
Ser Pro Ile Gly Glu Leu Ile Asn Asn His Phe Asp Gly Leu Ile Asn
145 150 155
His Gln Pro Gln His Ile Leu Asp Met Cys Thr Gly Ser Gly Cys Ile 165 170 175
Ala Ile Ala Cys Ala Tyr Ala Phe Pro Glu Ala Glu Val Asp Ala Val
      180 185 190
Asp Ile Ser Thr Asp Ala Leu Ala Val Thr Glu His Asn Ile Glu Glu
    195 200 205
His Gly Leu Ile His His Val Thr Pro Ile Arg Ser Asp Leu Phe Arg
                215 220
Asp Leu Pro Thr Leu Gln Tyr Asp Leu Ile Val Thr Asn Pro Pro Tyr
225 230 235 240
Val Asp Ala Glu Asp Met Ser Asp Leu Pro Asn Glu Tyr Arg His Glu
           245 250
Pro Glu Leu Gly Leu Ala Ser Gly Ser Asp Gly Leu Lys Leu Thr Arg
       260 265 270
Arg Ile Leu Ala Cys Ala Pro Asp Tyr Leu Thr Asp Asp Gly Val Leu
     275 280
                                  285
Ile Cys Glu Val Gly Asn Ser Met Val His Leu Ile Glu Gln Tyr Pro
290 295
                               300
Asp Val Pro Phe Thr Trp Leu Glu Phe Asp Asn Gly Gly Asp Gly Val
305 310 315
Phe Met Leu Thr Lys Ala Gln Leu Leu Asp Ala Arg Glu Tyr Phe Ser
           325
              330
Ile Tyr Lys Asp
        340
```

<210> 7955

```
<211> 382
<212> PRT
<213> Enterobacter cloacae
<400> 7955
Ser Ser Gly Leu Arg Pro Val Ser Gln Arg Ser Asn Thr Asn Asn Asn
Ile Gly Ala Val Met Ala Gly Asn Ser Ile Gly Gln Val Phe Arg Val
        20
                                       30
                        25
Thr Thr Phe Gly Glu Ser His Gly Leu Ala Leu Gly Cys Ile Val Asp
      35
                     4.0
Gly Val Pro Pro Gly Ile Glu Leu Thr Glu Ala Asp Leu Gln His Asp
                 55
Leu Asp Arg Arg Pro Gly Thr Ser Arg Tyr Thr Thr Gln Arg Arg
             70
                              75
Glu Pro Asp Gln Val Lys Ile Leu Ser Gly Val Phe Glu Gly Arg Thr
           85
                90 95
Thr Gly Thr Ser Ile Gly Leu Leu Ile Glu Asn Thr Asp Gln Arg Ser
       100 105 110
Gln Asp Tyr Gly Ala Ile Lys Asp Val Phe Arg Pro Gly His Ala Asp
115 120 125
Tyr Thr Tyr Glu Gln Lys Tyr Gly Phe Arg Asp Tyr Arg Gly Gly Gly
 130 135 140
Arg Ser Ser Ala Arg Glu Thr Ala Met Arg Val Ala Ala Gly Ala Ile
145 150 155
Ala Lys Lys Tyr Leu Gln Gln Lys Phe Gly Ile Val Ile Arg Gly Cys
          165 170 175
Leu Thr Gln Met Gly Asp Ile Pro Leu Ala Ile Lys Asp Trp Glu Gln
   180 185 190
Val Glu Leu Asn Pro Phe Phe Cys Ala Asp Ala Asp Lys Leu Asp Ala
195 200 205
Leu Asp Glu Leu Met Arg Gly Leu Lys Lys Glu Gly Asp Ser Ile Gly
210 215 220
Ala Lys Val Thr Val Val Ala Asp Gly Val Pro Ala Gly Trp Gly Glu
    230 235
Pro Val Phe Asp Arg Leu Asp Ala Asp Ile Ala His Ala Leu Met Ser
           245 250 255
Ile Asn Ala Val Lys Gly Val Glu Ile Gly Asp Gly Phe Asp Val Val
        260 265 270
Lys Leu Arg Gly Ser Gln Asn Arg Asp Glu Ile Thr Lys Ala Gly Phe
   275 280
Gln Ser Asn His Ala Gly Gly Ile Leu Gly Gly Ile Ser Ser Gly Gln
                 295 300
Gln Ile Ile Ala Asn Ile Ala Leu Lys Pro Thr Ser Ser Ile Thr Val
305
            310 315
Pro Gly His Thr Ile Asn Arg Ala Gly Asp Glu Val Glu Met Ile Thr
           325 330
Lys Gly Arg His Asp Pro Cys Val Gly Ile Arg Ala Val Pro Ile Ala
            345 350
Glu Ala Met Leu Ala Ile Val Leu Met Asp His Phe Leu Arg Gln Arg
     355 360
                                    365
Ala Gln Asn Ala Asp Val Thr Thr Thr Ile Pro Arg Trp
                  375
<210> 7956
<211> 180
<212> PRT
<213> Enterobacter cloacae
<400> 7956
Ser Cys Glu Ser Arg Arg Ser Glu Ala Gln Tyr Pro Asp Asp Val Tyr
```

```
10
Trp Leu Asn Gly Gly Arg Ala Ala Gly Pro Ala Arg Thr Val Arg His
       20
                          25
Ser Ala Pro Asp Pro Ala Ala Ala Gly Tyr Leu Tyr Arg Pro Leu Phe
Leu Thr His Ala Lys Ala Arg Gly Arg Arg Ser Thr Ala Ser Pro Ser
Arg Pro Ala Val Cys Ala Asp Arg Arg Trp Leu Arg Arg Phe Leu Arg
                                75
Trp Leu Leu Trp Pro Gly Gly Arg Leu Val Leu Arg Ala Gly Ile Arg
            85
                        90
Asp Ala Gly Arg Val Gln Pro Arg Gln Ile His Arg Pro Arg Gln Ser
        100
              105
Pro Gln Arg Asp Leu Gln Arg Trp Arg Ser Ala Ala Val Tyr His Trp
 115 120 125
Arg Gln Gly Tyr Leu Gly Asn Arg Val Cys Asp Asp Gly Arg Ala Val
 130 135 140
Phe Gly Arg Ala Arg Arg Leu Ala Ser Gly Ile Lys Gln Arg Ala Lys
145 150 155 160
Ala Asp Pro Pro Asp Asp Cys Cys Arg Leu Gly Gly Asp Glu Arg Gln
Thr Ser Leu
         180
<210> 7957
<211> 196
<212> PRT
<213> Enterobacter cloacae
<400> 7957
Gln Pro Trp Thr Gly Asp Pro His Leu Val Gly Asp Glu Leu Met Asn
                            10
Ser Thr His Asn Tyr Glu Gln Leu Ile Glu Ile Phe Asp Ser Cys Phe
 20
Ala Asp Asp Phe Asn Thr Arg Leu Ile Lys Gly Asp Asp Glu Pro Ile
35 40
                              45
Tyr Leu Pro Ala Asp Asp Glu Val Pro Tyr Asn Arg Ile Ile Phe Ala
 50 55
His Gly Phe Tyr Ala Ser Gly Leu His Glu Ile Ser His Trp Cys Ile
              70
                               7.5
Ala Gly Lys Ala Arg Arg Glu Leu Val Asp Phe Gly Tyr Trp Tyr Cys
           85
                            90 95
Pro Asp Gly Arg Asp Ala Ala Thr Gln Gly Gln Phe Glu Asp Val Glu
        100 105
Val Lys Pro Gln Ala Leu Glu Trp Leu Phe Cys Val Ala Ala Gly Phe
    115 120
                           125
Pro Phe Asn Val Ser Cys Asp Asn Leu Glu Gly Asp Phe Glu Pro Asp
                  135 140
Arg Ile Val Phe Gln Arg Arg Val His Ala Gln Val Met Glu Tyr Leu
               150 155
Glu Lys Gly Ile Pro Ala Arg Pro Ala Arg Leu Ile Glu Ala Leu Gln
            165 170 175
Asn Tyr Tyr His Thr Pro Glu Ile Thr Ala Glu Arg Phe Pro Trp Pro
                         185
Glu Asp Leu
     195
```

<210> 7958

<211> 413 <212> PRT

<213> Enterobacter cloacae

```
<400> 7958
Arg Tyr Ser Arg Arg Glu Pro Arg Gly Ser Leu Phe Leu Cys Leu Asn
                          1.0
Thr Glu Leu Cys Met Lys Ala Val Thr Pro Glu Lys Ser Ala Pro Ser
                       25
Gly Asn Leu Ser Leu Phe Arg Ile Ala Phe Ala Val Phe Leu Thr Tyr
                    40
Met Thr Val Gly Leu Pro Leu Pro Val Ile Pro Leu Phe Val His Gln
                 55
                                60
Glu Leu Gly Tyr Gly Asn Thr Met Val Gly Ile Ala Val Gly Ile Gln
              70
Phe Leu Ala Thr Val Leu Thr Arg Gly Tyr Ala Gly Arg Leu Ala Asp
           85
                          90
Gln His Gly Ala Lys Arg Ser Ala Leu Gln Gly Met Phe Ala Cys Gly
            105
Leu Ala Gly Gly Ala Trp Leu Leu Ala Ala Leu Leu Pro Ile Asp Ala
 115 120
                        125
Ala Tyr Lys Phe Ala Leu Leu Val Val Gly Arg Leu Ile Leu Gly Phe
130 135 140
Gly Glu Ser Gln Leu Leu Thr Gly Thr Leu Thr Trp Gly Met Gly Leu
145 150 155
Val Gly Pro Ala Arg Ser Gly Lys Val Met Ser Trp Asn Gly Met Ala
      165 170 175
Ile Tyr Gly Ala Leu Ala Ala Gly Ala Pro Leu Gly Leu Leu Ile His
       180 185 190
Ser Gln Phe Gly Phe Ala Ala Leu Ala Gly Thr Thr Met Val Leu Pro
195 200 205
Leu Leu Ala Trp Ala Phe Asn Gly Ser Val Arg Lys Val Pro Ala His
210 215
                                220
Lys Gly Glu Arg Pro Ser Leu Trp Ser Val Val Gly Gln Ile Trp Gln
225 230 235
Pro Gly Leu Gly Leu Ala Leu Glr Gly Val Gly Phe Ala Val Ile Gly
           245
                          250 255
Thr Phe Val Ser Leu Tyr Phe Met Ser Arg Gly Trp Ala Met Ala Gly
        260 265 270
Phe Thr Leu Thr Ala Phe Gly Gly Ala Phe Val Leu Met Arg Val Leu
 275 280 285
Phe Gly Trp Met Leu Asp Arg Phe Gly Gly Val Lys Val Ala Val Ser
290 295 300
Ser Leu Val Ile Glu Thr Val Gly Leu Val Leu Leu Trp Gln Ala Pro
305 310 315 320
Ser Ala Ser Val Ala Leu Leu Gly Ala Ala Leu Thr Gly Cys Gly Cys
     325 330 335
Ser Leu Ile Phe Pro Ala Leu Gly Val Glu Val Val Lys Arg Val Ala
        340 345 350
Pro Gln Val Arg Gly Thr Ala Leu Gly Gly Tyr Ala Ala Phe Gln Asp
     355 360 365
Ile Ser Tyr Gly Ile Thr Gly Pro Leu Ala Gly Leu Leu Ala Thr Ser
                 375
                               380
Phe Gly Tyr Pro Ser Val Phe Leu Ala Gly Ala Val Ser Ala Val Val
385 390 395
Gly Ile Val Val Thr Met Val Ala Phe Arg Lys Arg
            405
```

<210> 7959 <211> 389

<212> PRT

<213> Enterobacter cloacae

```
Val Tyr Phe Leu Ser Asn Arg Tyr Ser Asp Val Lys Ile Leu Val Asp
Glu Asn Met Pro Tyr Ala Arg Glu Leu Phe Ser Arg Leu Gly Glu Val
                         25
Lys Ala Val Pro Gly Arg Pro Ile Pro Val Ser Glu Leu Asp Asp Ala
Asp Ala Leu Met Val Arg Ser Val Thr Lys Val Asn Glu Ala Leu Leu
                  55
Thr Gly Lys Gly Val Lys Phe Val Gly Thr Ala Thr Ala Gly Thr Asp
His Val Asp Asp Gln Trp Leu Lys Gln Ala Gly Ile Gly Phe Ser Ala
           8.5
                           90
Ala Pro Gly Cys Asn Ala Ile Ala Val Val Glu Tyr Val Phe Ser Ser
        100 105 110
Leu Leu Met Leu Ala Glu Arg Asp Gly Phe Thr Leu Lys Asp Arg Thr
    115
                     120 125
Val Gly Ile Val Gly Val Gly Asn Val Gly Gly Arg Leu Gln Lys Arg
  130
               135 140
Leu Glu Ala Trp Gly Ile Ser Thr Leu Leu Cys Asp Pro Pro Arq Lys
145 150 155
Asp Asn Gly Asp Glu Gly Asp Phe Arg Thr Leu Asp Glu Leu Val Asp
  165 170 175
Glu Cys Asp Val Ile Thr Phe His Thr Pro Leu Phe Lys Glu Gly Pro
 180 185
                                       190
Tyr Lys Thr Leu His Leu Ala Asp Glu Lys Leu Ile Arg Arg Leu Lys
                     200 205
Ala Gly Thr Ile Leu Ile Asn Ala Cys Arg Gly Pro Val Val Asp Asn
210 215 220
Ala Ala Leu Leu Ala Cys Leu Asp Glu Gly Gln Glu Leu Ser Val Val
225
              230 235
Leu Asp Val Trp Glu Pro Glu Pro Asp Leu Asn Val Ala Leu Leu Asp
           245 250 255
Lys Val Asp Val Gly Thr Ala His Ile Ala Gly Tyr Thr Leu Glu Gly
 260 265 270
Lys Ala Arg Gly Thr Thr Gln Val Phe Glu Ala Tyr Ser Ala Phe Ile
  275
                    280
                                  285
Gly His Pro Gln Gln Val Ala Leu Asp Thr Leu Leu Pro Ala Pro Glu
                 295 300
Phe Gly Arg Ile Thr Leu His Gly Leu Leu Asp Glu Ala Thr Leu Lys
              310
                              315
Arg Leu Val His Leu Val Tyr Asp Val Arg Arg Asp Asp Ala Leu Leu
            325
                           330
                                          335
Arg Lys Val Ala Gly Ile Pro Gly Glu Phe Asp Lys Leu Arg Lys Asn
                        345
                                        350
Tyr Leu Glu Arg Arg Glu Trp Ser Ser Leu Tyr Val Met Cys Asp Asp
                     360
     355
                                    365
Ala Ser Ala Ala Gly Leu Leu His Lys Leu Gly Phe Asn Ala Val His
  370
                 375
                                  380
His Pro Ala Arg
<210> 7960
<211> 340
<212> PRT
<213> Enterobacter cloacae
<400> 7960
Thr Thr Met Ser Glu Gly Trp Asn Ile Ala Ile Leu Gly Ala Thr Gly
```

10 Ala Val Gly Glu Ala Leu Leu Glu Thr Leu Ala Glu Arg Gln Phe Pro 25

3.0

```
Val Gly Glu Ile Tyr Ala Leu Ala Arg Thr Asp Ser Ala Gly Glu Gln
                    40
     35
Leu Arg Phe Gly Gly Lys Ser Leu Met Val Gln Asp Ala Ala Ala Phe
Asp Trp Thr Gln Ala Gln Leu Ala Phe Phe Ala Ala Gly Ala Gln Ala
               70
Thr Ala Ser Tyr Ile Glu Glu Ala Thr Asn Ser Gly Cys Leu Val Ile
           8.5
                           90
Asp Leu Ser Gly Leu Phe Ser Leu Glu Pro Asp Val Ser Leu Val Val
                       105
        100
Pro Asp Val Asn Pro Phe Val Leu Ala Asp Tyr Arg Asn Arg Asn Ile
  115 120
                               125
Ile Ala Val Pro Asn Ser Leu Thr Ser Gln Leu Leu Thr Ala Leu Lys
 130
      135
                                 140
Pro Leu Ile Asp Asp Gly Gly Leu Ser Arg Ile Ser Val Thr Ser Leu
145 150
                             155
Leu Ser Ala Ser Ala Asn Gly Lys Lys Ala Val Asp Ala Leu Ala Gly
         165 170
Gin Ser Ala Lys Leu Leu Asn Gly Ile Pro Ile Asp Glu Asp Asp Phe
        180 185 190
Phe Gly Arg Gln Leu Ala Phe Asn Met Leu Pro Leu Leu Pro Asp Arg
195 200 205
Glu Gly Ser Val Arg Glu Glu Arg Arg Ile Val Asp Glu Ala Arg Lys
210 215 220
Ile Leu Gln Asp Asp Gly Leu Met Ile Ser Ala Asn Val Val Gln Ser
225 230 235
Pro Val Phe Tyr Gly His Ala Gln Met Val Gly Phe Glu Ala Leu Arg
          245 250 255
Pro Leu Ala Ala Glu Glu Ala Arg Asp Ala Phe Gly Arg Gly Glu Asp
        260 265 270
Ile Val Leu Ser Glu Glu Ser Glu Phe Pro Thr Gln Val Gly Asp Ala
 275 280 285
Thr Gly Ser Ala His Leu Ser Val Gly Cys Val Arg Asn Asp Tyr Gly
290 295 300
Met Pro Glu Gln Val Gln Phe Trp Ser Val Ala Asp Asn Val Arg Phe
305 310 315 320
Gly Gly Ala Leu Met Ala Val Lys Ile Ala Glu Lys Leu Val Gln Glu
                   330
           325
Tyr Leu Tyr
<210> 7961
<211> 224
<212> PRT
<213> Enterobacter cloacae
<400> 7961
Gly Leu Asp Asn Met Asp Val Ile Arg Phe Leu Ile Asp Phe Ile Leu
                         10
His Ile Asp Val His Leu Ala Glu Leu Val Ala Gln Tyr Gly Val Trp
                        25
                                       3.0
```

```
Phe Arg Arg Ser Tyr Leu Asp Lys Thr His Ala Phe Tyr Glu Arg His
                 120
      115
Gly Gly Lys Thr Ile Ile Leu Ala Arg Phe Val Pro Ile Val Arg Thr
                    135
Phe Ala Pro Phe Val Ala Gly Met Gly His Met Ser Tyr Arg His Phe
                                 155
145
       150
Ala Met Tyr Asn Val Val Gly Ala Leu Leu Trp Val Leu Leu Phe Thr
            165
                             170
Tyr Ala Gly Tyr Leu Phe Gly Asp Leu Pro Val Val Gln Glu Asn Leu
                          185
                               190
         180
Lys Leu Leu Ile Val Ala Ile Ile Val Leu Ser Val Leu Pro Gly Val
    195 200 205
Ile Glu Ile Ile Arg His Lys Arg Ala Ala Ala Lys Gln Ala Lys
  210
          215
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<211> 113 <212> PRT <213> Enterobacter cloacae

<400> 7962

<210> 7962

65 70 80

Val Arg Ala Gly Asp Ala Ala Ala Pro Ser Leu Asp Pro Ser Arg Leu
85 90

85 90 95 Ala Thr Asn Asn His Ile Leu His Gln Gly Ser Cys Arg Ser Ala Ser

His

<210> 7963 <211> 257 <212> PRT

<213> Enterobacter cloacae

<220> <221>UNSURE <222>(252)

<400> 7963

Val Lys Asp Tyr Met Val Ala Arg Thr Ser Arg Lys Glu Arg Phe Ser 10 Met Phe Arg Asp Arg Pro Leu Lys Arg Met Lys Ser Pro Arg Asp Glu 25 Asp Asp Val Glu Asp Asp Ile Asp Gly Leu Asp Asp Asp Gly Val Gly 35 4.0 45 Glu Val Arg Val His Arg Val Asn Thr Ala Pro Gly Ala Ala His Gly 60 Glu His Glu Ala Pro Arg Ala Pro Gln His Gln Tyr Gln Pro Pro Tyr 70 75 Ala Ser Ala Gln Pro Arg Gln Pro Ala Pro Pro Pro Val Glu Glu Pro 90 Val Arg His Pro Pro His Gln Pro Val Gln Gln Pro Val Ala Pro

```
1.0.5
Gln Pro Val Gln Pro Gln Pro Val Gln Gln Pro Ala Gln Pro Val His
             120
 115
Gln Pro Gln Pro Val Gln Gln Pro Gln Pro Val Gln Gln Pro Gln Pro
                135
                                  140
Gln Pro Glu Pro Pro Ala Pro Gln Pro Ala Pro Arg Ala Glu Pro Glu
      150
                               155
Pro Val Ala Glu Pro Glu Pro Val Val Glu Lys Pro Gln Arg Lys Glu
       165
                          170
Ala Val Ile Ile Met Asn Val Ala Ala His His Gly Thr His Leu Asn
         180
                        185
                                         190
Gly Asp Val Leu Leu Asn Ser Ile Gln Gln Ala Gly Phe Lys Phe Gly
          200
    195
Asp Met Asn Ile Phe His Arg His Leu Ser Pro Asp Gly Ser Gly Pro
             215
                                 220
Ala Leu Phe Ser Leu Ala Asn Met Val Asn Pro Gly Thr Leu Val Phe
225 230 235
Tyr Leu Gly Asn Ser Thr Asp Ala Arg Lys Asn Xaa Ile Ser Pro Pro
          245
                            250
Ala
<210> 7964
<211> 271
<212> PRT
<213> Enterobacter cloacae
<400> 7964
Ile Pro Pro Ala Val Thr Ile Ser Ser Gly Arg Phe Met His Ala Asp
                       10
          5
Arg Ser Thr Gln Arg Ala Thr Thr Arg Leu Cys Ile Gln Cys Gly Leu
20
                       25
                                        3.0
Phe Leu Leu Gln His Gly Ala Glu Ser Ala Leu Val Glu Glu Leu Ser
35 40
                                   45
Thr Arg Leu Gly Leu Ala Leu Gly Met Asp Ser Val Glu Ser Ser Ile
               55
                                  60
Ser Ser Asn Ala Ile Val Leu Thr Thr Ile Lys Asp Gly Gln Cys Leu
               70
                               75
Thr Ser Thr Arg Lys Asn His Asp Arg Gly Ile Asn Met His Val Val
           85
                           90 95
Thr Glu Val Gln His Ile Val Ile Leu Ala Glu His Arg Leu Leu Asp
        100 105
                                        110
Leu Arg Glu Ile Glu Lys Arg Phe Asn Gln Ile Lys Pro Leu Arg Tyr
115 120 125
Pro Arg Trp Leu Val Val Leu Met Val Gly Leu Ser Cys Ala Cys Phe
 130 135 140
Cys Lys Leu Asn Ala Gly Gly Trp Asp Gly Ala Val Val Thr Phe Phe
               150 155
Ala Ser Ser Ile Ala Met Tyr Val Arg Gln Leu Leu Thr His Arg Gln
            165
                           170 175
Leu His Pro Gln Ile Asn Phe Cys Ile Thr Ala Phe Val Ala Thr Thr
                       185 190
Val Ser Gly Leu Leu Arg Gln Pro Tyr Phe Ala Ser Thr Pro Thr
     195 200 205
Val Ala Met Ala Ala Ser Val Leu Leu Leu Val Pro Gly Phe Pro Leu
                215
                                  220
Ile Asn Ala Val Ala Asp Met Phe Lys Gly His Ile Asn Thr Gly Leu
               230
                               235
Ala Arg Trp Ala Ile Ala Ser Leu Leu Thr Leu Ala Thr Cys Ile Gly
            245
                            250
Val Val Met Ala Met Thr Leu Trp Gly Leu Arg Gly Trp Ala
```

<210> 7965 <211> 493 <212> PRT <213> Enterobacter cloacae <400> 7965 Gly Asp Cys Lys Met Lys Lys Ile Asn His Trp Ile Asn Gly Lys Asn 10 Val Ala Gly Ser Glu Tyr Phe Gln Thr Thr Asn Pro Ala Ser Gly Glu 25 20 3.0 Val Leu Ala Glu Val Ala Ser Gly Gly Glu Ala Glu Ile His Gln Ala 35 40 4.5 Val Ala Ala Ala Lys Glu Ala Phe Pro Lys Trp Ala Asn Leu Pro Met 50 55 60 Lys Glu Arg Ala Arg Leu Met Arg Arg Leu Gly Asp Leu Ile Asp Gln 70 75 Asn Val Pro Asp Ile Ala Ala Met Glu Thr Ala Asp Thr Gly Leu Pro 85 90 Ile His Gln Thr Lys Asn Val Leu Ile Pro Arg Ala Ser His Asn Phe 100 105 110 Glu Phe Phe Ala Glu Val Cys Gln Gln Met Asn Gly Lys Thr Tyr Pro 115 120 125 Val Asp Asp Lys Met Leu Asn Tyr Thr Leu Val Gln Pro Val Gly Val 130 135 140 Cys Ala Leu Val Ser Pro Trp Asn Val Pro Phe Met Thr Ala Thr Trp 145 150 155 160Lys Val Ala Pro Cys Leu Ala Leu Gly Asn Thr Ala Val Leu Lys Met 165 170 175 Ser Glu Leu Ser Pro Leu Thr Ala Asp Arg Leu Gly Glu Leu Ala Leu 180 185 190 Glu Ala Gly Ile Pro Ala Gly Val Leu Asn Val Val Gln Gly Tyr Gly 195 200 205 Ala Thr Ala Gly Asp Ala Leu Val Arg His His Asp Val Arg Ala Val 210 215 220 Ser Phe Thr Gly Gly Thr Ala Thr Gly Arg Asn Ile Met Lys Asn Ala 225 230 235 240 Gly Leu Lys Lys Tyr Ser Met Glu Leu Gly Gly Lys Ser Pro Val Leu 245 250 255 Ile Phe Glu Asp Ala Asp Ile Glu Arg Ala Leu Asp Ala Ala Leu Phe 260 265 270 Thr Ile Phe Ser Ile Asn Gly Glu Arg Cys Thr Ala Gly Ser Arg Ile 275 280 285 Phe Ile Gln Gln Ser Ile Tyr Pro Glu Phe Val Lys Arg Phe Ala Glu 290 295 300 Arg Ala Asn Arg Leu Arg Val Gly Asp Pro Thr Asp Pro Asn Thr Gln 310 315 Ile Gly Ala Leu Ile Ser Gln Gln His Trp Glu Lys Val Ser Gly Tyr 325 330 335 Ile Arg Leu Gly Ile Glu Glu Gly Ala Thr Leu Leu Ala Gly Gly Pro 340 345 350 Asp Lys Pro Thr Asp Leu Pro Ala His Leu Lys Gly Gly Asn Phe Leu 355 360 365 Arg Pro Thr Val Leu Ala Asp Val Asp Asn Arg Met Arg Val Ala Gln 380 375 Glu Glu Ile Phe Gly Pro Val Ala Cys Leu Leu Pro Phe Lys Asp Glu 390 395 400 Ala Glu Gly Leu Arg Leu Ala Asn Asp Val Glu Tyr Gly Leu Ala Ser 405 410

Tyr Ile Trp Thr Gln Asp Val Ser Lys Val Leu Arg Leu Ala Arg Asn

```
3838
                             425
Ile Glu Ala Gly Met Val Phe Val Asn Thr Gln Asn Val Arg Asp Leu
       435
                         440
                                         445
Arg Gln Pro Phe Gly Gly Val Lys Ala Ser Gly Thr Gly Arg Glu Gly
   450
                     455
                                460
Gly Glu Tyr Ser Phe Glu Val Phe Ala Glu Met Lys Asn Val Cys Ile
       470
                          475
Ser Met Gly Asp His Pro Ile Pro Lys Trp Gly Ile
<210> 7966
<211> 110
<212> PRT
<213> Enterobacter cloacae
<400> 7966
Arg Arg Leu Arg Arg Pro Ala Arg Met Gly Glu Pro Glu Asn Cys Arg
                               10
Arg Pro Arg Ala Glu Arg Pro Gln Asp Arg Pro Tyr Leu Gln Ser Asp
 20
                            25
Ala Gly Gln Leu Ala Asp Gln Arg Ala Gly Leu Arg Cys Ala Ala Gly
            40
Arg Tyr Val Leu Pro Arg Arg Gln Arg His Pro Arg Gly Ser Leu Tyr
50
                    5.5
Arg Pro Ala His Arg Ser Gly Ala Gly Leu Arg Ala Gly Lys Thr Ala
                  70
                                   75
Ala Arg Pro Glu Leu His Asp Leu Arg Arg Leu Gln Arg His Gly Leu
        85 90
Arg His Pro Arg Pro Gly Ala Asp Arg Arg Pro Leu Pro
  100
                           105
<210> 7967
<211> 114
<212> PRT
<213> Enterobacter cloacae
<400> 7967
Gly Pro Tyr Gly Gln Arg Asn Pro Val Arg Ala Gly Ala Gly Arg Arg
                         10
Arg Glu Asp Leu Leu Thr Pro Leu Ile Lys His Val Thr Val Gly Pro
                     25
Asp Arg Cys Ala Pro Pro Gly Phe Phe Tyr Leu Glu Pro Ser Met Phe
                       4.0
                                     4.5
Gly Asn Leu Gly Glu Ala Lys Lys Tyr Leu Gly Gln Ala Ala Lys Met
                     55
Leu Ile Gly Ile Pro Asp Tyr Asp Asn Tyr Val Glu His Met Lys Thr
                 70
Asn His Pro Asp Lys Pro Tyr Met Thr Tyr Thr Glu Phe Phe Arg Glu
                             90
Arg Gln Glu Ala Arg Tyr Gly Gly Ser Gly Glu Gly Gly Val Arg Cys
                            105
<210> 7968
<211> 163
<212> PRT
<213> Enterobacter cloacae
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<400> 7968

Leu Ala Ile Val Ser Arg Thr Ile Tyr Ile His Phe Met Asp Ala Lys

```
10
Met Asn Asp Thr Thr Asn Ala Leu Leu Leu Asp Asn Gln Leu Cys Phe
          20
                            25
Ala Leu Tyr Ser Ala Asn Leu Ala Leu Asn Lys Leu Tyr Arg Gln Leu
Leu Ala Pro Leu Asn Leu Thr Tyr Pro Gln Tyr Leu Val Met Leu Val
Leu Trp Glu Gln Asp Asp Ile Thr Val Ser Asp Ile Gly Glu Arg Leu
                 7.0
                                   75
Phe Leu Asp Ser Ala Thr Leu Thr Pro Leu Leu Lys Arg Leu Glu Ser
            8.5
                               90
Ala Gly Leu Ile Phe Arg Gln Arg Ser Arg Gln Asp Glu Arg Gln Val
        100 105 110
Ala Val Thr Leu Ser Asp Ala Gly Arg Ala Leu Gln Gln Gln Ala Val
    115 120
                              125
Thr Ile Pro His Ala Val Gly Cys Ala Ala Gln Cys Asp Thr Asp Thr
 130 135 140
Met Leu Ala Leu Lys His Gln Leu Glu Leu Leu Arg Gln Gln Leu His
                150 155
Arg Ala
<210> 7969
<211> 148
<212> PRT
<213> Enterobacter cloacae
<400> 7969
Asp Glu Glu Pro Ala Met Ser Leu Glu Lys Val Val Tyr Thr Ala Lys
                                10
Ala Lys Ala Thr Gly Gly Arg Asp Gly Arg Ala Thr Ser Ser Asp Gly
                            25
Val Leu Asp Val Lys Leu Gly Val Pro Lys Glu Met Gly Gly Met Gly
                       40
Gly Glu Val Thr Asn Pro Glu Gln Leu Phe Ala Ala Gly Tyr Ser Ala
                   55
Cys Phe Leu Gly Ala Met Lys Phe Val Ala Ala Arg Asp Lys Phe Ala
                 7.0
                                   75
Leu Pro Lys Asp Ala Phe Ile Glu Gly Glu Val Gly Ile Gly Pro Leu
             85
                               90
Pro Thr Gly Phe Gly Ile Glu Ala Lys Leu Asn Ile His Val Glu Gly
                           105
Met Asp Ala Ala Glu Ala Lys Lys Leu Val Asp Ala Ala His Ile Val
 115 120
Cys Pro Tyr Ser Asn Ala Thr Arg Gly Asn Ile Asp Val Thr Leu Asn
 130
                    135
Ile Ile Ala
145
<210> 7970
<211> 252
<212> PRT
<213> Enterobacter cloacae
<400> 7970
Trp Ile Pro Arg Cys Glu Met Lys Asn Val Gly Asp Leu Met Lys Arg
Leu Gln Lys Met Met Pro Ala Asn Val Lys Pro Ala Phe Thr Thr Gly
Glu Glu Leu Leu Ala Trp Gln Lys Glu Gln Gly Lys Ile Arg Ala Ala
                        4.0
```

Ala Leu Ala Arg Glu Asn Arg Ala Met Lys Met Gln Arg Thr Phe Asn Arg Ser Gly Ile Arg Pro Leu His Gln Asn Cys Ser Phe Glu Asn Tyr 7.0 75 Lys Val Glu Ser Gln Gly Gln Met Asn Ala Leu Asn Gln Ala Arg Gln 90 85 Tyr Val Asp Glu Phe Asp Gly Asn Ile Ala Ser Phe Ile Phe Ser Gly 100 Lys Pro Gly Thr Gly Lys Asn His Leu Ala Ala Ala Ile Cys Asn Glu 115 120 125 Leu Leu Leu Arg Gly Lys Ser Val Leu Ile Ile Thr Val Ala Asp Ile 135 140 Met Ser Ala Met Lys Asp Thr Phe Ser Asn Arg Glu Thr Ser Glu Glu 145 150 155 Gln Leu Leu Asn Asp Leu Ser Asn Val Asp Leu Leu Val Ile Asp Glu 165 170 Ile Gly Val Gln Thr Glu Ser Arg Tyr Glu Lys Val Ile Ile Asn Gln 185 180 190 Ile Val Asp Arg Arg Ser Ser Ser Lys Arg Pro Thr Gly Met Leu Thr 195 200 205 Asn His Asn Ile Asp Glu Met Thr Arg Leu Leu Gly Glu Arg Val Met 210 215 220 Asp Arg Met Lys Leu Gly Asn Ser Leu Tyr Val Ile Phe Asp Trp Asp 225 230 235 Ser Tyr Arg Ser Arg Val Thr Gly Lys Glu Tyr 245 250 <210> 7971 <211> 163 <212> PRT <213> Enterobacter cloacae <400> 7971 Ile Ile Met Lys Lys Gln Phe Leu Ile Ser Ile Leu Thr Gly Thr Leu 10 Leu Val Thr Gly Ala Ala Gln Ala Ala Ser Trp Gln Glu Ser Leu Ser 20 25 30 Ser Ala Ala Ser Glu Leu Thr Lys Glu Ser Gly Thr Ser Gln Gly Gly 35 40 4.5 Leu Ser Ala Ser Ser Leu Thr Gly Leu Leu Ser Asn Ser Ser Gln Ser 50 55 60 Leu Ser Ala Gly Thr Met Asn Asn Ala Ala Gly Ile Leu Glu Tyr Cys 65 70 75 Ala Lys Gln Lys Leu Ala Ser Val Thr Asp Thr Glu Asn Ile Lys Asn 85 90 95 Gln Val Leu Gly Lys Leu Gly Leu Asp Thr Gln Glu Gln Lys Ala Asp 100 105 110

Thr Asn Tyr Met Asp Gly Ile Gln Gly Leu Leu Asn Ala Gln Asn Gly 115 120 125 Gln Gln Leu Asn Leu Ser Thr Leu Gly Asn Ser Ser Leu Ala Lys Gln

Val Lys Thr Lys Ala Cys Asp Leu Val Leu Lys Gln Gly Val Asn Phe 150

155

130 135 140

<210> 7972 <211> 177

Leu Ser

<212> PRT <213> Enterobacter cloacae

<400> 7972 Asn Cys Glu Gln Arg Trp Leu Met Thr Ala Phe Thr Leu Arg Pro Thr 10 Arg Ile Asp Asp Val Ala Ala Leu Pro Ala Ile Glu Arg Ala Ala Gly 25 Gln Arg Phe Arg Asp Val Pro Glu Leu Ala Trp Leu Ala Asp Asn Glu 40 Val Ile Cys Val Glu Asp His Leu Gly Tyr Ala Gly Arg Gly Leu Ser 5.5 60 Trp Leu Ala Leu Ala Asp Asp Arg Pro Val Gly Phe Ile Leu Ala Glu 70 75 Ala His Pro Ser Ser Leu Phe Ile Val Glu Leu Ser Val His Leu Asp 85 9.0 Trp Gln Gly Arg Gly Leu Gly Arg Gln Leu Ile Ala Arg Ala Val Ala 100 105 110 His Ala Arg Ser Leu Gly Leu Asn Ser Leu Thr Leu Thr Thr Phe Arg 115 120 125 Asp Val Pro Trp Asn Ala Pro Phe Tyr Arg Arg Leu Gly Phe Glu Met 130 235 140 Leu Thr Thr Leu Thr Pro Glu Leu Arg Gln Lys Arg Glu Glu Glu Thr 145 150 155 Ala His Gly Leu Ala Tyr Gly Ser Arg Cys Ala Met Arg Leu Pro Leu

<210> 7973 <211> 438 <212> PRT <213> Enterobacter cloacae

<400> 7973 Asn Gln Asn Arg Thr Ala Gly Leu Arg Ser Met Gly Met Lys Gly Thr Val Phe Ala Val Ala Leu Asn His Gln Ser Gln Arg Ala Ala Trp Ala 25 Glu Ala Phe Glu Lys Ala Pro Tyr Asn Ala Pro Pro Lys Thr Ala Val 40 Trp Phe Ile Lys Pro His Asn Thr Val Ile Arg Ala Gly Glu Pro Ile 55 Pro Phe Pro Gln Gly Glu Thr Val Leu Ser Gly Ala Thr Val Ala Leu 75 7.0 Val Val Gly Lys Thr Ala Ser Lys Val Arg Val Glu Glu Ala Ala Ala 85 9.0 Tyr Ile Ala Gly Tyr Ala Leu Ala Asn Glu Ile Ser Leu Pro Glu Glu 100 105 Ser Phe Tyr Arg Pro Ala Ile Lys Ala Lys Cys Arg Asp Gly Phe Cys 115 120 125 Pro Leu Gly Glu Pro Val Ala Val Asp Asn Val Asp Asn Leu Thr Ile 135 140 Ile Thr Glu Ile Asn Gly Arg Glu Ala Asp His Trp Asn Thr Ala Asp 145 150 155 Leu His Arg Asn Ala Ala Glu Leu Leu Ser Ala Leu Ser Glu Phe Ala 165 170 Thr Leu Asn Pro Gly Asp Ala Ile Leu Leu Gly Thr Pro Gln Ser Arg 180 185 190 Val Glu Ile Arg Pro Gly Asp Arg Val Arg Ile Leu Ala Glu Gly Phe 200 205 Pro Pro Leu Glu Asn Pro Val Val Val Glu Arg Asp Val Thr Ile Ala 210 215 Ser Arg Thr Pro Pro His Ala Thr Leu Phe Ala Leu Gly Leu Asn Tyr

```
230
Ala Asp His Ala Ser Glu Leu Asp Phe Lys Pro Pro Thr Glu Pro Leu
          245
                         250
Val Phe Ile Lys Ala Pro Asn Thr Phe Asn Gly Asp Asn Gln Thr Ser
         260
                        265
                            270
Val Arg Pro Asn Asn Ile Glu Tyr Met His Tyr Glu Ala Glu Leu Val
             280
                          285
Val Val Ile Gly Lys Thr Ala Arg Lys Val Ser Glu Ala Glu Ala Met
 290
               295 300
Asp Tyr Val Ala Gly Tyr Thr Val Cys Asn Asp Tyr Ala Ile Arg Asp
   310 315
Tyr Leu Glu Asn Tyr Tyr Arg Pro Asn Leu Arg Val Lys Ser Arg Asp
         325 330 335
Gly Leu Thr Pro Ile Ser Pro Asn Val Val Pro Lys Glu Ala Ile Pro
       340 345 350
Asp Pro His Asn Leu Arg Leu Arg Thr Tyr Val Asn Gly Glu Leu Arg
 355 360 365
Gln Glu Gly Thr Thr Ala Asp Leu Ile Phe Ser Ile Pro Phe Leu Ile
 370 375 380
Ala Tyr Leu Ser Asp Phe Met Thr Leu Gln Pro Gly Asp Met Ile Ala 385 $390$
Thr Gly Thr Pro Lys Gly Leu Ser Asp Val Val Pro Gly Asp Glu Val
       405 410 415
Val Val Glu Val Glu Gly Val Gly Arg Leu Val Asn Arg Ile Val Ser
    420
                       425
Glu Glu Thr Ala Lys
     435
<210> 7974
<211> 273
<212> PRT
<213> Enterobacter cloacae
<400> 7974
Lys Gln Asp Ile Ala Met Leu Asp Lys His Thr His Thr Leu Ile Ala
His Arg Leu His Gln Ala Glu Gln Ser Arg Glu Gln Ile Arg Ala Ile
                       25
                                       3.0
Ser Leu Glu Tyr Pro Glu Ile Thr Ile Glu Asp Ala Tyr Ala Val Gln
                    40
Arg Glu Trp Val Ser Leu Lys Ile Ala Glu Gly Arg Val Leu Lys Gly
 50 55
                                60
His Lys Ile Gly Leu Thr Ser Lys Ala Met Gln Ala Ser Ser Gln Ile
                      75
            70
Ser Glu Pro Asp Tyr Gly Ala Leu Leu Asp Asp Met Phe Phe His Asp
           85
                           90
Gly Ser Asp Ile Pro Val Asp Arg Phe Ile Val Pro Arg Ile Glu Val
        100 105
Glu Leu Ala Phe Val Leu Ala Lys Pro Leu Arg Gly Pro Asn Cys Thr
     115 120
Ile Phe Asp Val Tyr Asn Ala Thr Asp Tyr Val Ile Pro Ala Leu Glu
               135 140
Leu Ile Asp Ala Arg Cys His Asn Val Asp Pro Glu Thr Gln Arg Pro
145 150 155
Arg Lys Val Phe Asp Thr Ile Ser Asp Asn Ala Ala Asn Ala Gly Val
                           170 175
           165
Ile Leu Gly Gly Arg Pro Ile Lys Pro Asp Glu Leu Asp Leu Arg Trp
       180 185 190
Ile Ser Ala Leu Leu Tyr Arg Asn Gly Val Ile Glu Glu Thr Gly Val
           200
```

Ala Ala Gly Val Leu Asn His Pro Ala Asn Gly Val Ala Trp Leu Ala

<210> 7975 <211> 180 <212> PRT <213> Enterobacter cloacae

<213> Enterobacter Cloacae

<400> 7975 Ala Ala Glu Ile Thr Gln Arg Glu Val Ser Met Gln Ser Glu Glu Arg 1.0 Leu Arg Phe Arg Asp Ala Met Ala Ser Leu Ser Ala Ala Val Asn Val 20 25 30 Val Thr Thr Glu Gly Asp Ala Gly Arg Cys Gly Ile Thr Ala Thr Ala 35 40 45 Val Cys Ser Val Thr Asp Thr Pro Pro Ser Val Met Val Cys Ile Asn 55 Ala Asn Ser Ala Met Asn Pro Val Phe Gln Gly Asn Gly Lys Leu Cys 65 70 75 Val Asn Val Leu Asn His Glu Gln Glu Ile Met Ala Arg His Phe Ala 85 90 Gly Met Thr Gly Met Ala Met Glu Glu Arg Phe Ala Leu Ser Cys Trp 100 105 110 Gln Lys Gly Pro Leu Ala Gln Pro Val Leu Lys Gly Ala Leu Ala Ser

Leu Glu Gly Glu Ile Thr Gln Val Gln Thr Ile Gly Thr His Leu Val 135 140 Tyr Leu Val Glu Ile Lys Asn Ile Ile Leu Ser Ser Glu Gly His Gly 145 150

115 120 125

Leu Ile Tyr Phe Lys Arg Arg Phe His Pro Val Met Met Glu Met Glu 165 170 175

Ala Ala Val

180

<210> 7976 <211> 773

<212> PRT <213> Enterobacter cloacae

<400> 7976 Pro Leu Thr Leu Ala Phe Asp Arg Ser Arg Ile Ala Phe Asn His Ser 1 5 10 Pro Ile Tyr Arg Ala Leu Tyr Ala Arg Gly Ser Gly Thr Ile Ala Pro 25 30 Ala Leu Ile Asn Thr Ser Ser Gln Arg Thr Leu Thr Leu Phe Ser Leu 4.0 His Lys Lys Pro Gly Leu Thr Met Asp Thr Lys Lys Leu Leu Lys His 55 60 Val Pro Trp Ala Ile Leu Gly Ile Ile Gly Ala Phe Cys Leu Ala Val 7.0 7.5 Val Ala Leu Arg Arg Gly Glu His Val Ser Ala Leu Trp Ile Val Val 85 90 Ala Ser Val Ser Val Tyr Leu Val Ala Tyr Arg Tyr Tyr Ser Leu Tyr

```
Ile Ala Gln Lys Val Met Lys Leu Asp Pro Thr Arg Ala Thr Pro Ala
           120
Val Ile Asn Asn Asp Gly Leu Asn Tyr Val Pro Thr Asn Arg Tyr Val
              135
                               140
Leu Phe Gly His His Phe Ala Ala Ile Ala Gly Ala Gly Pro Leu Val
           150
                          155 160
Gly Pro Val Leu Ala Ala Gln Met Gly Tyr Leu Pro Gly Thr Leu Trp
           165
                         170
Leu Leu Ala Gly Val Val Leu Ala Gly Ala Val Gln Asp Phe Met Val
        180 185
Leu Phe Ile Ser Ser Arg Arg Asn Gly Ser Ser Leu Gly Glu Met Ile
                         205
     195
                   200
Lys Glu Glu Met Gly Arg Val Pro Gly Thr Ile Ala Leu Phe Gly Cys
 210
      215
                               220
Phe Leu Ile Met Ile Ile Ile Leu Ala Val Leu Ala Leu Ile Val Val
             230
                            235 240
Lys Ala Leu Ala Glu Ser Pro Trp Gly Val Phe Thr Val Cys Ser Thr
          245 250 255
Val Pro Ile Ala Leu Phe Met Gly Ile Tyr Met Arg Phe Leu Arg Pro
        260 265 270
Gly Arg Val Gly Glu Val Ser Val Ile Gly Ile Val Leu Leu Val Ala
 275 280
                       285
Ser Ile Tyr Phe Gly Gly Val Ile Ala His Asp Pro Tyr Trp Gly Pro
      295
                    300
Ala Leu Thr Phe Lys Asp Thr Thr Ile Thr Phe Ala Leu Ile Gly Tyr
305
     310 315
Ala Phe Ile Ser Ala Leu Leu Pro Val Trp Leu Ile Leu Ala Pro Arg
      325 330 335
Asp Tyr Leu Ala Thr Phe Leu Lys Ile Gly Val Ile Val Gly Leu Ala
     340 345 350
Ile Gly Ile Val Ile Ile Asn Pro Glu Leu Lys Met Pro Ala Val Thr
 355 36C 365
Gln Tyr Ile Asp Gly Thr Gly Pro Leu Trp Lys Gly Ala Leu Phe Pro
 370 375 380
Phe Leu Phe Ile Thr Ile Ala Cys Gly Ala Val Ser Gly Phe His Ala
385 390 395 400
Leu Ile Ala Ser Gly Thr Thr Pro Lys Leu Met Ala Asn Glu Thr Asp
     405 410 415
Ala Arg Phe Ile Gly Tyr Gly Ala Met Leu Met Glu Ser Phe Val Ala
  420 425 430
Ile Met Ala Leu Val Ala Ala Ser Ile Ile Glu Pro Gly Leu Tyr Phe
 435 440 445
Ala Met Asn Thr Pro Pro Ala Gly Leu Gly Ile Thr Met Pro Asn Leu
 450 455 460
His Glu Met Gly Gly Glu Asn Thr Ala Leu Ile Leu Ala Gln Leu Lys
465 470 475
Asp Ala Ser Ala His Ala Ala Ala Thr Val Ser Ser Trp Gly Phe Val
     485
                        490 495
Ile Ser Pro Glu Gln Ile Met Gln Thr Ala Lys Asp Ile Gly Glu Pro
       500 505 510
Ser Val Leu Asn Arg Ala Gly Gly Ala Pro Thr Leu Ala Val Gly Ile
                  520 525
Ala His Val Phe His Lys Val Leu Pro Trp Ala Asp Met Gly Phe Trp
               535 540
Tyr His Phe Gly Ile Leu Phe Glu Ala Leu Phe Ile Leu Thr Ala Leu
             550
                          555
Asp Ala Gly Thr Arg Ala Gly Arg Phe Met Leu Gln Asp Leu Leu Gly
         565 570 575
Asn Phe Val Pro Phe Leu Lys Lys Thr Asp Ser Leu Val Ala Gly Val
        580 585
Leu Gly Thr Ala Gly Cys Val Gly Leu Trp Gly Tyr Leu Leu Tyr Gln
```

```
600
Gly Val Val Asp Pro Leu Gly Gly Val Lys Ser Leu Trp Pro Leu Phe
                  615
                                   620
Gly Ile Ser Asn Gln Met Leu Ala Ala Val Ala Leu Val Leu Gly Thr
          630
                                635
Val Val Leu Val Lys Met Lys Arg Thr Lys Tyr Ile Trp Val Thr Val
          645
                    650
Val Pro Ala Leu Trp Leu Leu Ceu Cys Thr Thr Trp Ala Leu Gly Leu
       660
             665
Lys Leu Phe Ser Thr Asn Pro Gin Leu Glu Gly Phe Phe Phe Met Ala
  675 680
Asn Gln Tyr Lys Glu Lys Ile Ala Ala Gly Gly Ala Asp Leu Thr Ala
 690 695
                                   700
Gln Gln Ile Ala Asn Met Asn His Ile Val Val Asn Asn Tyr Thr Asn
      710 715
Ala Gly Leu Ser Ile Leu Phe Leu Val Val Val Tyr Ser Ile Ile Phe
          725 730 735
Tyr Gly Ile Lys Thr Trp Met Lys Val Arg Asn Val Glu Gly Arg Thr
        740 745 750
Asp Lys Glu Thr Pro Tyr Val Pro Val Pro Glu Gly Gly Val Lys Thr
                      760
Ser Ser His His
   770
<210> 7977
<211> 233
<212> PRT
<213> Enterobacter cloacae
<400> 7977
Leu Thr Leu Asn Ser Ser Ala Ser Val Arg Lys Arg Ala Thr Ala Glu
                            10
Val Glu Lys Ala Ala Ser Ala Ala Ala Lys Gly Glu Thr Met Thr Pro
                         25
Ile Ala Val Thr Leu Leu Thr Gly Phe Leu Gly Ala Gly Lys Thr Thr
                     40
Leu Leu Arg His Ile Leu Asn Glu Gln His Gly Phe Lys Ile Ala Val
 50
                 55
Ile Glu Asn Glu Phe Gly Glu Val Ser Val Asp Asp Gln Leu Ile Gly
               70
                               75
Asp Arg Ala Thr Gln Ile Lys Thr Leu Thr Asn Gly Cys Ile Cys Cys
                90
            8.5
Thr Arg Ser Asn Glu Leu Glu Asp Ala Leu Leu Asp Leu Leu Asp Ser
         100
                         105
Arg Asp Arg Gly Asp Ile Val Phe Asp Arg Leu Val Ile Glu Cys Thr
      115
                      120 125
Gly Met Ala Asp Pro Gly Pro Ile Ile Gln Thr Phe Phe Ser His Glu
   130
                   135
                                   140
Ile Ile Cys Gln Arg Tyr Leu Leu Asp Gly Val Ile Ala Leu Val Asp
                150 155
Ala Val His Ala Asp Glu Gln Met Asn Gln Phe Thr Ile Ala Gln Ser
            165 170 175
Gln Val Gly Tyr Ala Asp Arg Ile Leu Leu Thr Lys Thr Asp Val Ala
         180
                         185 190
Gly Glu Ser Glu Lys Leu Arg Glu Arg Leu Thr Arg Ile Asn Ser Arg
      195
                      200
                                      205
Ala Pro Ile Tyr Thr Val Thr His Gly Asp Ile Asp Leu Ala Gln Leu
                                   220
  210
Phe Asn Thr Asn Gly Phe Met Leu
                230
225
```

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<210> 7978
<211> 196
<212> PRT
<213> Enterobacter cloacae
<400> 7978
Tyr Val Gln Arg Pro His Gln His Arg Ser Gly Ala Leu Gly Asp Ser
                           10
Gln Pro Ala Asp Ala Gly Asp Leu Tyr Arg Gly Gly Asn Gly His Asp
Thr Leu Gly Val Thr Arg Met Gly Val Ile Asp Phe Leu Leu Ala Leu
     35
                     40
                                     4.5
Ala Gln Asp Met Leu Leu Ala Ala Leu Pro Ala Val Gly Phe Ala Met
                  55 60
Val Phe Asn Val Pro Gln Arg Ala Leu Pro Trp Cys Ala Leu Leu Gly
              70 75
Ala Ile Gly His Gly Ser Arg Met Ile Met Met Thr Ala Gly Phe Asn
           85 90
Ile Glu Trp Ser Thr Phe Ile Ala Ser Met Leu Val Gly Ser Ile Gly
       100 105
Ile Gln Trp Ser Arg Trp Tyr Leu Ala His Pro Lys Val Phe Thr Val
115 120 125
Ala Ala Val Ile Pro Met Phe Pro Gly Ile Ser Ala Tyr Thr Ala Met
130 135 140
Ile Ser Ala Val Lys Ile Ser His Phe Gly Tyr Ser Glu Pro Gln Met
145 150 155
Ile Leu Leu Ser Asn Phe Leu Lys Ala Ser Ser Ile Val Gly Ala
  165 170 175
Leu Ser Ile Gly Leu Ser Ile Pro Gly Leu Trp Leu Tyr Arg Lys Arg
              185
Pro Arg Val
 195
<210> 7979
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 7979
Glu Ser Val Met Ser Ser Arg Ile Leu Thr Thr Ser Ile Ala Gly Ile
        5 10
Asp Ala Phe Met Arg Asp Pro Arg Gly Val Leu Thr His Ala Glu Gly
      20
                        25
Gly Thr Leu Ala Val Phe Ala Asp Asn Ala Pro Ala Phe Tyr Ala Val
     35 40
Thr Pro Glu Arg Leu Ala Gln Leu Leu Glu Ile Glu Ala Lys Leu Ser
            55
Arg Pro Ala Ser Asp Val Met Leu Asp Asn Gln Phe Phe Asp Glu Pro
65 70
                            75
                                           8.0
Ala Ser Ala Pro Val Ala Val Pro Met Gly Lys Phe Pro Met Tyr Ala
                           90
Gly Trp Gln Pro Asp Ala Asp Phe Gln Arg Gln Ala Ala Leu Trp Gly
        100 105
                                       110
Ile Ala Leu Ala Gln Pro Ala Thr Pro Glu Glu Leu Ala Ala Phe Thr
     115 120
                                   125
Ala Tyr Trp Gln Ala Glu Gly Lys Val Phe His His Val Gln Trp Gln
 130 135 140
Gln Lys Phe Ala Arg Ser Leu Gln Ile Asn Arg Ala Ser Asn Asn Gly
145 150 155 160
Gln Pro Lys Arg Asp Ile Asn Ala Phe Ser Glu Pro Asp Lys Lys Ile
                           170
```

Pro Asp Gly Phe Arg Gly Ala Lys 180 185

<210> 7980 <211> 778

<212> PRT <213> Enterobacter cloacae

<400> 7980

Ala Ile Ser Arg Leu Ser Val Arg His Asp Glu Asp Leu Leu Ser 10 Glu Leu Met Ser Leu Val Leu Phe Leu Ala Ser Ile Gly Val Tyr Ala 20 25 Trp Lys Ala Gly Arg His Thr Trp Trp Phe Val Ala Thr Leu Val Val 35 45 4.0 Leu Gly Ile Phe Ile Val Leu Asn Ile Thr Leu Tyr Ala Ser Asp Tyr 55 60 Phe Thr Gly Asp Gly Ile Asn Asp Ala Val Leu Tyr Thr Leu Thr Asn 70 75 80 Ser Leu Thr Gly Ala Gly Val Gly Lys Tyr Ile Leu Pro Gly Leu Gly 85 90 95 Leu Val Val Ala Leu Val Gly Ile Phe Ala Ala Leu Ala Trp Val Leu 100 105 110 Arg Arg Arg His Arg Pro His His His Gly Tyr Ser Leu Leu Ala 115 120 125 Leu Cys Leu Ala Leu Ala Ser Val Asp Ala Ser Pro Ala Phe His Gln 130 135 140 Ile Thr Glu Leu Val Lys Ser Gln Ser Arg Asp Gly Asp Pro Asp Phe 145 150 155 160 Ala Ala Tyr Tyr Lys Glu Pro Ser Lys Lys Ile Asp Asn Pro Arg Leu 165 170 175 Asn Leu Val Tyr Ile Tyr Gly Glu Ser Leu Glu Arg Thr Tyr Phe Asp 180 185 190 Asn Asp Ala Phe Pro Asn Leu Thr Pro Glu Leu Gly Ala Leu Lys Asn 195 200 205 Gln Gly Leu Asp Phe Ser His Thr Met Gln Leu Pro Gly Thr Asp Tyr 210 215 220 Thr Ile Ala Gly Met Val Ala Ser Gln Cys Gly Ile Pro Leu Phe Ala 225 230 235 240 Pro Phe Glu Gly Asn Ala Ser Ala Ser Met Ser Ser Phe Phe Pro Gln 245 250 255 Asn Ile Cys Leu Gly Asp Ile Leu Lys Asn Ser Gly Tyr Glu Asn Tyr 260 265 270 Phe Met Gln Gly Ala Asn Leu Arg Phe Ala Gly Lys Asp Val Phe Leu 275 280 1 Lys Ser His Gly Phe Asp His Leu Tyr Gly Ser Glu Glu Leu Lys Thr 295 300 Thr Val Ala Asp Pro Ala Tyr Arg Asn Asp Trp Gly Phe Tyr Asp Asp 305 310 315 320 Thr Val Leu Asp Glu Thr Trp Lys Lys Phe Glu Glu Leu Ser Arg Ala 325 330 335 Gly Lys Arg Phe Ser Leu Phe Ala Leu Thr Val Asp Thr His His Pro 340 345 350 Asp Gly Phe Val Ser Arg Thr Cys Lys Arg Gln Gly Tyr Asp Ile Asp 355 360 365 Gly Lys Asn Asn Lys Ser Phe Ser Ala Val Thr Cys Ser Gln Glu His 370 375 380 Ile Ala Ala Leu Ile Glu Lys Ile Lys Ala Ser Pro Tyr Phe Lys Asn 385 390 395 Thr Val Ile Val Val Ser Ser Asp His Leu Ala Met Lys Asn Ser Ala

```
Trp Asp Glu Leu Asn Lys Leu Asp Arg Ser Asn Leu Phe Phe Val Leu
        420
                        425
Arg Gly Asp Lys Pro Gln Gln Glu Ile Ile Ala Ala Lys Arg Asn Ser
      435
                     440
Met Asp Asn Gly Ala Thr Val Leu Asp Ile Leu Gly Gly Asp Asn Phe
                455
                                  460
Ile Gly Leu Ser Arg Ser Thr Leu Ser Gly Gln Ser Leu Ser Glu Ile
     470
                   475
Phe Leu Asn Met Lys Glu Lys Ile Leu Ala Trp Lys Pro Asp Ile Ile
      485
                           490 495
Arg Leu Trp Asn Phe Pro Lys Glu Ile Lys Asp Phe Thr Ile Asp Gln
    500 505 510
Asp Lys Lys Met Ile Ala Phe Ser Gly Ser His Phe Arg Leu Pro Leu
 515 520 525
Leu Leu Arg Val Ser Asp Asn Arg Val Glu Pro Leu Pro Glu Ser Glu
 530 535 540
Tyr Ser Ala Pro Leu Arg Phe Gln Leu Ala Glu Phe Ala Pro Arg Asp
545 550
                              555
Asn Phe Val Trp Val Asp Lys Cys Tyr Lys Met Gly Gln Leu Trp Ser
           565 570 575
Gln Gln Leu Ser Leu Ser Thr Asp Trp Cys Val Ser Gln Gly Gln Leu
        580 585
                             590
Gly Gly Glu Gln Ala Val Gln His Val Asp Lys Pro Gln Trp Gln Gly
    595
                     600 605
Lys Thr Ala Phe Lys Asp Thr Val Ile Asp Thr Ala Arg Tyr Gln Arg
 610 615
                                  620
Asn Val Asp Leu Leu Lys Ile Val Asp Asn Asp Ile Arg Tyr Lys Ala
       630 635
Asp Ser Phe Ile Phe Asn Val Ala Gly Ala Pro Glu Glu Val Lys Gln
           645
                          650 655
Phe Ser Gly Ile Ser Arg Pro Glu Ser Trp Gly Arg Trp Ser Asn Ala
        660
                        665 670
Gln Leu Gly Asp Glu Val Lys Ile Glu Tyr Thr His Pro Leu Pro Glu
                      680
                                     685
Lys Phe Asp Leu Val Ile Thr Ala Arg Ala Phe Gly Pro Asn Ala Asn
                695
                                  700
Arg Pro Ile Pro Val Arg Val Gly Asp Lys Glu Gln Thr Leu Thr Leu
               710
                               715
Ser Asn Asp Val Thr Thr Ser Thr Leu His Phe Asp Asn Pro Thr Arg
            725
                            730
Ser Asn Thr Leu Val Ile Val Pro Pro Asp Pro Gln Ser Thr Asn Glu
                        745
Gly Asn Ile Leu Gly His Ala Pro Arg Lys Leu Gly Ile Gly Met Val
   755
                     760
Glu Ile Lys Ile Val Ser Ser Ala Gly
  770
                  775
<210> 7981
<211> 380
<212> PRT
<213> Enterobacter cloacae
<400> 7981
Gly Arg Ser Gly Arg Pro Ala Pro Gly Glu Arg Arg Gly Val Trp Pro
                            10
                                            15
Gly Val Val His Leu Asp Pro Gly Arg Gln Gln Ser Ala Ala Ser Gly
         20
Ala Gln His Arg Ser Gly His Gly Val Arg Gln His Pro Glu Arg Ala
     3.5
                     4.0
Arg Pro Ala Pro Ala Val Trp Arg Arg Glu Gly Leu Arg His Arg Ala
```

```
Arg Arg Arg Arg Val Gln Leu Arg Gly Ile Arg Gly Asp Glu Glu Arg
Val His Leu His Gly Arg Pro Ser Asp Ser Lys Val Gly Asp Leu Lys
          85
                          90
Met Gly Lys Leu Ala Leu Ala Ala Lys Ile Thr His Val Pro Ser Met
      100
                       105
Tyr Leu Ser Glu Leu Pro Gly Lys Asn His Gly Cys Arg Gln Gly Ala
   115 120
Ile Asp Gly His Lys Glu Ile Ser Lys Arg Cys Arg Glu Leu Gly Val
       135 140
Asp Thr Ile Ile Val Phe Asp Thr His Trp Leu Val Asn Ser Ala Tyr
145 150 155 160
His Ile Asn Cys Ala Asp His Phe Ser Gly Val Tyr Thr Ser Asn Glu
         165 170 175
Leu Pro His Phe Ile Arg Asp Met Thr Tyr Asp Tyr Asp Gly Asn Pro
        180 185 190
Glu Leu Gly Gln Leu Ile Ala Asp Glu Ala Val Lys Leu Gly Val Arg
     195 200 205
Ala Lys Ala His Asn Ile Pro Ser Leu Lys Leu Glu Tyr Gly Thr Leu
 210 215 220
Val Pro Met Arg Tyr Met Asn Ala Asp Lys His Phe Lys Val Val Ser
            230 235 240
Ile Ser Ala Phe Cys Thr Val His Asp Phe Ala Asp Ser Arg Arg Leu 245 250 255
Gly Glu Ala Ile Ile Ser Ala Ile Glu Lys Tyr Asp Gly Thr Val Ala
        260 265 270
Val Leu Ala Ser Gly Ser Leu Ser His Arg Phe Ile Asp Asp Gln Arg
 275 280 285
Ala Glu Glu Gly Met Asn Ser Tyr Thr Arg Glu Phe Asp Arg Gln Met
 290 295
                                300
Asp Glu Arg Val Val Lys Leu Trp Arg Glu Gly Gln Phe Lys Glu Phe
305 310
                             315
Cys Ser Met Leu Pro Glu Tyr Ala Asp Tyr Cys Tyr Gly Glu Gly Asn
           325
                          330
                              335
Met His Asp Thr Val Met Leu Leu Gly Met Leu Gly Trp Asp Lys Tyr
         340 345 350
Asp Gly Lys Val Glu Phe Leu Thr Glu Leu Phe Ala Ser Ser Gly Thr
   355 360
Gly Gln Val Asn Ala Val Phe Pro Leu Pro Ala
                  375
   370
```

<210> 7982 <211> 130

<212> PRT

<213> Enterobacter cloacae

<400> 7982 Gly Val Val Met Pro His Phe Ile Ala Glu Cys Thr Asn Asn Ile Arg 1.0 Glu Gln Ala Asp Leu Pro Gly Leu Phe Ala Lys Val Asn Glu Ala Leu 25 20 Ala Ala Thr Gly Ile Phe Pro Leu Gly Gly Ile Arg Ser Arg Ala His 45 40 Trp Leu Asp Thr Trp Gln Met Ala Asp Gly Lys His Asp Tyr Ala Phe 55 Val His Met Thr Leu Lys Ile Gly Ala Gly Arg Ser Leu Glu Ser Arg 75 70 Glu Glu Val Gly Glu Met Leu Phe Ala Leu Ile Lys Thr His Phe Ala 90 8.5 Glu Leu Met Ala Gly Arg Tyr Leu Ala Leu Ser Phe Glu Leu Asp Glu 100 105 110

```
Leu His Pro Thr Leu Asn Tyr Lys Gln Asn Asn Val His Ala Leu Phe
  115
           120
Lys
  130
<210> 7983
<211> 339
<212> PRT
<213> Enterobacter cloacae
<400> 7983
Ser Lys Arg Pro Gly Ser Pro Gln Ala Cys Leu Thr Thr Arg Arg Thr
                      10
Ala Trp Arg Gly Trp Arg Thr Asn Ser Arg His Thr Thr Cys Ser Leu
                 25
                          30
Ser Gln Asp Lys Ser Ser Ser Ala Ala Arg Leu Pro Ala Arg Leu Pro
 35
              40 45
Pro Ala Glu Ala Thr Pro Ser Thr Ser Thr Thr Ala Thr Trp Ala Pro
              55 60
Ser Ala Ala Ala Leu Cys Lys Glu Met Thr Met Gln Asn Ala Phe Lys
           70 75
Ala Ala Leu Lys Ala Gly Arg Pro Gln Ile Gly Leu Trp Leu Gly Leu
         85 90
Thr Ser Ser Tyr Ser Ala Glu Leu Leu Ala Gly Ala Gly Phe Asp Trp
     100 105 110
Leu Leu Ile Asp Gly Glu His Ala Pro Asn Ser Val Gln Thr Ile Leu
115 120 125
Thr Gln Leu Gln Ala Ile Ala Pro Tyr Pro Ser Gln Pro Val Val Arg
130 135 140
Pro Ser Trp Asn Asp Pro Val Gln Ile Lys Gln Leu Leu Asp Val Gly
145 150 155 160
Ala Gln Thr Leu Leu Val Pro Met Val Gln Asn Ala Asp Glu Ala Arg
     165 170 175
Leu Ala Val Ser Ala Thr Arg Tyr Pro Pro Ala Gly Ile Arg Gly Val
 180 185 190
Gly Ser Ala Leu Ala Arg Ala Ser Arg Trp Asn Arg Ile Pro Glu Tyr
 195 200 205
Leu His Gln Ala Asn Asp Ala Met Cys Val Leu Val Gln Ile Glu Thr
 210 215 220
Arg Glu Ala Leu Lys Asn Leu Pro Gln Ile Leu Asp Val Glu Gly Val
225 230 235 240
Asp Gly Val Phe Ile Gly Pro Ala Asp Leu Ser Ala Asp Met Gly Phe
        245 250 255
Ala Gly Asn Pro Gln His Pro Glu Val Gln Ala Ala Ile Glu Gln Ala
       260 265 270
Ile Ala Gln Ile Leu Ser Ala Gly Lys Ala Pro Gly Ile Leu Met Ala
    275 280 285
Asn Glu Gln Leu Ala Lys Arg Tyr Leu Glu Leu Gly Ala Leu Phe Val
290 295 300
Ala Val Gly Val Asp Thr Thr Leu Leu Ala Arg Ser Ala Glu Ala Leu
305 310 315 320
Ala Ala Arg Phe Thr Asp Val Thr Thr Ala Val Asp Asn Asn Lys Ser
Val Tyr
```

<210> 7984

<211> 455 <212> PRT

<213> Enterobacter cloacae

```
<400> 7984
Thr Tyr Asp Val Glu Arg Asn Met Thr Thr Ser Thr Leu His Asn Lys
                          1.0
Ala Val Glu His Arg Val Ile Asn Lys Leu Phe Arg Arg Leu Ile Val
                       25
Phe Leu Phe Ile Leu Phe Val Phe Ser Phe Leu Asp Arg Ile Asn Ile
   35
                   40
Gly Phe Ala Gly Leu Thr Met Gly Lys Asp Leu Gly Leu Thr Ser Thr
               5.5
Met Phe Gly Leu Ala Ala Thr Leu Phe Tyr Val Thr Tyr Val Leu Cys
65 70 75
Gly Ile Pro Ser Asn Ile Met Leu Ala Lys Ile Gly Ala Arg Arg Trp
      85
               90
Ile Ala Gly Ile Met Val Val Trp Gly Ile Ala Ser Thr Cys Thr Met
       100 105
Phe Ala Thr Ser Pro Glu Thr Leu Tyr Val Leu Arg Met Leu Val Gly
 115 120 125
Ile Ala Glu Ala Gly Phe Leu Pro Gly Ile Leu Val Tyr Leu Thr Trp
 130 135 140
Trp Phe Pro Ala Tyr His Arg Ala Arg Ala Asn Ala Leu Phe Met Ile
145 150 155
Ala Met Pro Val Thr Met Met Leu Gly Ser Ile Leu Ser Gly Tyr Ile
     165 170 175
Leu Ala Met Asp Gly Leu Trp Asn Leu Lys Gly Trp Gln Trp Leu Phe
  180 185 190
Leu Leu Glu Gly Leu Pro Ser Val Val Leu Gly Val Val Thr Trp Phe
195 200 205
Tyr Leu Asn Asp Thr Pro Asp Gln Ala Thr Trp Leu Asp Asp Asp Glu
 210 215 220
Lys Gln Ala Leu Lys Thr Met Ile Ala Arg Glu Gln Glu Leu Ala Ile
225 230 235 240
Ala His Ala Ala Thr Pro Arg Ser Thr Leu Arg Glu Val Leu Thr Pro
           245 250 255
Ala Val Leu Leu Tyr Thr Leu Ala Tyr Phe Cys Leu Thr Asn Thr Leu
            265 270
Ser Ala Ile Asn Ile Trp Thr Pro Gln Ile Leu Gln Ser Phe Asn Thr
 275 280 285
Gly Ser Ser Asn Ile Val Ile Gly Leu Leu Ala Ala Ile Pro Gln Phe
      295 300
Cys Thr Ile Leu Gly Met Ile Trp Trp Ser Arg Arg Ser Asp Arg Leu
305 310 315
Lys Glu Arg Lys Lys His Thr Ile Leu Pro Tyr Leu Phe Ala Ala Ala
           325 330
Gly Trp Met Leu Ala Ser Ala Thr Asp His Ser Leu Ile Gln Leu Leu
        340 345 350
Gly Ile Ile Met Ala Ser Thr Gly Ser Phe Thr Ala Met Ala Ile Phe
      355 360 365
Trp Thr Thr Pro Asp Gln Val Ile Ser Leu Gln Ser Arg Ala Val Ala
      375 380
Leu Ala Val Ile Asn Ala Ile Gly Asn Val Gly Ser Ala Val Ser Pro
            390 395 400
385
Leu Leu Ile Gly Ile Leu Arg Asp Ala Thr Gly Ser Phe Ser Ser Gly
           405 410 415
Leu Trp Phe Val Ala Gly Leu Leu Val Val Gly Ala Leu Val Leu Thr
      420 425
Arg Ile Pro Met Thr Arg Arg Glu Ser Leu Glu Arg Glu Pro Asp Ile
                   440
Ala Ala Gln Lys Ile His
   450
```

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<211> 314
<212> PRT
<213> Enterobacter cloacae
<400> 7985
Gly Ala Ala Met Cys Gln Ser Pro Ile Thr Asn Ile Asp Ile Ser Lys
Glu Tyr Asp Glu Ser Leu Gly Thr Asp Asp Val His Tyr Gln Ser Phe
         20
                        25
Ala Arg Met Ala Ala Phe Phe Gly Arg Asp Met Gln Ala His Arg His
                     40
Asp Gln Tyr Phe Gln Met His Phe Leu Asp Thr Gly Gln Ile Glu Leu
                55
Gln Leu Asp Asp His Arg Tyr Ser Val Gln Ala Pro Leu Phe Val Leu
               70
                               7.5
Thr Pro Pro Ser Val Pro His Ala Phe Ile Thr Glu Ser Asp Ser Asp
           85
                90
Gly His Val Leu Thr Val Arg Glu Asp Leu Ile Trp Pro Leu Leu Glu
        100
                             110
             105
Val Leu Tyr Pro Gly Thr Arg Glu Ala Phe Gly Leu Pro Gly Ile Cys
 115 120
                         125
Leu Ser Leu Ala Asp Lys Pro Asp Glu Leu Ala Ala Leu Lys His Tyr
130 135 140
Trp Gln Leu Ile Ala Arg Glu Ser Thr Glu Gln Leu Pro Gly Arg Glu
145 150 155
His Thr Leu Val Leu Leu Ala Gln Ala Val Phe Thr Leu Leu Leu Arg
          165 170 175
Asn Ala Lys Leu Asp Asp His Ala Ser Gly Gly Met Arg Gly Glu Leu
       180 185
                                        190
Lys Leu Phe Gln Arg Phe Asn Gln Leu Thr Asp Ala His Tyr His Glu
195 200 205
His Trp Thr Val Pro Glu Tyr Ala Ser Glu Leu His Leu Thr Glu Ser
210 215 220
Arg Leu Thr Asp Ile Cys Arg Arg Phe Ala Asn Arg Ser Pro Lys Arg
225 230 235
Leu Ile Phe Asp Arg Gln Leu Arg Glu Ala Arg Arg Leu Leu Phe
         245 250 255
Ser Asp Ser Thr Val Ser Glu Ile Ala Trp Gln Leu Gly Phe Lys Asp
        260
             265 270
Pro Ala Tyr Phe Ala Arg Phe Phe Asn Arg Leu Thr Gly Cys Ser Pro
     275 280 285
Ser Ala Tyr Arg Ala Gln Lys Val Pro Val Ser Pro Val Pro Leu Thr
290 295
                                  300
Pro Ala Leu Ser Gln Met Glu Arg Glu
               310
<210> 7986
<211> 562
<212> PRT
<213> Enterobacter cloacae
<400> 7986
Ser Leu Ala Lys Ser Thr Cys Arg Cys Pro Asn Arg Pro Phe Thr Phe
                            1.0
Arg Pro Ser His Ala Ser Ile Lys Gln Gln Lys Gln Asn Ile Asn Leu
                         25
Thr Thr Ile Phe Arg Tyr Glu Val Pro Met Lys Pro Glu Asp Phe Arg
                     40
Ala Asp Ala Lys Arg Pro Leu Thr Gly Glu Glu Tyr Leu Asn Ser Leu
                  55
Gln Asp Gly Arg Glu Ile Tyr Ile Tyr Gly Glu Arg Val Lys Asp Val
```

Thr Thr His Pro Ala Phe Arg Asn Ala Ala Ala Ser Ile Ala Gln Met 8.5 90 Tyr Asp Ala Leu His Lys Pro Asp Met Gln Asp Thr Leu Cys Trp Gly 100 105 Thr Asp Thr Gly Ser Gly Gly Tyr Thr His Lys Phe Phe Arg Val Ala 115 120 125 Lys Ser Ala Asp Asp Leu Arg Gln Gln Arg Asp Ala Ile Ala Glu Trp 130 135 140 Ser Arg Leu Ser Tyr Gly Trp Met Gly Arg Thr Pro Asp Tyr Lys Ala 145 150 155 160 Ala Phe Gly Cys Ala Leu Gly Ala Asn Pro Ala Phe Tyr Gly Gln Phe 165 170 175 Glu Gln Asn Ala Arg Asn Trp Tyr Thr Arg Ile Gln Glu Thr Gly Leu 180 185 190 Tyr Phe Asn His Ala Ile Val Asn Pro Pro Ile Asp Arg His Lys Pro 195 200 205 Ala Asp Glu Val Lys Asp Val Tyr Ile Lys Leu Glu Lys Glu Thr Asp 210 215 220 Ala Gly Ile Ile Val Ser Gly Ala Lys Val Val Ala Thr Asn Ser Ala 225 230 235 240 Leu Thr His Tyr Asn Met Ile Gly Phe Gly Ser Ala Gln Val Met Gly 245 250 255 Glu Asn Pro Asp Phe Ala Leu Met Phe Val Ala Pro Met Asp Ala Glu 260 265 270 Gly Val Lys Leu Ile Ser Arg Ala Ser Tyr Glu Met Val Ala Gly Ala 275 280 285 Thr Gly Ser Pro Tyr Asp Tyr Pro Leu Ser Ser Arg Phe Asp Glu Asn 290 295 300 Asp Ala Ile Leu Val Met Asp His Val Leu Ile Pro Trp Glu Asn Val 305 310 315 320 Leu Ile Tyr Arg Asp Phe Asp Arg Cys Arg Arg Trp Thr Met Glu Gly 325 330 335 Gly Phe Ala Arg Met Tyr Pro Leu Gln Ala Cys Val Arg Leu Ala Val 340 345 350 Lys Leu Asp Phe Ile Thr Ala Leu Leu Lys Lys Ser Leu Glu Cys Thr 355 360 365 Gly Thr Leu Glu Phe Arg Gly Val Gln Ala Asp Leu Gly Glu Val Val 370 375 380 Ala Trp Arg Asn Met Phe Trp Ala Leu Ser Asp Ser Met Cys Ser Glu 390 395 400 Ala Thr Pro Trp Val Asn Gly Ala Tyr Leu Pro Asp His Ala Ala Leu 405 410 415 Gln Thr Tyr Arg Val Met Ala Pro Met Ala Tyr Ala Lys Ile Lys Asn 425 430 420 Ile Ile Glu Arg Asn Val Thr Ser Gly Leu Ile Tyr Leu Pro Ser Ser 435 440 Ala Arg Asp Leu Asn Asn Pro Gln Ile Asp Gln Tyr Leu Ala Lys Tyr 455 460 Val Arg Gly Ser Asn Gly Met Asp His Val Glu Arg Ile Lys Ile Leu 475 470 Lys Leu Met Trp Asp Ala Ile Gly Ser Glu Phe Gly Gly Arg His Glu 485 490 Leu Tyr Glu Ile Asn Tyr Ser Gly Ser Gln Asp Glu Ile Arg Leu Gln 505 510 Cys Leu Arg Gln Ala Gln Ser Ser Gly Asn Met Asp Lys Met Met Ala 515 520 525 Met Val Asp Arg Cys Met Ser Glu Tyr Asp Gln His Gly Trp Thr Val 535 540 530 Pro His Leu His Asn Asn Thr Asp Ile Asn Met Leu Asp Lys Leu Leu 550 555

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<210> 7987
<211> 568
<212> PRT
<213> Enterobacter cloacae
<400> 7987
Phe Leu Pro Leu Thr Leu Ile Cys Pro Phe Ser Asp Pro Pro Leu Trp
                            10
Asn Arg Met Val Ala His Gly Asp Ala His Val Leu His Leu Arg Glu
         20
               25
Tyr Leu Glu Ala Val Leu Ala Ala Phe Ala Pro Gly Ala Gly Gly Leu
          40
His Ala Ala Lys Arg Leu Ala Gln Val Ala His Val Leu Gly Val Asp
 50 55 60
Glu His His Ala Arg Phe Asp Val Ala Arg Gln Thr Gln His Phe Ala
                   75
          7.0
Asp Val Leu Gly Pro Asp Val Arg Arg Gln Ala Ile Leu His Val Val
                           90 95
           8.5
Arg Gln Ala Gln Ala Phe Arg Phe Val Leu Lys Arg Gln Gln Ala Gly
        100 105 110
His Arg Pro Glu Asp Leu Phe Leu Arg His Ala His Ala Val Ile Asp
 115 120 125
Ile Arg Gln His Gly Arg Ala Gln Glu Val Ala Ala Phe Gln Val Arg
                135 140
Arg Gln Ile Gly Arg Phe Val Arg Ala Ala Arg Gln Gln Gly Cys Pro
             150
                              155
Leu Phe Asn Ala Glu Ala Asp Ile Ala Gly Asp Phe Phe Pro Val Leu
            165 170 175
Leu Ala Asp Glu Arg Ala Asn Leu Gly Val Trp Ile Gly Arg Val Ala
       180
             185 190
His Ala Gln Ala Val Gly Ala Leu Gly Lys Ala Phe Asp Glu Leu Arg
 195
                     200
                          205
Val Asp Ala Leu Leu Asp Glu Asp Ala Arg Ala Gly Gly Ala Ala Phe
   210 215 220
Ala Val Asp Gly Glu Asn Gly Glu Gln Gly Gly Val Gln Arg Ala Leu
      230 235
Asp Val Arg Val Phe Lys Asn Gln His Arg Arg Phe Ala Ala Gln Leu
                250 255
            245
His Arg Ile Leu Leu Gln Pro Gly Val Phe His Asp Val Thr Pro Gly
         260 265
                                         270
Gly Gly Ala Ala Gly Glu Gly Asp Gly Ala His Val Met Met Thr His
      275 280 285
Gln Arg Val Ala Arg Arg Gly Ala Ile Ala Leu His His Val Glu His
                 295
Ala Arg Arg Asn Ala Arg Phe Glu Gly Gln Leu Ala Gln Thr Val Gly
      310
                               315
305
Gly Gln Arg Gly Glu Phe Arg His Leu Gln His Arg Gly Val Thr Gln
                            330
            325
Arg Glu Thr Gly Arg Asp Leu Pro Gly Gly Gly His Lys Arg His Val
                         345
         340
Pro Arg Arg His Gln Arg Ala Asp Thr His Arg Leu His Gln Gly Val
                     360
                                      365
      355
Val Glu His Leu Val Val Asp Arg Val Gly Phe Ala Val His Leu Leu
                   375
                                  380
Ala His Leu Gly Glu Glu Leu Glu Val Val Arg Gly Ala Arg Asn Glu
              390
                               395
His Val Phe Gly Leu Val Asp Arg Gln Ala Gly Val Gly Gly Leu His
            405
                            410
```

Arg Gly Asn Val Arg His Val Leu Val Asn Gln Ile Pro Gln Ala Thr 420 425 His Gln Ala Arg Thr Leu Leu His Arg Gln Val Gly Pro Phe Arg Glu 440 Arg Leu Phe Gly Gly Gly Asn Gly Leu Met Asp Phe Gly Phe Ala Pro 455 Gly Gly Tyr Phe Ser Gln His Leu Ala Gly Gly Arg Val Ser Gly Leu 470 475 Glu Val Leu Thr Ser Gly Asp Val Phe Pro Val Asp Pro Val Val Asn 485 490 495 Leu Phe His Phe Ala Val Ser Ser Leu Thr Ile Arg Phe Thr Arg Arg 500 505 510 Pro Thr Pro Ser Thr Ser Thr Thr Thr Ser Ser Pro Gly Thr Thr Ser 515 520 525 Asp Ser Pro Phe Gly Val Pro Val Ala Ile Met Ser Pro Gly Cys Arg 530 535 540 Val Met Lys Ser Leu Arg Tyr Ala Ile Arg Asn Gly Met Leu Lys Met 545 550 555 Arg Ser Ala Val Val Pro Ser 565 <210> 7988 <211> 596 <212> PRT <213> Enterobacter cloacae <400> 7988 Thr Trp Lys Pro Thr Tyr Cys Arg Ala Gly Arg Arg Val Lys Thr Leu 10 Asn Ser Arg Met Ile Phe Val Lys Phe Ser Leu Ser Arg Pro Lys Ile 20 25 Leu Tyr Leu Ser Glu Glu Arg Glu Asn Met Leu Asn Arg Ile Lys Ile 35 40 45 Val Thr Ser Leu Leu Leu Val Leu Ala Ile Phe Gly Leu Leu Gln Leu 55 Thr Ser Gly Gly Leu Phe Phe Asn Ala Leu Lys His Asp Lys Glu Asn 7.0 75 Phe Thr Ile Leu Gln Thr Ile Arg Gln Gln Gln Ser Thr Leu Asn Gly 85 90 Ser Trp Val Ala Leu Leu Gln Thr Arg Asn Thr Leu Asn Arg Ala Gly 100 105 110 Ile Arg Tyr Met Met Asp Glr. Asn Asn Ile Gly Ser Gly Ser Thr Val 115 120 125 Ala Glu Leu Met Gln Ile Ala Ser Ala Ser Leu Lys Gln Ala Glu Lys 130 135 140 Asn Trp Ala Asp Tyr Glu Ala Leu Pro Arg Asp Pro Arg Gln Ser Asp 145 150 155 160 Ala Ala Ala Leu Glu Ile Lys Arg Asn Tyr Asp Ile Tyr His Gly Ala 165 170 175 Leu Ala Glu Leu Ile Gln Leu Leu Gly Ala Gly Lys Ile Asn Glu Phe 185 180 190 Phe Asp Gln Pro Thr Gln Ser Tyr Gln Asp Gly Phe Glu Lys Gln Tyr 195 200 205 Val Thr Tyr Leu Gln Gln Asn Asp Ala Leu Tyr Gln Thr Ala Val Glu 210 215 220 Asp Ser Asn Ser Ser Tyr Arg Gln Ala Ile Trp Val Leu Ile Ser Val 225 230 235 240 Leu Ala Ala Val Leu Val Val Ile Val Ala Val Trp Leu Gly Ile Arg 245 250 Gln Ala Leu Ile Ser Pro Leu Asn Arg Leu Ile Asp Ser Ile Arg His

265

270

```
Ile Ala Ser Gly Asp Leu Val Lys Arg Ile Asp Val Glu Gly Ser Asn
                    280
   275
                                   285
Glu Met Gly Glu Leu Ala Asp Ser Leu Arg His Met Gln Gly Glu Leu
                                300
                 295
Val Arg Thr Val Gly Asp Val Arg Asn Gly Ala Asn Ala Ile Tyr Ser
              310
                             315
Gly Ala Ser Glu Ile Ser Met Gly Asn Asn Asp Leu Ser Ser Arg Thr
           325
                          330
Glu Gln Gln Ala Ala Ser Leu Glu Glu Thr Ala Ala Ser Met Glu Gln
        340
                       345
Leu Thr Ala Thr Val Lys Gln Asn Ala Glu Asn Ala Arg Gln Ala Ser
 355
                    360
Asn Leu Ala Leu Ser Ala Ser Glu Thr Ala Gln Lys Gly Gly Lys Val
               375
                                380
Val Asp Asn Val Val Gln Thr Met Arg Asp Ile Ala Gly Ser Ser Gln
385 390 395
Lys Ile Ala Asp Ile Ile Ser Val Ile Asp Gly Ile Ala Phe Gln Thr
        405
                         410 415
Asn Ile Leu Ala Leu Asn Ala Ala Val Glu Ala Ala Arg Ala Gly Glu
     420 425 430
Gln Gly Arg Gly Phe Ala Val Val Ala Gly Glu Val Arg Asn Leu Ala
435 440 445
Gln Arg Ser Ala Gln Ala Ala Arg Glu Ile Lys Ser Leu Ile Glu Asp
 450 455 460
Ser Val Gly Arg Val Glu Ile Gly Ser Thr Leu Val Glu Ser Ala Gly
465 470 475 480
Glu Thr Met Gly Glu Ile Val Asn Ala Val Thr Arg Val Thr Asp Ile
          485 490 495
Met Gly Glu Ile Ala Ser Ala Ser Asp Glu Gln Ser Arg Gly Ile Asp
        500 505 510
Gln Val Gly Leu Ala Val Ala Glu Met Asp Arg Val Thr Gln Gln Asn
515 520 525
Ala Ser Leu Val Glu Glu Ser Ala Ala Ala Ala Ala Ala Leu Glu Glu
 530 535 540
Gln Ala Ser Arg Leu Thr Gln Ala Val Ala Val Phe Arg Ile Gln Gln
545 550 555
Glu Gln Met Lys Ala Arg Glu Phe Ala Ser Ala Lys Ser Val Ala Ala
         565 570 575
Pro Val Val Ala Arg Lys Pro Ala Thr Ala Asp Ala Gly Asp Asn Trp
                       585
Glu Thr Phe
```

<210> 7989 <211> 152 <212> PRT

<213> Enterobacter cloacae

```
Thr Lys Glu Gly Asn Ala Leu Tyr Gln Arg Ala Gln Ala Gln Val Glu
       100
                           105
                                                110
Glu Ala Tyr Gln Gln Ile Glu Ala Glu Tyr Thr Pro Glu Lys Met Thr
     115
                         120
                                         125
Gln Leu Thr Ala Leu Leu Glu Glu Phe Ile Glu Leu Gly Asn Arg His
 130 135
Ile Ala Ala Arg Asp Glu Glu
<210> 7990
<211> 275
<212> PRT
<213> Enterobacter cloacae
<400> 7990
Phe Cys Val Val Val Trp Phe Cys Pro Ala Pro Phe Leu Ala Ala Lys
                                                    1.5
                              10
Ala Gln Leu Ile Phe Asn Val Ile Glu Ser Phe Ser Gln Val Ile Phe
                                                30
           20
                              25
Gly Ile Ile Asn Met Ile Met Arg Leu Ala Pro Ile Gly Ala Phe Gly
       35
                         40
Ala Met Ala Phe Thr Ile Gly Lys Tyr Gly Val Gly Thr Leu Val Gln
 50
                      55
Leu Gly Gln Leu Ile Val Cys Phe Tyr Ile Thr Cys Ile Leu Phe Val
                  7.0
                                     7.5
Val Val Val Leu Gly Ser Ile Ala Arg Ala Thr Gly Phe Ser Ile Phe
              8.5
                                  90
Lys Phe Ile Arg Tyr Ile Arg Glu Glu Leu Leu Ile Val Leu Gly Thr
                              105
Ser Ser Ser Glu Ser Ala Leu Pro Arg Met Leu Asp Lys Met Glu Lys
                          120
                                             125
       115
Leu Gly Cys Arg Lys Ser Val Val Gly Leu Val Ile Pro Thr Gly Tyr
                      135
                                         140
 130
Ser Phe Asn Leu Asp Gly Thr Ser Ile Tyr Leu Thr Met Ala Ala Val
                                     155
                  150
145
Phe Ile Ala Gln Ala Thr Asn Ser His Met Asp Ile Phe His Gln Ile
                                  170
               165
Thr Leu Leu Val Val Leu Leu Leu Ser Ser Lys Gly Ala Ala Gly Val
                              185
         180
Thr Gly Ser Gly Phe Ile Val Leu Ala Ala Thr Ile Ser Ala Val Gly
                         200
                                          205
        195
His Leu Pro Val Ala Gly Leu Ala Leu Ile Leu Gly Ile Asp Arg Phe
                                          220
                       215
    210
Met Ser Glu Ala Arg Ala Leu Thr Asn Leu Val Gly Asn Gly Val Ala
                   230
                                      235
225
Thr Ile Val Val Ala Lys Trp Val Lys Glu Leu Asp His Lys Lys Leu
                                  250
               245
Asn Asp Thr Leu Asn Asn Arg Thr Ser Glu Asp Lys Thr Pro Gly Leu
                              265
            260
Ser Ser
        275
<210> 7991
<211> 501
<212> PRT
<213> Enterobacter cloacae
<400> 7991
Ser Gly Val His Met Gln Gly Thr Lys Ile Arg Leu Leu Thr Gly Gly
Leu Leu Met Met Ala Ala Ala Ser Tyr Val Gln Ala Asp Ala Leu Gln
```

Pro Asp Pro Ala Trp Gln Gln Gly Thr Leu Ala Asn Gly Phe Gln Trp 40 Gln Val Leu Ser Thr Pro Gln Arg Pro Ser Asp Arg Ile Glu Ile Arg 55 Leu Ser Val Asn Thr Gly Ser Leu Thr Glu Ser Thr Gln Gln Thr Gly 70 75 Leu Ser His Phe Ile Pro Arg Leu Ala Leu Thr Gln Ser Gly Ser Leu 85 90 Gln Ala Val Gln Val Arg Ser Leu Trp Gln Gln Ala Ile Asp Pro Lys 100 105 Arg Pro Leu Pro Pro Ala Val Val Ser Tyr Asp Tyr Thr Met Phe Asn 115 120 125 Leu Ser Leu Pro Asn Asn Arg Asn Asp Leu Leu Lys Glu Ala Leu Thr 130 135 140 Tyr Leu Ser Asp Ala Thr Gly Lys Leu Ala Ile Thr Pro Glu Thr Val 145 150 155 160 Asn Tyr Ala Leu Ser Asn Ser Asp Met Val Ala Thr Trp Pro Thr Asp 165 170 175 Thr Lys Glu Gly Trp Trp Arg Tyr Arg Leu Lys Gly Ser Thr Leu Leu 180 185 190 Gly His Asp Pro Ala Glu Pro Leu Lys Gln Pro Val Asp Ala Glu Gln 195 200 205 Val Lys Ser Phe Tyr Gln Gln Trp Tyr Thr Pro Asp Ala Met Thr Leu 210 215 220 Ile Val Val Gly Asn Val Asp Ser Arg Ala Val Ile Glu Gln Ile Asn 230 235 Lys Ala Phe Gly Asp Leu Lys Gly Lys Arg Glu Thr Pro Ala Pro Val 245 250 Pro Thr Leu Ser Pro Leu Arg Pro Glu Thr Val Ser Ile Met Thr Asp 260 265 270 Thr Val Arg Gln Asp Arg Leu Ser Met Met Trp Asp Thr Ala Trp Gln 275 280 285 Pro Ile Arg Glu Ser Ser Ala Leu Leu Arg Tyr Trp Arg Ala Asp Leu 290 295 300 Ala Arg Glu Ala Leu Phe Trp His Val Gln Gln Thr Leu Ser Lys Asn 310 Asn Val Lys Asp Ile Gly Leu Gly Phe Asp Cys Arg Val Leu Phe Gln 325 330 Arg Ala Gin Cys Ala Ile Asn Val Glu Ser Pro Gly Asp Lys Leu Asn 340 345 Ala Asn Leu Gly Val Val Ala Lys Glu Leu Ala Lys Val Arg Lys Glu 355 360 Gly Leu Ser Glu Glu Glu Phe Asn Ala Leu Val Ala Gln Lys Ser Leu 375 Glu Leu Gln Lys Leu Phe Ala Thr Tyr Ala Arg Ala Asp Thr Asp Ile 390 395 Leu Ile Ser Gln Arg Ile Arg Ser Leu Gln Asn Gln Val Val Asp Ile 405 410 Ala Pro Glu Gln Tyr Gln Lys Leu Arg Gln Asp Phe Leu Asn Gly Leu 425 420 Thr Val Glu Met Leu Asn Gln Asp Leu Arg Gln Gln Leu Ser Gln Asp 440 Met Ala Leu Ile Leu Leu Gln Pro Lys Gly Glu Pro Glu Tyr Asp Met 460 455 Lys Glu Leu Lys Ala Thr Trp Asn Ala Ile Met Ala Thr Ala Pro Gln 470 475 Pro Ala Gln Thr Ala Ala Asp Asp Leu His Gln Asp Ala Ser Asp Ile 485 490 Pro Gln Gly Gln

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<210> 7992
<211> 274
<212> PRT
<213> Enterobacter cloacae
<400> 7992
Leu Ser Asp Glu Ser Arg Lys Ala Ile Pro Tyr Asn Arg Thr Ser Glu
                            10
Met Lys Ser Glu Gln Val Ile Gln Arg Leu Ser Thr Thr Pro Glu Ala
         20
                         25
Ser Ile Glu Asn Leu Gln Glu His Arg Tyr Trp Leu Gln Cys Glu Arg
                     40
Ala Tyr Thr Tyr Gln Pro Ile Tyr Arg Thr Asp Gly Arg Leu Met Ala
                                  60
                  5.5
Ile Glu Val Leu Thr Val Val Thr His Pro Ser Asn Pro Ser Gln Arq
         70
                             75
Ile Ala Pro Asp Arg Tyr Phe Ala Glu Val Ala Val Arg Gln Arg Ile
           8.5
                  90
Asp Val Leu Glu Glu Gln Leu Arg Met Leu Ala Thr Lys Gln Ala Phe
       100 105 110
Phe Lys Gln His Gly Ile Leu Ala Ser Val Asn Val Asp Gly Pro Thr
     115 120
                           125
Leu Met Ala Leu Arg Gln Asn Ala Thr Leu Gln Ala Leu Ile Ala Thr
130 135 140
Leu Pro Trp Met Arg Phe Glu Leu Val Glu His Val Gln Leu Pro Gln
145 150 155
Asp Ser Ser Phe Ala Ser Met Cys Glu Phe Gly Pro Leu Trp Leu Asp
          165 170 175
Asp Phe Gly Thr Gly Met Ala Asn Phe Ser Ala Leu Ser Glu Val Arg
        180 185 190
Tyr Asp Tyr Ile Lys Val Ala Arg Asp Leu Phe Ile Met Leu Arg Gln
 195 200 205
Thr Pro Glu Gly Arg Asn Leu Phe Thr Met Leu Leu Gln Leu Met Asn
210 215 220
Arg Tyr Cys Gln Gly Val Ile Val Glu Gly Val Glu Thr Leu Glu Glu
225 230 235
Trp Arg Asp Val Gln Asn Ser Pro Ala Ala Ala Gln Gly Tvr Phe
          245 250 255
Leu Ser Arg Pro Val Pro Met Asp Thr Leu Glu Lys Val Ile Thr Ser
                        265
Leu
<210> 7993
<211> 254
<212> PRT
<213> Enterobacter cloacae
<400> 7993
Ile Met Ser Glu Arg Ile Ala Leu Val Thr Gly Gly Ser Arg Gly Leu
                            10
Gly Lys Asn Ala Val Leu Lys Leu Ala Ala Glu Gly Thr Gly Ile Ile
         20
                         25
                                         30
Leu Thr Trp Asn Asn Ser Gln Gln Glu Ala Gln Glu Val Val Arg Glu
                      40
Ile Glu Gly Lys Gly Gly Lys Ala Ala Ala Leu Gln Leu Asn Val Gly
 50 55
                                  60
Asp Thr Ala Ser Phe Ser Arg Phe Ala Gln Lys Val Lys Asp Thr Leu
               7.0
                               7.5
```

Lys His Val Trp Gln Arg Asp Thr Phe Asp Tyr Leu Val Asn Asn Ala

```
90
Gly Thr Gly Leu Tyr Ala Pro Tyr Thr Glu Thr Thr Glu Ala Gln Phe
                       105
Asp Asp Ala Met Asn Ile His Phe Lys Gly Pro Phe Phe Leu Thr Gln
     115
            120
                                    125
Gln Leu Leu Pro Leu Ile Lys Asp Gly Gly Arg Ile Leu Asn Val Ser
  130 135
                                 140
Ser Gly Leu Ala Arg Phe Thr Gln Pro Gly Ser Gly Thr Tyr Ala Ala
      150 155
Met Lys Gly Ala Met Glu Val Leu Thr Arg Tyr Gln Ala Lys Glu Leu
         165
                         170
Gly Ala Arg Gly Ile Ser Val Asn Ile Ile Ala Pro Gly Ala Ile Glu
                185
        180
                            190
Thr Asp Phe Gly Gly Gly Arg Val Arg Asp Asn Ala Glu Leu Asn Gln
     195
             200
Leu Leu Ala Ser Gln Thr Ala Leu Gly Arg Val Gly Leu Pro Asp Asp
 210 215 220
Ile Gly Asp Ala Ile Ala Ala Leu Leu Ser Asp Lys Leu Gly Trp Met
225 230 235
Asn Ala Gln Arg Ile Glu Val Ser Gly Gly Met Phe Leu
           245
<210> 7994
<211> 229
<212> PRT
<213> Enterobacter cloacae
<400> 7994
Phe Val Thr Ser Pro Phe Ile Glu Phe Phe Leu Lys Lys Cys Leu Cys
         5
                      10
Arg Ile Pro Leu Arg Tyr Ser Gln Arg Ser Lys Thr Met Arg Val Ile
 20
                  25
Met Phe Asp Arg Gln Ser Leu Phe Ile His Gly Ala Met Tyr Ser Leu
35 40
Gln Lys Leu Ile Pro Lys Ile Asp Met Thr Gly Thr Arg Gln Thr Asp
 50 55
                                 60
Glu Leu Trp Ala Gln Leu Ser Ala Ser Pro Ser Ala Ile Val Met Ile
        70
                           75
Asp Gly Tyr Leu Ile Arg Asp Asn Gly Val Ala Leu Leu Glu Glu Ile
         85
                           90 95
Met Asp Arg Phe Pro Thr Ser Arg Val Val Leu Val Leu Thr Lys Lys
       100 105 110
Glu Arg Arg Trp Val Glu Gln Met Phe Gln Arg Asn Val Val Ala Ile
 115 120 125
Ile Pro Arg Asn Ala Asn Pro Glu Arg Phe Ser Ala Val Leu Asp Ser
 130 135 140
Val Ser Arg Gly Met Val Cys Phe Pro Gly Glu Trp Leu Lys Gln His
145 150 155
Thr Ser Gln Asp Glu Leu Ala Val Leu Ser Glu Arq Gln Arq Glu Val
          165 170
Leu Lys Leu Leu Ala Ala Gly Glu Ser Asn Lys Glu Ile Gly Arg Asn
    180 185 190
Leu Asn Ile Ser Ala Ala Thr Val Lys Ala His Leu Glu Thr Leu Phe
 195 200 205
Arg Arg Leu Asp Val Lys Asn Arg Thr Gln Ala Ala Met Tyr Tyr Thr
 210
                 215
Arg Ala Thr Ala
```

<210> 7995 <211> 743 <212> PRT <213> Enterobacter cloacae

<400> 7995 Ile Asp Asp Leu Pro Gln Phe Thr Ala Glu Arg His Arg Leu Pro Ala 10 Gly Pro Val Ser Ala Ala Pro Pro Gly Ser Phe Pro Pro Arg Leu Ala 25 20 Leu Lys Ser Ser Thr Leu Asn Pro Ile Thr Glu Gln Tyr Ala Gln Arg 40 Arg Met Arg Ala Ser Phe Thr Tyr Phe Asn Arg Thr Ala Phe Met Thr 55 Asn Pro Leu Leu Thr Pro Phe Ser Leu Pro Pro Phe Ser Lys Ile Leu 70 75 Pro Glu His Val Val Pro Ala Val Thr Gln Ser Leu Asp Asn Cys Arg 85 90 Ala Ala Val Glu Ser Val Val Ala Gln Gly Gly Pro Tyr Thr Trp Glu 100 105 Asn Leu Cys Gln Pro Leu Ala Glu Val Asp Asp Val Leu Gly Arg Ile 115 120 125 Phe Ser Pro Val Ser His Leu Asn Ser Val Lys Asn Ser Pro Glu Leu 130 135 140 Arg Glu Ala Tyr Glu Gln Thr Leu Pro Leu Leu Ser Glu Tyr Ser Thr 145 150 155 160 Trp Val Gly Gln His Glu Gly Leu Tyr Lys Ala Tyr Arg Asp Leu Arg 165 170 175 Asp Gly Asp His Tyr Ala Glu Leu Asn Thr Ala Gln Lys Lys Ser Val 180 185 190 Asp Asn Ala Leu Arg Asp Phe Glu Leu Ser Gly Ile Gly Leu Pro Lys 195 200 205 Glu Lys Gln Val Arg Tyr Gly Glu Ile Ala Ala Arg Leu Ser Glu Leu 210 215 220 Gly Asn Gln Tyr Ser Asn Asn Val Leu Asp Ala Thr Met Gly Trp Thr 225 230 235 Lys Leu Ile Thr Asp Glu Ser Glu Leu Ala Gly Met Pro Glu Ser Ala 245 250 255 Leu Ala Ala Ala Lys Ala Gln Ala Glu Ala Lys Glu Gln Glu Gly Phe 260 265 270 Leu Leu Thr Leu Asp Ile Pro Ser Tyr Leu Pro Val Met Thr Tyr Cys 275 280 285 Asp Asn Gln Ala Leu Arg Glu Glu Met Tyr Arg Ala Tyr Ser Thr Arg 295 300 Ala Ser Asp Gln Gly Pro Asn Ala Gly Lys Trp Asp Asn Ser Pro Val 310 315 320 Met Ala Glu Ile Leu Ala Leu Arg His Glu Leu Ala Gln Leu Leu Gly 325 330 335 Phe Asp Ser Tyr Ala Asp Lys Ser Leu Ala Thr Lys Met Ala Glu Asn 340 345 350 Pro Gln Gln Val Leu Asp Phe Leu Thr Asp Leu Ala Lys Arg Ala Arg 355 360 Pro Gln Gly Glu Lys Glu Leu Ala Gln Leu Arg Ala Phe Ala Lys Ala 370 375 380 Glu Phe Gly Val Asp Glu Leu Gln Pro Trp Asp Ile Ala Tyr Tyr Ser 390 395 Glu Lys Gln Lys Gln His Leu Tyr Ser Ile Ser Asp Glu Gln Leu Arg 405 410 Pro Tyr Phe Pro Glu Asn Lys Ala Val Asn Gly Leu Phe Glu Val Val 425 Lys Arg Ile Tyr Gly Ile Thr Ala Lys Glu Arg Thr Asp Ile Asp Val 440

Trp His Pro Asp Val Arg Phe Phe Glu Leu Tyr Asp Asp Lys Asn Glu

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455
Leu Arg Gly Ser Phe Tyr Leu Asp Leu Tyr Ala Arg Glu Asn Lys Arg
                          475
        470
Gly Gly Ala Trp Met Asp Asp Cys Val Gly Gln Met Arg Lys Ala Asp
          485
                    490
Gly Ser Leu Gln Lys Pro Val Ala Tyr Leu Thr Cys Asn Phe Asn Arg
            505 510
        500
Pro Val Ser Gly Lys Pro Ala Leu Phe Thr His Asp Glu Val Ile Thr
   515
           520
                       525
Leu Phe His Glu Phe Gly His Gly Leu His His Met Leu Thr Arg Ile
         535 540
Glu Thr Ala Gly Val Ala Gly Ile Ser Gly Val Pro Trp Asp Ala Val
   550 555 560
Glu Leu Pro Ser Gln Phe Met Glu Asn Trp Cys Trp Glu Pro Asp Ala
         565 570 575
Leu Ala Phe Ile Ser Gly His Tyr Glu Thr Gly Glu Pro Leu Pro Lys
     580 590
Glu Leu Leu Asp Lys Met Leu Ala Ala Lys Asn Tyr Gln Ala Ala Met
 595 600 605
Phe Ile Leu Arg Gln Leu Glu Phe Gly Leu Phe Asp Phe Arg Leu His
610 615 620
Ala Glu Phe Ser Pro Glu Gln Gly Ala Lys Ile Leu Glu Thr Leu Ala
625 630 635
Glu Ile Lys Lys Gln Val Ala Val Ile Pro Gly Pro Thr Trp Gly Arg
      645 650 655
Phe Pro His Ala Phe Ser His Ile Phe Ala Gly Gly Tyr Ala Ala Gly
 660 665 670
Tyr Tyr Ser Tyr Leu Trp Ala Asp Val Leu Ala Ala Asp Ala Phe Ser
675 680 685
Arg Phe Glu Glu Glu Gly Ile Phe Asn Arg Glu Thr Gly Gln Ser Phe
690 695 700
Leu Asp Asn Ile Leu Thr Arg Gly Gly Ser Glu Glu Pro Met Glu Leu
705 710 715 720
Phe Lys Arg Phe Arg Gly Arg Glu Pro Gln Leu Asp Ala Met Leu Glu
        725
                   730
His Tyr Gly Ile Lys Gly
       740
<210> 7996
<211> 154
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<212> PRT

<213> Enterobacter cloacae

<400> 7996 Ser Val Arc

Ser Val Arg Ile Leu Lys Arg Glu Pro Asp Arg Leu Leu Val Ile Leu 10 Ser Leu Asn Cys Leu Ser Gly His Trp Gly Ala Val Ala Gln Glu Pro 20 25 Cys Phe Val Gly Gly Arg Arg Gly Gly Cys Met Ile Ser Thr Val Ala 35 40 Leu Phe Trp Ala Leu Cys Val Val Cys Ile Val Asn Met Ala Arg Tyr 50 55 60 Phe Ser Ser Leu Arg Ala Leu Leu Val Val Leu Arg Gly Cys Asp Pro 65 70 7.5 Leu Leu Tyr Gln Tyr Val Asp Gly Gly Gly Phe Phe Thr Ser His Gly 85 90 Gln Pro Ser Lys Gln Met Arg Leu Val Gly Tyr Ile Tyr Tyr Gln Arg 100 105 110 Tyr Arg Asp His His Asp Glu Glu Phe Ile Arg Arg Cys Glu Arg Leu 115 120

Arg Arg Gln Phe Ile Leu Thr Ser Ala Leu Cys Gly Leu Val Val Val

135 140 Ser Met Ile Ala Leu Met Ile Trp His <210> 7997 <211> 429 <212> PRT <213> Enterobacter cloacae <400> 7997 Asn Gly Phe Val Ile Ser Phe Tyr Ala Gly Ala Thr Thr Glu Glu Thr 1.0 Leu Gln Ser Ala Ala Val Asn Glu Glu Asp Phe Asp Val Glu Arg Phe 20 25 Asp Ala Val Val Ile Gly Ala Gly Ala Ala Gly Met Phe Cys Ala Ala 35 4.0 4.5 Met Ala Gly Gln Ala Gly Arg Arg Val Leu Leu Leu Asp Asn Gly Lys 50 55 60 Lys Pro Gly Arg Lys Ile Leu Met Ser Gly Gly Gly Arg Cys Asn Phe 65 70 75 80 Thr Asn Leu Tyr Val Glu Pro Ala Ala Tyr Leu Ser Gln Asn Arg His 85 90 95 Phe Cys Lys Ser Ala Leu Ala Arg Tyr Thr Gln Trp Asp Phe Ile Glu 100 105 110 Leu Val Gly Lys His Gly Ile Ala Trp His Glu Lys Thr Leu Gly Gln 115 120 125 Leu Phe Cys Asp Asp Ser Ala Gin Gln Ile Val Asp Met Leu Val Ala 130 135 140 Glu Cys Glu Lys Gly Gly Val Val Met Arg Leu Arg Thr Glu Val Leu 145 150 155 160 Asp Val Ala Arg Asp Glu Gln Gly Tyr Thr Leu Gln Leu Asn Gly Glu 165 170 175 Thr Val Ser Ala Asp Asn Leu Val Ile Ala Ser Gly Gly Leu Ser Met 180 185 190 Pro Gly Leu Gly Ala Ser Pro Phe Gly Tyr Lys Ile Ala Glu Gln Phe 195 200 205 Gly Leu Lys Val Leu Pro Thr Arg Ala Gly Leu Val Pro Phe Thr Leu 210 215 220 His Lys Pro Leu Leu Glu Gln Leu Gln Thr Leu Ser Gly Val Ser Val 225 230 235 Pro Ser Val Ile Thr Ala Glu Asp Gly Thr Val Phe Arg Glu Asn Leu 245 250 255 Leu Phe Thr His Arg Gly Leu Ser Gly Pro Ala Val Leu Gln Ile Ser 260 265 270 Ser Tyr Trp Gln Pro Gly Glu Phe Val Ser Val Asn Leu Val Pro Asp 275 280 285 Cys Asp Leu Asp Ala Phe Leu Asn Glu Gln Arg Ala Ala His Pro Asn 290 295 300 Gln Ser Leu Lys Asn Thr Leu Ala Met Gln Leu Pro Lys Arg Leu Val 305 310 315 Glu Cys Leu Gln Val Leu Gly Gln Ile Pro Asp Val Ala Leu Lys Gln 325 330 335 Leu Asn Ser Arg Glu Gln Glu Thr Leu Val Glu Thr Leu Thr Asn Trp 340 345 350 Arg Val Gln Pro Asn Gly Thr Glu Gly Tyr Arg Thr Ala Glu Val Thr 360 365 Leu Gly Gly Val Asp Thr Asn Glu Leu Ser Ser Arg Thr Met Glu Ala 375 380 Arg Asn Val Pro Gly Leu Tyr Phe Ile Gly Glu Val Met Asp Val Thr 390 395 Gly Trp Leu Gly Gly Tyr Asn Phe Gln Trp Ala Trp Ala Ser Ala Trp

405 415 410 Ala Cys Ala Gln Ala Leu Ala Asp Val Arg Gly Gln 420 <210> 7998 <211> 287 <212> PRT <213> Enterobacter cloacae <400> 7998 Pro Ala Ala Val Gln Lys Ser Leu Trp Ser Cys Ser Asn Ala Ser Val Ala Ala Ser Arg Ser Trp Met Arg Cys Trp Ser Ile Thr Glu Ser Lys 20 2.5 30 Ala Asp Cys Tyr Val Lys Ile Cys Leu Val Asp Glu Thr Gly Ala Gly Asp Gly Ala Leu Ser Val Leu Ala Ala Arg Trp Gly Leu Glu His Asp 50 55 60 Glu Asp Asn Leu Met Ala Leu Val Met Thr Pro Glu His Leu Glu Leu 65 70 75 Arg Lys Arg Asp Glu Pro Lys Leu Gly Gly Ile Phe Val Asp Phe Val 85 90 95 Gly Gly Ala Met Ala His Arg Arg Lys Phe Gly Gly Gly Arg Gly Glu 100 105 110 Ala Val Ala Lys Ala Val Gly Ile Lys Gly Ser Tyr Leu Pro Asp Val 115 120 125 Val Asp Ala Thr Ala Gly Leu Gly Arg Asp Ala Phe Val Leu Ala Ser 130 135 140 Val Gly Cys Arg Val Arg Met Leu Glu Arg Asn Pro Val Val Ala Ala 145 150 155 160 Leu Leu Asp Asp Gly Leu Thr Arg Gly Tyr Ala Asp Pro Glu Ile Gly 165 170 175 Ser Trp Leu Gln Glu Arg Leu Gln Leu Ile His Ala Ser Ser Leu Thr 180 185 190 Ala Leu Thr Asp Ile Thr Pro Arg Pro Gln Val Val Tyr Leu Asp Pro 195 200 205 Met Phe Pro His Lys Gln Lys Ser Ala Leu Val Lys Lys Glu Met Arg 210 215 220 Val Phe Gln Ser Leu Val Gly Pro Asp Leu Asp Ala Asp Gly Leu Leu 225 230 235 Glu Pro Ala Arg Gln Leu Ala Thr Lys Arg Val Val Lys Arg Pro 245 250 255 Asp Tyr Ala Pro Pro Leu Ala Asp Val Ala Thr Thr Asn Ala Val Thr 260 265 270 Thr Lys Gly His Arg Phe Asp Ile Tyr Ser Gly Thr Pro Glu 280 <210> 7999 <211> 284 <212> PRT <213> Enterobacter cloacae <400> 7999 Gly Thr Ile Met Ala Arg Gly Arg Arg Leu Lys Ser Tyr Leu Asp Tyr Glu Asn Ala Leu Gly Asp Gly Ile Gly Val Gly Tyr Gly Gln Ser Tyr Gln Pro Trp Leu Arg Ala Gln Asp Val Lys Ser Arg Gly Asn Arg Ser 40 Ile Val Phe Gly Leu Lys Thr Phe Arg Asn His His Leu Leu Ser Ser

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Val Glu Ser Asn Phe Phe Tyr Leu Ala Glu Phe Asn Asp Ser Val Ile
Asp Ile Arq Glu Gln Phe Pro Leu Phe Pro Leu Arq Leu Thr Gln Gln
            8.5
                        90
Ile Ala Asn His Leu His Phe Gln His Pro Met Val Arg Gly Val Arg
       100 105 110
Gly Val Pro Val Glu Val Leu Asn Val Met Thr Thr Asp Phe Leu Leu
   115
                      120
                                      125
Thr Leu Arg Thr Pro Glu Gly Gly Leu Arg Tyr Lys Ala Ile Ala Val
130 135 140
Lys His Asn Glu Ser Ile Pro Glu Arg Glu Ala Gln Lys Leu Glu Ile
145 150 155 160
Glu Arg Met Phe Trp Gln Leu Ile Asp Val Glu Phe Gln Ile Tyr Val
       165 170 175
Gly Ser Glu Leu Asn Asn Val Val Gly Lys Asn Ile Cys Trp Ala Thr
180 185 190
Ser Val Leu Arg Asp Gly Ser Glu Phe Tyr Asp Lys Tyr Pro Leu Asp
      195 200 205
Lys Ile Leu Trp Lys Leu Lys Pro Asp Val Tyr Pro Ile Val Gly Leu
210 215 220
Arg Ala Met Ile Ser Ser Ile Phe Gly Val Asp Ala Gln Glu Ala Met
225
          230 235
Met Leu Leu Gln Ala Met Ile Gly Leu Lys Met Ile Asn Val Asp Leu
            245 250 255
Ser Tyr Pro Ile Leu Glu Thr Gly Leu Ile Lys Ile Ile Ser Asn Asp
   260 265
His Tyr Ile Gly Leu Asn Ala Asn Gly Tyr Tyr
                      280
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<211> 315 <212> PRT <213> Enterobacter cloacae

<210> 8000

<400> 8000 Gly Arg Arg Ile Met Asn Leu Ile Arg Arg Val Ser Ala Ile Tyr Lys 10 Glu Gln Glu Leu Pro Glu Tyr Arg Gly Asn Pro Leu Ile Glu Ala Leu 20 25 30 Pro Glu Ala Leu Thr Glu Asp Glu Val Leu Leu Glu Met Ser Tyr Phe 40 4.5 35 Pro Glu Ile Asp Glu Lys Ile Arg Trp Thr Ala Pro Ala Asn Val Arg 55 Glu Gln Tyr Val Glu Arg Ile Lys Lys Phe Arg Cys Pro Gln Thr Asn 70 7.5 Leu Ile Gln Ala Tyr Lys Met Ile Leu Arg Ala Leu Arg Glu Ser Tyr 8.5 90 95 Ala Ala Arg Asn Pro Leu Lys Ser Gly Thr Ile Gln Tyr Leu His Tyr 100 105 110 Tyr Gly Asn Glu Arg Pro Asp Ile Glu Pro Glu Ser Gly Tyr Phe Lys 120 115 Ser Gln Ala Glu Ile Ile Tnr Ile Val Gly Met Ser Gly Ser Gly Lys 135 130 140 Thr Thr Met Ile Glu Gln Val Met Asp His Phe Pro Gln Ile Ile Glu 145 150 155 His Ser Ser Tyr Lys Gly Val Phe Pro Gly Phe Ser Lys Gln Ile Val 165 170 Trp Val Lys Ile Asn Cys Pro Tyr Asn Ser Ser Val Arg Asp Leu Cys 180 185 190 Glu Glu Ile Leu Gln Lys Leu Asp Asp Ala Ile Gly Ile Glu Arg Thr 195 200 205

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Thr Pro Glu Ile Arg Asn Gly Ala Leu Ala Arg Gln Ile Ala Gln Arg
Ile Lys Ser Ser Phe Leu Gly Ile Leu Val Ile Asp Glu Met Gln Arg
            230
                                235
Leu Lys Phe Ser Arg Thr Gly Gly Glu Ser Lys Leu Ile Asp Phe Leu
            245 250
His Glu Ile Val Asp Ser Met Gly Val Ser Met Val Phe Cys Gly Asn
        260 265 270
His Pro Phe Asp Glu Thr Leu Thr Lys Lys Met Arg Ile Ala Arg Arg
    275 280 285
Ala Glu Ser Gly Gly Tyr Met Lys Ile Lys Asn Val Arg Tyr Asp Ser
290 295 300
Gln Asp Trp Gln Ser Phe Ile His Tyr Leu Trp
               310
<210> 8001
<211> 695
<212> PRT
<213> Enterobacter cloacae
<400> 8001
Thr Ile Val Leu Glu Ala Ser Ser Ser Gly Lys Gly Thr Thr Met Thr
                            10
Lys Thr Thr Arg Val Ile Ser Trp Thr Ala Gly Ile Phe Leu Leu
                        2.5
Ile Val Val Leu Ile Ile Ile Ile Ala Thr Phe Asp Trp Asn Arg Leu
                    40
Lys Pro Thr Ile Asn Gln Lys Val Ser Thr Glu Leu Asn Arg Pro Phe
                  5.5
Ala Ile Arg Gly Asp Leu Gly Val Val Trp Glu Arg Gln Lys Glu Glu
             70 75
Thr Gly Trp Arg Ser Trp Val Pro Trp Pro His Val His Ala Asp Asp
                 90
Ile Ile Leu Gly Asn Pro Pro Asp Ile Pro Glu Val Thr Met Ile His
        100
                      105
Leu Pro Arg Val Glu Ala Thr Leu Ala Pro Leu Ala Leu Leu Thr Lys
                      120 125
Thr Val Tyr Leu Pro Trp Ile Lys Leu Gln Gln Pro Asp Ala Arg Leu
                  135 140
Ile Arg Leu Ser Glu Lys Asn Asn Trp Thr Phe Asp Leu Ala Ser
    150 155
Ser Gly Asp Lys Asp Gln Asn Ala Gln Pro Ser Ser Trp Ser Phe Arg
            165 170
Leu Asp Asn Ile Leu Phe Asp Arg Gly Arg Ile Ala Ile Asp Asp Lys
         180
                        185
Val Ser Lys Ala Asp Val Glu Ile Leu Val Asp Pro Leu Gly Lys Pro
      195
                      200
                                    205
Leu Pro Phe Ser Glu Val Thr Gly Ser Lys Ala Lys Gly Asp Asp Ser
                   215
                                   220
Lys Ala Gly Asp Tyr Val Phe Gly Leu Thr Ala Lys Gly Arg Tyr Asn
                230
                                235
Gly Gln Pro Leu Thr Gly Lys Gly Lys Ile Gly Gly Met Leu Ala Leu
            245
                            250
Arg Ser Glu Gly Thr Pro Phe Pro Val Gln Ala Asp Phe Arg Ser Gly
         260
                         265
                             270
Asn Thr Arg Val Ala Phe Val Gly Thr Val Asn Asp Pro Met Asn Met
      275
                      280 285
Gly Gly Val Asp Leu Gln Leu Lys Phe Ala Gly Asp Ser Leu Gly Glu
                   295
                                   300
Leu Tyr Asp Leu Thr Gly Val Leu Leu Pro Asp Thr Pro Pro Phe Glu
                310
                                315
```

```
Thr Asp Gly His Leu Val Ala Lys Ile Asn Thr Glu Lys Ser Ser Val
                           330
           325
Phe Asp Tyr Arg Gly Phe Asn Gly Arg Ile Gly Asp Ser Asp Ile His
         340
                        345
Gly Thr Leu Thr Tyr Thr Gly Lys Pro Arg Pro Lys Leu Glu Gly
                     360
Asp Val Glu Ser Arg Gln Leu Arg Leu Ala Asp Leu Gly Pro Leu Ile
                  375
                                 380
Gly Val Asp Ser Gly Lys Gly Thr Lys Ser Lys Glu Val Lys Lys Asp
               390
                              395
Val Gln Pro Ala Gly Lys Val Leu Pro Tyr Asp Arg Phe Glu Thr Asp
           405
                           410
Lys Trp Asp Val Met Asp Ala Asp Val Arg Phe Lys Gly Arg Lys Ile
       420 425
                             430
Glu His Gly Ser Thr Leu Pro Leu Ser Asn Leu Ser Thr His Ile Ile
                         445
     435 440
Leu Lys Asn Ala Asp Leu Arg Leu Gln Pro Leu Lys Phe Gly Met Ala
450 455 460
Gly Gly Thr Ile Ser Ser Asn Ile His Leu Glu Gly Asp Lys Lys Pro
465 470 475
Met Gln Gly Arg Ala Glu Ile Gln Ala Arg Arg Leu Lys Leu Lys Glu
           485 490 495
Leu Met Pro Asp Val Glu Leu Met Gln Lys Thr Leu Gly Glu Met Asn
        500 505 510
Gly Asp Ala Asp Ile Arg Gly Thr Gly Asn Ser Val Ala Ala Leu Leu
 515 520 525
Gly Ser Gly Asn Gly Asn Leu Lys Leu Leu Met Asn Asp Gly Leu Val
 530 535 540
Ser Arg Asn Leu Met Glu Ile Leu Gly Leu Asn Val Gly Asn Phe Ile
545 550 555 560
Ile Gly Gln Ile Phe Gly Asp Asp Glu Val Arg Val Asn Cys Ala Ala
            565 570 575
Ala Asn Leu Asp Leu Val Asn Gly Val Ala Arg Pro Gln Ile Phe Ala
        580 585
Phe Asp Thr Glu Asn Ala Val Ile Asn Val Thr Gly Thr Ala Ser Met
    595 600 605
Ala Ser Glu Gln Leu Asp Leu Tar Ile Asp Pro Glu Ser Lys Gly Ile
 610 615 620
Arg Ile Ile Thr Leu Arg Ser Pro Leu Tyr Val Arg Gly Thr Phe Lys
               630
                            635
Asp Pro Gln Ala Gly Val Lys Ala Gly Pro Leu Ile Ala Arg Gly Ala
            645
                           650 655
Val Ala Ala Ala Leu Ala Thr Leu Val Thr Pro Ala Ala Ala Leu Leu
                       665 670
Ala Leu Ile Ser Pro Ser Glu Gly Glu Ala Asn Gln Cys Arg Thr Ile
   675
                     680
Leu Ser Gln Met Lys Lys
  690
<210> 8002
<211> 567
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(554)
<400> 8002
Thr Gln Met Asp Ile Ile Arg Asn Ser Val Trp Leu Ser Gln Gly Thr
            5
```

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Asp Leu Leu Ala Glu Gly Leu Tyr Arg Val Leu Asp Phe Asp Arg Lys
                      25
        2.0
Val Asp Leu Leu Ile Leu Phe Lys Ile Lys Ser Glu Arg Thr Gly Lys
      35
                    40
Pro Ile Pro Phe Ser Phe Ser Met Phe Lys Tyr Tyr Ile Glu Ser Asn
                55
Ser Ile Thr Cys Lys Asp Tyr Ile Tyr Pro Ser Tyr Met Leu Val Asp
              70
Glu Lys Glu Leu Thr Asp Lys Asp Arg Gly Arg Arg Asp Glu Asn Tyr
                           90
           8.5
Asn Ile Ile Lys Asp Leu Val Asp Asp Arg Met Phe Leu Phe Asp Tyr
        100
                        105
Ala Leu His Lys Lys Ser His Leu Leu Met Asp Tyr Ser Arg Asn Lys
                     120
 115
Lys Ile Ser Gln Tyr Thr Ile Arg Thr Leu Leu Ala Leu Tyr Trp Arg
 130
                  135
His Gly Gln Asp Ile Tyr Ala Leu Leu Pro Ala Phe Ser Asn Cys Gly
145 150
                            155
Ala Ala Gly Lys Ser Arg Ile Lys His Glu Ile Lys Leu Gly Asn Ser
     165 170 175
Lys Lys Asn Arg Ala Leu Pro Asn Glu Arg Ser Arg Val Phe Ile Leu
 180 185
                                       190
Asn Glu Arg Asp Ile Asn Asn Ile Arg Lys Ser Leu Ile Thr Tyr His
195 200 205
Tyr Lys Val Asn Gly Asp Thr Ile Lys Lys Thr Leu Glu Arg His Ile
210 215 220
Asp Leu Tyr Phe Arg Asp Glu Ile Lys Thr Ala Asn Leu Glu Asn Arg
225 230 235 240
Ala Pro Tyr Val Pro Ser Leu Lys Gln Phe Ser Tyr Trp Asn Lys Lys
       245 250 255
Leu Phe Thr Lys Asp Phe Ser Ile Asn Lys Lys Asn Thr Lys Lys Glu
 260 265
                                        270
Ile Asp Leu Lys Met Arg Ala Leu Leu Gly Ser Val Ala Asn Thr Thr
275 280 285
Val Leu Pro Gly Asp Val Phe Glu Ile Asp Ser Thr Val Ala Asp Val
290 295 300
His Leu Ile Ser Ser Leu Asn Arg Arg Lys Val Ile Gly Arg Pro Thr
305 310 315
Ile Tyr Thr Val Val Asp Arg Ala Thr Arg Met Ile Val Gly Leu His
            325 330
Val Ser Leu Tyr His Ala Ser Trp Arg Ala Ala Arg Gln Ala Leu Ala
        340 345
Asn Cys Phe Met Pro Lys Lys Glu Tyr Cys Arg Leu Phe Gly Ile Ser
     355 360 365
Ile Thr Asp Asp Asp Trp Pro Cys Ser His Ile Pro Leu Thr Leu Met
  370 375 380
Cys Asp Asn Gly Glu Met Ile Gly Leu Lys Pro Gln Glu Glu Met Thr
385 390 395 400
Pro Leu Thr Lys Leu Glu Phe Ala Pro Val Gly Arg Gly Asp Arg Lys 405 410 415
Ser Ile Val Glu Arg Cys Phe Gly Ile Leu Asn Asp Glu Val Ile His
                       425 430
Arg Leu Ile Gly Thr Thr Arg Arg Gly Lys Ile Val Lys Gly Glu Pro
     435
                     440
Thr Pro Gln Ser Arg Ala Cys Leu Thr Ile Gln Glu Val Thr Ser Leu
450 455 460
Leu Ile Arg Glu Ile Leu Ala His Asn Gln Arg Thr Tyr Glu Glu Leu
              470 475
Ala Tyr Ile Asn Pro Leu Leu Ile Glu Asn Asp Leu Val Ile Ser Pro
          485
                      490
Lys Asn Ser Trp Met Ile Ser Leu Lys His Gly Arg Phe Ser Ala Arg
```

505 Ala Val Gly Ala Asp Glu Val Ile Ala Arg Leu Leu Ile Pro Val Asn 525 520 Ala Asn Ile Thr Ala Gly Gly Ile Gln Tyr Asn Asn Leu Phe Tyr Glu 535 540 Cys Asp Pro Glu Ile Ala Ser Gly Val Xaa Val Phe Gly Arg Thr Thr 550 Cys Glu Ala Arg Ile Glu 565 <210> 8003 <211> 502 <212> PRT <213> Enterobacter cloacae <400> 8003 Arg Pro Met Leu His Leu Phe Ala Gly Leu Asp Leu His Thr Gly Leu 10 Leu Leu Leu Ala Leu Val Phe Val Leu Phe Tyr Glu Ala Ile Asn 20 25 3.0 Gly Phe His Asp Thr Ala Asn Ala Val Ala Thr Val Ile Tyr Thr Arg 40 4.5 Ala Met Arg Ser Gln Leu Ala Val Val Met Ala Ala Val Phe Asn Phe 55 60 Phe Gly Val Leu Leu Gly Gly Leu Ser Val Ala Tyr Ala Ile Val His 7.0 7.5 Met Leu Pro Thr Asp Leu Leu Leu Asn Val Ser Ser Gly His Gly Leu 90 85 Ala Met Val Phe Ser Met Leu Leu Ala Ala Ile Ile Trp Asn Leu Gly 100 105 110 Thr Trp Tyr Phe Gly Leu Pro Ala Ser Ser Ser His Thr Leu Ile Gly 115 120 125 Ala Ile Ile Gly Ile Gly Leu Thr Asn Ala Leu Met Thr Gly Thr Ser 130 135 140 Val Val Asp Ala Leu Asn Ile Pro Lys Val Leu Gly Ile Phe Gly Ser 150 155 Leu Ile Ile Ser Pro Ile Val Gly Leu Val Val Ala Gly Gly Leu Ile 165 170 175 Phe Ile Leu Arg Arg Tyr Trp Ser Asn Thr Lys Lys Arg Ala Arg Ile 185 190 His Leu Thr Pro Ala Glu Arg Glu Lys Lys Asp Gly Lys Lys Pro 200 205 Pro Phe Trp Thr Arg Ile Ala Leu Ile Ile Ser Ala Ile Gly Val Ala 215 Phe Ser His Gly Ala Asn Asp Gly Gln Lys Gly Ile Gly Leu Val Met 230 235 Leu Val Leu Ile Gly Val Ala Pro Ala Gly Phe Val Val Asn Met Asn 245 250 Ala Ser Gly Tyr Glu Ile Thr Arg Thr Arg Asp Ala Val Asn Asn Val 260 265 Glu Thr Tyr Phe Gln Gln His Pro Asp Leu Leu Lys Lys Ala Thr Gly 275 280 285 Val Asp Gln Leu Ile Pro Ser Pro Glu Ser Gly Ala Thr Thr Ala Pro 295 290 300 Gly Glu Phe His Cys His Pro Ala Asn Ala Ile Asn Ala Leu Glu Arg 305 310 315 Ala Lys Gly Met Leu Ala Asp Ile Glu Ser Tyr Asp Lys Leu Ala Val 325 330 335 Glu Gln Arg Gly Gln Leu Arg Arg Ile Met Leu Cys Ile Ser Asp Val 345 340

Thr Asp Lys Val Ala Lys Leu Pro Glu Val Asn Ala Asp Asp Gln Arg

```
360
Leu Leu Lys Lys Leu Lys Gly Asp Met Leu Asn Thr Ile Glu Tyr Ala
                           380
                  375
Pro Ile Trp Ile Ile Met Ala Val Ala Leu Ala Leu Gly Ile Gly Thr
            390
                            395
Met Ile Gly Trp Arg Arg Val Ala Thr Thr Ile Gly Glu Lys Ile Gly
           405 410
Lys Lys Gly Met Thr Tyr Ala Gln Gly Met Ser Ala Gln Met Thr Ala
        420 425
Ala Val Ser Ile Gly Leu Ala Ser Tyr Thr Gly Met Pro Val Ser Thr
    435 440
                         445
Thr His Val Leu Ser Ser Ser Val Ala Gly Thr Met Ile Val Asp Gly
  450 455 460
Gly Gly Leu Gln Arg Lys Thr Val Thr Asn Ile Leu Met Ala Trp Val
465 470 475
Phe Thr Leu Pro Ala Ser Ile Leu Leu Ser Gly Gly Leu Tyr Trp Ile
        485 490
Ser Leu Lys Leu Ile
         500
<210> 8004
<211> 481
<212> PRT
<213> Enterobacter cloacae
<400> 8004
Ala Gly Ser Cys Arg Ser Asn Arg Ser His Arg Trp Lys Leu Leu Ile
                           10
Ser Gly Ile Gln Ser Arg Gln Phe Thr Ile Lys Asp Asn Ala Met Thr
                      25
Lys His Tyr Asp Tyr Ile Ala Ile Gly Gly Gly Ser Gly Gly Ile Ala
35
                     4.0
                               4.5
Ser Ile Asn Arg Ala Ala Met Tyr Gly Gln Lys Cys Ala Leu Ile Glu
50 53
                                  60
Ala Lys Glu Leu Gly Gly Thr Cys Val Asn Val Gly Cys Val Pro Lys
              70
                       75
Lys Val Met Trp His Ala Ala Gln Ile Arg Glu Ala Ile His Met Tyr
           85 90
Gly Pro Asp Tyr Gly Phe Asp Thr Thr Ile Asn His Phe Asp Trp Asp
         100 105
Lys Leu Ile Ala Ser Arg Thr Ala Tyr Ile Asp Arg Ile His Thr Ser
                     120 125
   115
Tyr Asp Asn Val Leu Gly Lys Asn Asn Val Asp Val Ile Arg Gly Phe 130 135
Ala Arg Phe Val Asp Ala Lys Thr Ile Glu Val Asn Gly Glu Thr Ile
               150
                              155 160
Thr Ala Asp His Ile Leu Ile Ala Thr Gly Gly Arg Pro Ser His Pro
            165
                            170
His Ile Pro Gly Ala Glu Tyr Gly Ile Asp Ser Asp Gly Phe Phe Glu
         180
                         185
Leu Pro Ala Leu Pro Glu Arg Val Ala Ile Val Gly Ala Gly Tyr Ile
     195
                     200
                                     205
Ala Val Glu Leu Ala Gly Val Ile Asn Gly Leu Gly Ala Glu Ala His
                  215 220
Leu Phe Val Arg Lys His Ala Pro Leu Arg Ser Phe Asp Pro Leu Ile
               230
                               235
Val Asp Thr Leu Val Glu Val Met Asn Ala Glu Gly Pro Thr Leu His
                           250 255
            245
Thr Asn Ala Val Pro Lys Ala Val Val Lys Asn Ala Asp Gly Ser Leu
         260
                         265
```

Thr Leu Glu Leu Glu Asp Gly Arg Ser Gln Thr Val Asp Cys Leu Ile

```
280
Trp Ala Ile Gly Arg Glu Pro Ala Thr Asp Asn Phe Asn Leu Ala Ala
            295
                            300
Thr Gly Val Lys Thr Asn Glu Lys Gly Tyr Ile Val Val Asp Lys Phe
               310
                              315
Gln Asn Thr Ser Val Pro Gly Ile Tyr Ala Val Gly Asp Asn Thr Gly
          325
                           330
                                  335
Ala Val Glu Leu Thr Pro Val Ala Val Ala Ala Gly Arg Arg Leu Ser
       340 345
                               350
Glu Arg Leu Phe Asn Asn Lys Pro Asp Glu His Leu Asp Tyr Ser Asn
 355 360
                            365
Ile Pro Thr Val Val Phe Ser His Pro Pro Ile Gly Thr Val Gly Leu
370 375 380
Thr Glu Pro Gln Ala Arg Glu Gln Tyr Gly Asp Asp Gln Val Lys Val
385 390 395
Tyr Lys Ser Ala Phe Thr Ala Met Tyr Thr Ala Val Thr Ser His Arg
        405 410 415
Gln Pro Cys Arg Met Lys Leu Val Cys Val Gly Pro Glu Glu Lys Ile
        420 425 430
Val Gly Ile His Gly Ile Gly Phe Gly Met Asp Glu Ile Leu Gln Gly
 435 440 445
Phe Ala Val Ala Leu Lys Met Gly Ala Thr Lys Lys Asp Phe Asp Asn
450 455 460
Thr Val Ala Ile His Pro Thr Ala Ala Glu Glu Phe Val Thr Met Arg
               470
<210> 8005
<211> 444
<212> PRT
<213> Enterobacter cloacae
<400> 8005
Glu Asn Ile Met Gln Ala Thr Ala Thr Thr Leu Asn Glu Gly Ala Glu
                        10
His Val Pro Val Asn Ser Arg Asn Lys Val Val Val Ala Ser Leu Ile
                      25
                               30
Gly Thr Ala Ile Glu Phe Phe Asp Phe Tyr Ile Tyr Ala Thr Ala Ala
                    40
                                    4.5
Val Ile Val Phe Pro His Ile Phe Phe Pro Gln Gly Asp Pro Thr Ala
         55
                                 60
Ala Thr Leu Gln Ser Leu Ala Thr Phe Ala Ile Ala Phe Val Ala Arg
               70 75
Pro Ile Gly Ser Ala Val Phe Gly His Phe Gly Asp Arg Val Gly Arg
                           90 95
            85
Lys Val Thr Leu Val Ala Ser Leu Leu Thr Met Gly Ile Ser Thr Val
        100 105
Ala Ile Gly Leu Leu Pro Thr Tyr Glu Thr Ile Gly Ile Leu Ala Pro
Val Leu Leu Ala Leu Ala Arg Phe Gly Gln Gly Leu Gly Leu Gly Gly
  130
                  135 140
Glu Trp Gly Gly Ala Ala Leu Leu Ala Thr Glu Asn Ala Pro Ala Arg
             150 155 160
Lys Arg Ala Leu Tyr Gly Ser Phe Pro Gln Leu Gly Ala Pro Ile Gly
           165 170 175
Phe Phe Phe Ala Asn Gly Thr Phe Leu Leu Leu Ser Trp Leu Leu Thr
                      185 190
      180
Asp Glu Gln Phe Met Ser Trp Gly Trp Arg Ile Pro Phe Val Phe Ser
                     200
```

Ala Val Leu Val Leu Ile Gly Leu Tyr Val Arg Val Ser Leu His Glu

```
215
Thr Pro Val Phe Ala Lys Val Ala Ala Ala Lys Lys Gln Val Lys Val
         230
                      235
Pro Leu Gly Thr Leu Leu Thr Arg His Leu Arg Val Thr Val Leu Gly
                           250
            245
Thr Phe Ile Met Leu Ala Thr Tyr Thr Leu Phe Tyr Ile Met Thr Val
                                       270
        260
                      265
Tyr Ser Met Thr Phe Ser Thr Ala Ala Ala Pro Val Gly Leu Gly Leu
  275
            280 285
Pro Arg Asn Glu Val Leu Trp Met Leu Met Met Ala Val Ile Gly Phe
 290 295
                                 300
Gly Val Met Val Pro Ile Ala Gly Leu Leu Ala Asp Lys Phe Gly Arg
305 310 315
Arg Ser Ser Met Ile Val Ile Thr Ser Leu Ile Ile Leu Phe Ala Leu
         325
                           330
Phe Val Phe Pro Pro Leu Leu Gly Ser Gly Ser Pro Ala Leu Val Met
    340 345 350
Ala Tyr Leu Leu Ile Gly Leu Ser Leu Met Gly Leu Thr Phe Gly Pro
 355 360 365
Met Gly Ala Leu Leu Pro Glu Leu Phe Pro Thr Glu Val Arg Tyr Thr
370 375 380
Gly Ala Ser Phe Ser Tyr Asn Val Ser Ser Ile Leu Gly Ala Ser Val
385 390 395 400
Ala Pro Tyr Ile Ala Thr Trp Leu Gln Ala Asn Tyr Gly Leu Phe Tyr
        405 410 415
Val Gly Val Tyr Leu Ala Ala Met Ala Ala Leu Thr Leu Ile Ala Leu
      420 425 430
Leu Leu Thr His Glu Thr Lys His Gln Ala Leu
<210> 8006
<211> 151
<212> PRT
<213> Enterobacter cloacae
<400> 8006
Gly Arg Ser Asn Thr Met Ala Tyr Lys His Ile Leu Ile Ala Val Asp
                           10
Leu Ser Pro Glu Ser Lys Val Leu Val Asp Lys Ala Val Ser Met Ala
                      25
                                       30
Arg Pro Tyr Asn Ala Lys Val Ser Leu Ile His Val Asp Val Asn Tyr
                4.0
                                    4.5
   35
Ser Asp Leu Tyr Thr Gly Leu Ile Asp Val Asn Leu Gly Asp Met Gln
                           60
                  5.5
Lys Arg Ile Ser Glu Glu Thr His His Ala Leu Ser Glu Leu Ser Thr
                   75 80
             70
65
Asn Ala Gly Tyr Pro Ile Thr Glu Thr Leu Ser Gly Ser Gly Asp Leu
                           90 95
            85
Gly Gln Val Leu Val Asp Ala Ile Lys Lys Tyr Asp Met Asp Leu Val
         100
                        105 110
Val Cys Gly His His Gln Asp Phe Trp Ser Lys Leu Met Ser Ser Ala
      115
                    120
                         125
Arq Gln Leu Ile Asn Thr Val His Val Asp Met Leu Ile Val Pro Leu
 130 135
                                 140
Arq Asp Glu Glu Asp Glu
145
<210> 8007
<211> 569
<212> PRT
<213> Enterobacter cloacae
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<400> 8007 Lys Ile Ala Gly Lys Asn Pro Tyr Leu Leu Arg Gln Lys Pro Glu Val 10 Leu Asn Thr Met Phe Asn Gln Lys Leu Gln Thr Ala Glu Asp Ile Glu 20 25 Phe Asp Ile Ala Glu Glu Leu Arg Tyr Glu Thr Asp Pro Cys Glu Leu 35 40 Lys Leu Asp Glu Met Ile Glu Ala Glu Pro Glu Pro Glu Met Ile Glu 55 60 Gly Leu Pro Ala Ser Asp Ala Leu Thr Pro Ala Asp Arg Tyr Leu Glu 70 75 Leu Phe Glu His Val Gln Ser Ser Arg Leu Phe Ala Asp Ser Lys Thr 85 90 95 Phe Pro Asp Cys Ala Pro Lys Met Asp Pro Leu Asp Ile Leu Ile Arg 100 105 Tyr Arg Lys Val Arg Arg His Arg Asp Phe Asp Leu Ala Arg Phe Val 115 120 125 Lys Asn His Phe Trp Leu Pro Glu Asp Tyr Ser Lys Glu Tyr Val Ser 130 $$135\$ Asp Pro Gly Leu Ser Leu Lys Glu His Ile Asp Asn Leu Trp Pro Val 145 150 155 160 Leu Thr Arg Glu Pro Gln Asp His Ile Pro Trp Ser Ser Leu Leu Ala 165 170 175 Leu Pro Gln Ala Tyr Ile Val Pro Gly Gly Arg Phe Ser Glu Thr Tyr 180 185 190 Tyr Trp Asp Ser Tyr Phe Ser Met Leu Gly Leu Ala Glu Ser Gly Arg 195 200 205 Asn Asp Leu Leu Lys Cys Met Ala Asp Asn Phe Ala Trp Leu Ile Glu 215 220 210 Arg Tyr Gly His Ile Pro Asn Gly Asn Arg Thr Tyr Tyr Leu Ser Arg 230 235 240 Ser Gln Pro Pro Val Phe Ala Leu Met Val Glu Leu Phe Glu Glu Asp 245 250 255 Gly Val Arg Gly Ala Lys Arg Tyr Leu Glu His Leu Lys Met Glu Tyr 260 265 270 Ala Phe Trp Met Asp Gly Ala Glu Ser Leu Leu Leu Asn Gln Ala Tyr 280 285 275 Arg Ser Ala Val Arg Met Pro Asp Gly Ser Leu Leu Asn Arg Tyr Trp 295 300 Asp Asp Arg Asp Thr Pro Arg Asp Glu Ser Trp Ile Glu Asp Val Glu 310 315 305 Thr Ala Arg His Ser Gly Arg Pro Pro Asn Glu Val Tyr Arg Asp Leu 325 330 335 Arg Ala Gly Ala Ala Ser Gly Trp Asp Tyr Ser Ser Arg Trp Leu Arg 350 345 340 Asp Pro Ala Arg Leu Ala Ser Ile Arg Thr Thr Gln Phe Ile Pro Ile 355 360 365 Asp Leu Asn Ala Phe Leu Phe Lys Leu Glu Ser Ala Ile Ala Asn Ile 375 380 370 Ser Ala Ser Lys Gly Asp Lys Glu Thr Ala Asp Leu Phe Arg Gln Lys 395 400 390 Ala Ser Asp Arg Arg Ala Ala Val Asn Arg Tyr Leu Trp Asp Glu Glu 405 410 415 Asn Gly Cys Tyr Arg Asp Tyr Asp Trp Arg Arg Glu Ala Leu Ala Leu 430 425 420 Phe Ser Ala Ala Ser Ile Val Pro Leu Tyr Val Gly Met Ala Thr His 440 445 Glu Gln Ala Glu Arg Leu Ser Asp Ala Val Lys Ala Arg Leu Leu Thr 455 Pro Gly Gly Ile Leu Ala Thr Glu Tyr Glu Thr Gly Glu Gln Trp Asp

470 Lys Pro Asn Gly Trp Ala Pro Leu Gln Trp Met Ala Ile Gln Gly Phe 485 490 495 Lys Gln Tyr Gly Asn Asp Ser Leu Gly Asp Glu Ile Ala Trp Ser Trp 500 505 510 Leu His Thr Val Asn His Tyr Tyr Lys Thr His His Lys Leu Ile Glu 515 520 525 Lys Tyr His Ile Ala Ser Ser Thr Pro Arg Glu Gly Gly Gly Glu 530 535 540 Tyr Pro Leu Gln Asp Gly Phe Gly Trp Thr Asn Gly Val Val Arg Arg 550 Leu Ile Gly Leu Tyr Gly Glu Pro 565 <210> 8008 <211> 117 <212> PRT <213> Enterobacter cloacae <400> 8008 Glu Glu Thr Leu Met Thr Gly Tyr Ala Met Gln Ile Ser Ser Ala Ala 10 Ile Ala Leu Ile Lys Lys Gln Gln Gly Leu Ser Leu Glu Lys Tyr Arg 20 25 Asp Glu Lys Gly Ile Trp Val Ile Gly Tyr Gly His Val Ile Arg Gln 35 4.0 Trp Glu Lys Phe Asn Gly Leu Ile Thr Pro Thr Glu Ala Glu Asn Leu 55 60 Leu Cys Asn Asp Ile Gln Leu Cys Glu Ala Leu Leu Arg Glu Met Asn 65 70 75 Lys Arg Pro Leu Thr Gln Gln His Asp Ala Leu Ile Leu Thr Leu 8.5 90 Phe Ser Phe Gly Glu Glu Ser Pro Leu Pro Glu Lys Ile Leu Gln Ala 100 105 Val Ala Arg Val 115 <210> 8009 <211> 225 <212> PRT <213> Enterobacter cloacae <400> 8009 Pro Leu Pro Ser Gly Ala Cys Val Tyr Gly Val Ala Tyr Arg Thr His 10 Lys Arg Leu Arg Gly Leu Val Ala Ser Tyr Asn Ser Val Thr Ser Ser 25 20 3.0 Ser Thr Lys Arg Lys Met Arg Val Thr Pro Glu Asn Asn Pro Gln Arg 40 3.5 Pro Thr Gln His Leu Asp Tyr Glu Pro Ile Lys Lys Met Asp Asn Glu 55 Pro Glu Ala Pro Lys Glu Pro Gly Thr Ala Ser Lys Ala Leu Gly Thr 75 7.0 Val Thr Gly Ile Ala Glu Lys Ile Gln Gln Ile Pro Ala Ile Ala His 85 90 Leu Ile Arg Ala Ala Glu Arg Phe Asn Asp Arg Met Gly Asn Gln Phe 100 105 Gly Ala Ala Ile Thr Tyr Phe Ser Phe Leu Ser Met Ile Pro Ile Leu 115 120 Met Val Ser Phe Ala Ala Ala Gly Phe Val Leu Ala Ser His Pro Thr

135

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3875
Leu Leu Gln Asp Ile Phe Asn Lys Ile Leu Thr Asn Val Ser Asp Gln
                                    155
                 150
Thr Leu Ala Thr Thr Leu Lys Ser Thr Ile Asn Thr Ala Val Gln Gln
              165
                                170
Arg Thr Thr Val Gly Ile Val Gly Leu Leu Ile Ala Leu Tyr Ser Gly
                            185
                                 190
         180
Val Asn Trp Met Gly Asn Leu Arg Glu Ala Ile Arg Ala Gln Ser Arg
                                          205
    195 200
Asp Val Trp Glu Arg Arg Pro Gln Asp Gln Glu Lys Ile Trp Val Lys
          215
225
<210> 8010
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 8010
Leu Arg Asp Phe Ile Ser Leu Ile Gly Leu Leu Val Ala Leu Val Ile
                                10
Thr Leu Ser Ile Thr Ser Val Ala Gly Ser Ala Gln Gln Met Ile Ile
                                             30
                            25
Ser Ala Leu Tyr Leu Asp Tyr Ile Glu Trp Leu Lys Pro Ala Trp Arg
      3.5
                       40
                                     4.5
Gly Ile Gly Leu Ala Ile Ser Ile Phe Ala Asn Tyr Leu Leu Phe Phe
                     55
                                 60
Trp Ile Phe Trp Arg Leu Pro Arg His Arg Pro Arg Lys Lys Ala Leu
                                   75
                 70
Ile Arg Gly Thr Leu Ile Ala Ala Ile Gly Phe Glu Val Ile Lys Ile
                                                  95
              85
                                90
Val Met Thr Tyr Thr Leu Pro Ser Leu Val Lys Ser Pro Ser Gly Ala
          100
               105 110
Ala Phe Gly Ser Val Leu Gly Leu Met Ala Phe Phe Tyr Phe Phe Ala
    115
                        120 125
Arg Leu Thr Leu Phe Cys Ala Ala Trp Ile Ala Thr Ala Glu Tyr Lys
                   135
Asp Asp Pro Arg Met Pro Gly Lys Thr His Arg
145
<210> 8011
<211> 294
<212> PRT
<213> Enterobacter cloacae
<400> 8011
Thr Val Ala Asn Arg Gln Phe Ser Gly Ile Ser Leu Pro Met Leu Ser
                                 10
Tyr Arg His Ser Phe His Ala Gly Asn His Ala Asp Val Leu Lys His
          20
                             25
Thr Val Gln Ser Leu Ile Ile Glu Ser Leu Lys Glu Lys Asp Lys Pro
       35
                         4.0
Phe Leu Tyr Leu Asp Thr His Ala Gly Ala Gly Arg Tyr Gln Leu Ser
                     55
                                        60
Gly Glu His Ala Glu Arg Thr Gly Glu Tyr Leu Glu Gly Ile Ala Arg
                  70
                                    75
Ile Trp Gln Gln Asp Asp Leu Pro Ala Glu Leu Glu Pro Tyr Ile Gly
```

90 Val Val Asn His Phe Asn Arg Asn Gly Gln Leu Arg Tyr Tyr Pro Gly 105

Ser Pro Leu Ile Ala Arg Gln Leu Leu Arg Glu Gln Asp Ser Leu Gln

110

85

```
120
Leu Thr Glu Leu His Pro Ser Asp Phe Pro Leu Leu Arg Ser Glu Phe
                  135
                                  140
Gln Lys Asp Asn Arg Ala Arg Val Asp Lys Ala Asp Gly Tyr Gln Gln
                             155
       150
Leu Lys Ala Lys Leu Pro Pro Val Ser Arg Arg Gly Leu Val Leu Ile
                                            175
          165
                 170
Asp Pro Pro Tyr Glu Ile Lys Thr Asp Tyr Gln Ala Val Val Thr Gly
       180 185
                                190
Ile Asn Glu Gly Tyr Lys Arg Phe Ala Thr Gly Thr Tyr Ala Leu Trp
 195
           200
                                      205
Tyr Pro Val Val Leu Arg Ala Gln Ile Lys Arg Met Ile Lys Asp Leu
 210 215
                          220
Glu Ala Thr Gly Ile Arg Lys Ile Leu Gln Ile Glu Leu Ala Val Arg
225 230 235
Pro Asp Ser Asp Gln Arg Gly Met Thr Ala Ser Gly Met Ile Val Ile
        245 250 255
Asn Pro Pro Trp Lys Leu Glu Ala Gln Met Asn Asn Val Leu Pro Trp
       260 265 270
Leu His Lys Thr Leu Val Pro Ala Gly Thr Gly His Ala Thr Val Ser
                     280
Trp Ile Val Pro Glu
  290
<210> 8012
<211> 191
<212> PRT
<213> Enterobacter cloacae
<400> 8012
Gln Pro Tyr Asn His Leu Gln Cys Leu Arg Arg Ile Val Met Pro Ala
Leu Thr Thr Ala Arg Leu Thr Cys Ser Pro Leu Gln Glu Gln Asp Trp
                       2.5
                                         3.0
Pro Phe Phe Leu Ser Leu Gln Gln Asn Pro Glu Val Met Arg Phe Val
                40
                                     4.5
Ala Pro Ala Arg Ser Glu Ala Asp Ile Arg Glu Ala Phe Glu Ser Arg
                               60
                   55
Leu Leu Pro Trp Thr Pro Gly Ser Ser His Trp Leu Cys Leu Met Val
               70
                               75
Arg Glu Thr Ala Ser Gln Thr Pro Leu Gly Val Thr Gly Tyr Val His
            85
                            90
Arg Glu Ala Asp Cys Ala Glu Val Gly Phe Leu Phe Ala Pro Ser Ala
         100 105 110
Gln Gly Lys Gly Tyr Gly Phe Glu Ser Leu Arg Ala Val Cys Asp Phe
      115 120 125
Ala Leu Thr Gln Gly Asn Ile Arg Arg Leu Thr Ala Thr Val Thr Ala
  130
                 135
                                  140
Gly Asn Ile Ala Ser Arg Arg Leu Leu Glu Lys Thr Gly Phe Gln Leu
                150 155 160
145
Glu Gly Glu Leu Arg Glu Ser Tyr Phe Leu Ser Gly Gln Trp His Asn
       165 170 175
Asp Trp Leu Phe Gly Leu Leu Lys Lys Glu Phe Pro Phe Ser
         180
                         185
<210> 8013
<211> 303
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<212> PRT <213> Enterobacter cloacae

<400> 8013

```
Pro Thr Ser Met Asp Lys Ile His Ala Met Gln Leu Phe Leu Arg Val
Ala Glu Leu Glu Ser Phe Ser Arg Ala Ala Glu Thr Leu Ser Leu Pro
        2.0
                         2.5
Lys Gly Ser Val Ser Arg Gln Ile Gln Ala Leu Glu Asn Ala Leu Gly
      35
                4.0
Thr Gln Leu Leu His Arg Thr Thr Arg Arg Val Ser Leu Thr Gln Asp
                  55
                                  60
Gly Met Val Tyr Tyr Glu Arg Ala Lys Asp Leu Leu Met Asn Leu Asp
            7.0
                   75
Glu Leu Asp Gly Met Phe Leu His Asp Pro Ser Thr Ile Ser Gly Arg
           85
                           90
                                          95
Leu Arg Val Asp Met Pro Val Ala Ile Ala Arg Asn Val Val Ile Pro
        100
             105 110
Lys Leu Pro Ala Phe Leu Gln Gln Phe Pro Gly Ile Glu Leu Glu Leu
     115 120
                                     125
Ser Ser Ser Asp Arg Leu Val Asp Val Ile Arg Glu Gly Phe Asp Cys
 130 135
Val Val Arg Val Gly Asn Leu Lys Asp Ser Gly Leu Ile Ala Arg Pro
145 150 155
Leu Gly Lys Leu Ser Val Ile Asn Cys Ala Ser Pro Asp Tyr Leu Thr
                170
            165
Arg Phe Gly Tyr Pro Glu Thr Leu Asp Asp Leu Ala Ser His Ala Leu 180 185 190
Ile His Tyr Ser Ala Thr Leu Gly Thr Arg Pro Gln Gly Phe Glu Tyr
195 200 205
Tyr Asn Gly Ser Ala Thr Arg Trp Val Lys Thr Gly Gly Val Leu Ser
 210
                  215
                                  220
Val Asn Ser Thr Glu Thr Tyr Gln Ala Ala Cys Ile Ala Gly Leu Gly
             230
                             235
Ile Ile Gln Val Pro Arg Val Gly Val Arg Asp Ala Leu Arg Thr Lys
                            250
            245
Lys Leu Val Glu Ile Leu Pro Gln Tyr Arg Ala Glu Pro Met Pro Val
         260 265
Ser Leu Ile Tyr Pro His Arg Arg Asn Leu Ser Arg Arg Val His Val
275
                     280
Phe Met Glu Trp Leu Thr Glu Leu Thr Lys Gly Tyr Val Asp
                   295
```

290 <210> 8014 <211> 330 <212> PRT

<213> Enterobacter cloacae

<400> 8014 Leu Thr Ile Lys Asn Thr Gln Arg Thr Leu Pro Leu Ile Thr Leu Phe 10 Arg Phe Thr Thr Met Ser Lys Lys Ile Ala Val Ile Gly Glu Cys Met 25 3.0 Ile Glu Leu Ser Gln Lys Gly Ala Glu Val Ser Arg Gly Phe Gly Gly 35 40 Asp Thr Leu Asn Thr Ser Val Tyr Ile Ala Arg Gln Val Ser Pro Asp 5.5 Ala Leu Ser Val Ser Tyr Val Thr Ala Leu Gly Thr Asp Ser Phe Ser 75 Gln Gln Met Leu Glu Ala Trp Gln Gly Glu Asn Val Gly Thr Ser Leu 85 90 Ile Gln Arg Met Glu Asn Arg Leu Pro Gly Leu Tyr Tyr Ile Glu Thr 105 Asp Ser Thr Gly Glu Arg Thr Phe Tyr Tyr Trp Arg Asn Glu Ala Ala

```
Ala Lys Phe Trp Leu Glu Ser Glu Ala Ala Ala Ala Ile Cys Glu Glu
 130
              135
Leu Ala Thr Phe Asp Tyr Leu Tyr Leu Ser Gly Ile Ser Leu Ala Ile
145
           150 155
Leu Ser Gln Glu Ser Arg Glu Lys Leu Leu Ser Leu Leu Arg Glu Cys
           165 170 175
Arg Ala Asn Gly Gly Lys Val Ile Phe Asp Asn Asn Tyr Arg Pro Arg
         180 185
                               190
Leu Trp Ala Ser Arg Glu Glu Thr Gln Gln Val Tyr Gln Gln Met Leu
      195 200 205
Glu Cys Thr Asp Ile Ala Phe Leu Thr Leu Asp Asp Glu Asp Ala Leu
 210 215 220
Trp Gly Glu Lys Pro Val Asp Glu Val Ile Ala Arg Thr Gln Ala Ala
           230 235
Gly Val Ser Glu Val Val Ile Lys Arg Gly Ala Glu Ser Cys Leu Val
             245 250
                                              255
Ala Val Ala Gly Glu Ala Val Thr Glu Val Pro Ala Val Lys Leu Ala
          260
              265 270
Lys Glu Lys Val Ile Asp Thr Thr Ala Ala Gly Asp Ser Phe Ser Ala
                       280
       275
Gly Tyr Leu Ala Val Arg Leu Thr Gly Gly Thr Pro Glu Ala Ala Ala
 290 295
                                    300
Gln Arg Gly His Leu Thr Ala Ser Thr Val Ile Gln Tyr Arg Gly Ala
305 310
                                 315
Ile Ile Pro Arg Glu Ala Met Pro Ala
             325
<210> 8015
<211> 106
<212> PRT
<213> Enterobacter cloacae
<400> 8015
Lys Leu Leu Gln Pro Gln Gln Gly Arg Gln Val Glu Val Val Ala Arg
                             10
Phe Val Gln Lys Gln Gln Ile Arg Ile Ala Tyr Gln Arg Pro Arg Gln
                          25
          20
Gln Gln Pro Arg Met Leu Thr Ala Ala Gln Arg Gly Gly Leu Gln Arg
     35
                     4.0
                                        45
Arg Phe Leu Arg Arg Lys Ala His Ser Gly Gln Gln Arg Leu Gly Leu
                   55
                                    60
Pro Ala Lys Thr Val Ala Leu Thr Gly Arg Gln Leu Arg Gln His Arg
              70
                                 75
Ile Gln His Gly Gln Gly Ile Lys Gly Leu Arg Gln Met Leu Phe His
             8.5
Ala Arg Gln Gln Ala Met Ser Ser Gln
          100
<210> 8016
<211> 234
<212> PRT
<213> Enterobacter cloacae
<400> 8016
His Cys Ser Ser Ile Glu Val Phe Asp Ala Leu Val Ile Leu Ser Val
                              10
Leu Leu Trp Val Pro Asp Ile His Asp Thr Thr Thr Arg Leu Thr
                          25
                                           30
         20
Glu Gln Phe His Phe Leu Lys Lys Pro Glu Pro Trp Leu Ile Phe Ala
                                        45
Ala Thr Met Phe Gly Asn Ala Gly Val Phe Ala Trp Phe Ser Phe Val
```

```
Lys Pro Phe Met Val Asn Val Ser Gly Phe Ser Glu Gly Val Met Thr
               70
                               75
Ala Ile Met Met Leu Met Gly Leu Gly Met Val Leu Gly Asn Val Phe
           85
                      90
Ser Gly Lys Leu Ser Ser Arg Phe Ser Pro Leu Arg Ile Ala Ala Thr
        100 105
Thr Asp Leu Val Ile Val Ala Ser Leu Leu Ala Leu Phe Ala Phe Gly
     115 120 125
Glu Leu Lys Thr Ala Ser Leu Val Met Gly Phe Val Cys Cys Ala Gly
 130 135 140
Leu Phe Ala Leu Ser Ala Pro Leu Gln Ile Leu Leu Gln Asn Ala
145 150 155 160
Lys Gly Gly Glu Met Leu Gly Ala Ala Gly Gly Gln Met Ala Phe Asn
          165 170 175
Leu Gly Ser Ala Ile Gly Ala Tyr Phe Gly Gly Met Met Ile Thr Leu
       180 185 190
Gly Phe Ser Trp Ser Tyr Val Thr Leu Pro Ala Ala Ile Leu Ser Phe
 195 200 205
Ser Ala Met Thr Ser Leu Leu Met Tyr Gly Tyr Leu Cys Ala Lys Lys
210 215
Arg Gln Ala Asn Ala Gly Ala Leu Ala
                230
<210> 8017
<211> 303
<212> PRT
<213> Enterobacter cloacae
<400> 8017
Ile Glu Gln Met Glu Val Lys Met Asp Arg Val Ile Ala Ala Gln Val
                            10
Tyr Asn Arg Ile Cys Glu Leu Gly Ser Leu Ser Ala Ala Ala Arg Ala
                        25
Leu Gly Ile Ser Arg Pro Met Val Ser Arg Tyr Leu Glu Gln Met Glu
35
                     4.0
Lys Trp Ala Gly Ala Arg Leu Val Asn Arg Ser Thr Arg Lys Leu Thr
                  55
 50
Leu Thr Ala Ala Gly Glu Lys Val Leu Gln Lys Thr Arg Thr Leu Ser
               7.0
                               75
Gln Ile Ser Gln Glu Ile Glu Asp Gln Ser Val Lys Asp Leu Pro Ser
                            90 95
           8.5
Gly Thr Leu Arg Val Ala Cys Ala His Phe Thr Ala Met His Ile Ile
         100 105 110
Val Pro Val Leu Pro Asp Leu Leu Gln Arg Tyr Pro Gln Leu Arg Ile
      115 120 125
Glu Leu Asp Val Asn Asn His Pro Val Ser Leu Val Gly Glu Arg Ile
  130
                   135
                                  140
Asp Val Ala Ile Arg Ile Thr Asp Asn Pro Glu Pro Gly Met Ile Ala
               150
                               155
145
Arg Arg Leu Gly Glu Cys Arg Ser Val Leu Cys Ala Ser Pro His Tyr
            165
                            170
Leu Ala Ser Arg Gly Val Pro Val Gln Leu Glu Asp Leu Ser Arg His
                                        190
              185
         180
Asn Cys Leu His Tyr Ser Phe Phe Ala Gly Gln Ser Trp Arg Phe Leu
                     200
                                      205
      195
Thr Pro Glu Gly Glu Ser Val Thr Thr Ala Val Ser Gly Asn Leu Ser
                  215
                                  220
 210
Ala Ser Ile Ser Ser Leu Leu Met Glu Ala Ala Ile Asn His Cys Gly
                230 235
Ile Ala Met Leu Pro Glu Arg Glu Ala Asp Ala Ala Leu Arg Gln Gly
```

245 250 Ser Leu Val Pro Val Leu Gly Ala Phe Thr Pro Lys Pro Ile Gly Ile 265 270 260 Phe Gly Ile Tyr Gln Ser Arg Asp Tyr Gln Pro Ala Ala Gln Arg Val 285 280 275 Phe Leu Asp Ala Leu Ala Asn His Leu Ala Thr Arg Ser Asp 295 290 <210> 8018 <211> 149 <212> PRT <213> Enterobacter cloacae <400> 8018 Ala Lys Arg Arg Ala Arg Met Thr Ile His Lys His Gly Ser Ala His 1.0 Trp Ser Gly Asp Ile Lys Arg Gly Lys Gly Thr Val Ser Thr Glu Ser 20 25 Gly Val Leu Asn Gln Gln Pro Tyr Gly Phe Asn Thr Arg Phe Glu Gly 35 4.0 Glu Lys Gly Thr Asn Pro Glu Glu Leu Ile Gly Ala Ala His Ala Ala 55 60 Cys Phe Ser Met Ala Leu Ser Leu Met Leu Gly Glu Ala Gly Tyr Thr 70 75 Ala Asp Ser Ile Asp Thr Thr Ala Asp Val Ser Leu Asp Lys Thr Asp 85 90 Ser Gly Phe Ala Ile Ser Lys Val Ala Leu Gln Ser Lys Val Thr Val 100 105 110 Pro Gly Ile Asp Pro Gln Gln Phe Asp Gly Ile Ile Gln Lys Ala Lys 115 120 125 Ala Gly Cys Pro Val Ser Gln Leu Leu Lys Ala Glu Ile Thr Leu Asp 135 130 Tvr Lvs Leu Asn <210> 8019 <211> 265 <212> PRT <213> Enterobacter cloacae <400> 8019 Arg Gly Gln Thr Leu Leu Phe Tyr Ile Thr Thr Lys Val Met Ser Met 10 Asn Thr Thr Leu Ala Gly Lys Ile Ala Leu Val Thr Gly Gly Ser Thr 30 20 2.5 Gly Ile Gly Leu Ala Thr Ala Gln Glu Leu Ala Ala Gln Gly Ala Lys 40 4.5 Val Tyr Ile Thr Gly Arg Arg Gln Ala Glu Leu Asp Ala Ala Arg Ala 55 Asp Ile Gly Ala Ala Ala Val Ala Ile Arg Ala Asp Val Ser Arg Met 70 75 Ala Asp Leu Asp Ala Val Tyr Ala Gln Ile Ala Lys Glu Glu Gly Arg 90 8.5 Leu Asp Ile Leu Phe Ala Asn Ala Gly Gly Gly Asp Met Leu Pro Leu 105 100 Gly Ala Ile Thr Glu Glu Gln Phe Asp Arg Ile Phe Ala Thr Asn Val 120 1.25 115 Arg Gly Val Leu Phe Thr Val Gln Lys Ala Leu Pro Leu Leu Ser Ser 135 140 Gly Ser Ser Ile Ile Leu Thr Gly Ser Thr Val Ser Ile Lys Gly Thr 150 155

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Ala Asn Phe Ser Val Tyr Ser Ala Ser Lys Ala Ala Val Arg Asn Phe
           165
Ala Arg Ser Trp Ala Leu Asp Leu Gln Gly Arg Gly Ile Arg Val Asn
          180
                            185
Val Val Ser Pro Gly Pro Val Lys Thr Pro Gly Leu Gly Asp Leu Val
       195
                         200
Pro Glu Glu Gln Arg Gln Gly Leu Tyr Asp Ala Leu Ala Ala Gln Val
                     215
                                      220
Pro Leu Gly Arg Leu Gly Ala Pro Gly Glu Val Gly Lys Ala Val Ala
              230
                       235
Phe Leu Ala Ser Asp Ala Ala Ser Phe Ile Asn Ala Thr Glu Leu Phe
              245
                   250
Val Asp Gly Gly Met Ala Gln Ile
         260
<210> 8020
<211> 126
<212> PRT
<213> Enterobacter cloacae
<400> 8020
His Pro Val Pro Ala Arg Arg Gln Ala Ser Arg Cys Pro Ser Ser Pro
                               10
Ser Val Ala Pro Gly Asp Pro Ala Ser Gly Tyr Gly Thr Pro Pro Ile
 20
                           25
Lys Cys Pro Ala Ala Arg Gln Ser Pro Gly Pro Ala Ala Lys Ser Arg
 35
                      40
                             4.5
Arg Pro Val Pro Ala Trp Arg Gly Lys Arg Leu Ser Asn Leu Pro Gln
                     55
Arg Gly Asp Arg Cys Glu Trp Met Cys Pro Asp Arg His Ala Pro Ala
                 70
                      7.5
Pro Leu His Ser Gly Gln Thr Glu Tyr Arg Ala Val Asp Pro Ala Pro
             85 90 95
Ala Ala Gly Gly Cys Pro Ala Arg Phe His Arg Trp Arg Gly His Arg
         100 105 110
Pro Ala Gly Gly Pro Asp Arg Arg Gly Ser Gly Val Lys
<210> 8021
<211> 502
<212> PRT
<213> Enterobacter cloacae
<400> 8021
Lys Leu Trp Gly Lys Lys Arg Glu Pro Tyr Met Ala Asn Leu Pro Trp
                               10
Arg Val Ser Val Arg Leu Met Ala Leu Ala Lys Lys Ile Ala Met Val
                            25
                                              30
Ile Gly Ile Ile Val Leu Val Leu Leu Ser Val Arg Val Tyr Leu Ser
                        40
Gln Gln Gly Pro Ala Leu His His Trp His Thr Trp Arg Ala Asp Glu
                    5.5
                                       60
Met Ser Val Gln Glu Met Asp Asn Ala Thr Phe Ala Ala Tyr Val Ala
                 7.0
                                   75
Arg Glu Asn Ala Ile Phe Thr Ala Leu Asp Ala Glu Val Thr Ala Lys
                               90
             8.5
Val Pro Pro Ala Glu Arg Thr Pro Leu Asn Arg Tyr Tyr Arg Gln Ser
         100
                           105
                                              110
Leu Val Trp Pro Gly His Phe Ser Pro Asp Ala Asn Arg Ser Phe Val
                                        125
                        120
```

Leu Met Pro Ala Gly Lys Pro Arg Gly Gly Val Val Leu Leu His Gly

```
135
Leu Thr Asp Ser Pro Tyr Ser Val Arg His Leu Ala Glu Asn Tyr Gln
           150
                    155
Gln His Gly Phe Val Ala Val Val Pro Arg Leu Pro Gly His Gly Thr
        165 170
Ala Pro Gly Ala Leu Thr Asp Val Asp Trp Glu Ala Trp Leu Ala Ala
       180
           185
                                   190
Thr Arg Leu Ala Val Arg Glu Ala Thr Arg Leu Thr Gly Asn Asp Leu
                       205
    195 200
Pro Leu His Leu Val Gly Tyr Ser Asn Gly Gly Ala Leu Ala Met Lys
210 215 220
Tyr Ala Leu Asp Ala Leu Asp Ala Pro Ala Leu Arg Gln Pro Glu Gln
225 230
                  235
Ile Val Leu Leu Ser Pro Met Ile Gly Val Thr Ala Phe Ala Arg Phe
                        250
         245
Ala Gly Phe Ala Gly Leu Pro Ala Met Leu Pro Ala Phe Ala Lys Ala
       260
                      265
Ala Trp Leu Asn Ile Ser Pro Glu Tyr Asn Pro Tyr Lys Tyr Asn Ser
                       285
275 280
Phe Pro Val Asn Ala Ala Arg Gln Ser Trp Leu Leu Thr Gln Ala Leu
290 295
                    300
His Glu Gln Ile Asn Arg Gly Val His Asp His Lys Leu Ala Gln Leu
305 310 315 320
Pro Pro Ile Leu Ala Phe Gln Ser Val Met Asp Ser Thr Val Ser Thr
         325 330 335
Arg Ala Val Val Ser Gly Leu Phe Asp Gln Leu Pro Ala Asn Gly Ser
     340 345
                          350
Glu Leu Val Val Phe Asp Ile Asn Gln Ala Gly Ser Phe Arg Pro Leu
355 360
                                 365
Phe Arg Pro Ser Ser Trp Thr Ala Val Ala Asp Leu Leu Pro Glu Ala
370 375 380
Lys Arg Arg Tyr Ser Val Thr Ile Val Thr Asn Ala Ser Pro Asp Arg
385 390 395 400
Phe Asp Met Val Ala Lys Lys Thr Pro Ala Gly Ser Thr Arg Glu Thr
      405 410 415
Val Met Pro Leu Ser Val Ala Tyr Pro Gln Glu Val Tyr Ser Leu Ser
       420 425
His Val Ala Ile Pro Phe Pro Gln Asp Asp Leu Tyr Gly Arg His
  435 440 445
Pro Ala Val Lys Asn Arg Tyr Gly Ile Ser Leu Gly Thr Ile Ala Leu
450 455 460
Trp Gly Glu Thr Ser Val Leu Ser Val Gly Lys Asp Ala Leu Met Arg
465 470 475 480
Val Thr Ser Asn Pro Phe Tyr Asp Tyr Met Gln Thr Arg Ile Asp Ser
      485 490
Arg Ile Gly Asp Asn
       500
<210> 8022
<211> 405
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<212> PRT

<213> Enterobacter cloacae

Ala Arg Ile Arg Asn Thr Glu Gln Gly Ile Ser Gly Ile Leu Leu Ser

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Arg Gly Arg Asp Val Leu Gln Ile Leu Glu Gly Thr Glu Gln Arg Val
         70
                   75
Val Ala Leu Phe Asn Ser Ile Arg Ala Asp Asp Arg His Thr Gly Val
        85 90
Val Glu Leu Met Arg Asp Tyr Gly Pro Arg Arg Arg Phe Glu Asp Val
      100 105 110
Gly Met Leu Leu Phe Asp Leu Asp Val Gln Thr Pro Lys Ala Val Leu
   115 120 125
Ala Ser Val Leu His Tyr Ser Lys Leu Glu Ser Tyr Leu Thr Ser Glu
130 135 140
Glu Arg Val Phe Lys Phe Ile Gln Thr Phe Ile Thr Gly Lys Thr Ala
   150 155
Ile Pro Pro Ala Ser Asp Tyr Glu Pro Asp Lys Trp Thr Leu Ser Arg
          165 170 175
Glu Arg Ala Pro Phe Gly Lys Gly Leu Gly Leu Leu Ala Gly Gln Pro
   180 185
                         190
Cys Gln Phe Ala Leu Gln Pro Ile Val Glu Pro Ser Glu Gly Lys Ile
195 200 205
Ser Ser Leu Glu Ala Leu Ile Arg Gly Asn Asp Gly Gly Ser Pro Glu
210 215
                              220
His Phe Phe Arg Ser Leu Asp Arg Glu Leu Ile Tyr Glu Val Asp Leu
225 230 235
Gln Thr Lys Ala Trp Thr Phe Ala Leu Ala Gln Lys Leu Gly Ile Gly
          245 250 255
Ser His Lys Leu Ala Val Asn Leu Leu Pro Met Ser Leu Val Asn Val
       260
           265 270
Pro Gly Ala Val Glu Phe Leu Val Thr Gln Ile Lys Lys His Asn Leu
275 280 285
Gln Pro Glu Gln Val Ile Ile Glu Val Tnr Glu Asn Glu Met Ile Ser
290 295 300
Gly Phe Asn Gln Phe Asn Ser Ala Ile Lys Gln Leu Arg Ala Glu Gly
305 310 315
Val Gly Leu Ala Ile Asp Asp Phe Gly Ser Gly Tyr Ala Gly Leu Ser
      325 330 335
Leu Leu Thr Arg Phe Gln Pro Asp Lys Leu Lys Ile Asp Arg Glu Ile
 340 345 350
Val Ser Asp Ile His Leu Ser Gly Pro Lys Gln Ala Ile Val Lys Ser
  355 360 365
Ile Ile Ser Cys Cys Thr Asp Leu Glu Ile Thr Leu Val Ala Glu Gly
370 375 380
Ile Glu Gln Ile Gly Ala Trp Cys Cys Ile Arg Pro Arg Gly Asp Gln
Asn Arg Val Arg Arg
```

<210> 8023 <211> 171 <212> PRT

<213> Enterobacter cloacae

<400> 8023

75 Asp Val Ala His Ala Ile Asp Gly Glu Lys Asn Met Phe Glu Cys Arg 85 90 Glu Val Arg Gln Arg Leu Ala Val Phe Asp Glu Thr Pro Pro Ala Trp 100 105 Val Cys Asp Gly Pro Cys Gly Val Arg Ser Val Met Asp Ser Ala Gln 115 120 Gln Arg Met Glu Glu Leu Gly Arg His Thr Ile Leu Asp Leu Ala 135 140 Arg Lys Met Tyr Arg Lys Ala Pro Asp Thr Phe Gln Ile Glu Val Gln 145 150 155 Glu Trp Ile Ser Asp Arg Arg Ser Ser Thr 1.65

<210> 8024 <211> 512 <212> PRT

<213> Enterobacter cloacae

<400> 8024 Pro Leu Ala Gly Ser Pro Gly Ala Thr Asp Gly Asp Asp Gly His Leu 10 Asp Ala Cys Leu Leu Ala Gly Thr Gly Cys Tyr Arg Ser Val Leu Arg 20 25 Ala Thr Ala Asn Ser Ala Arg Arg Gln Ala Gly Arg Leu Ala Arg 35 40 Ser Ala Arg Pro Arg Tyr Arg Phe Leu Ser Ala Gly Arg Ser Ala Gly 55 60 Arg Gln Arg Arg Gly Val Phe Gln Arg Pro Thr Ala Pro Asp Ser Thr 70 Leu Pro Asp Pro Gly Leu Cys Ala Ser Gly Tyr Cys Gly Ala Ser Gly 85 90 Thr Phe Arg Asp Ala Gly Ala Thr Glu Arg Gly Leu Tyr Ser Tyr Arg 100 105 Pro Arg Glu Arg Val Ala Gly Val Val His Arg Ala Ala Leu Arg Leu 115 120 125 Thr Gln Arg His Asp Pro Leu His Tyr Arg Ala Arg Ala Gly Ala Gly 130 135 140 Arg Ser Ala Val Arg Gly Ser Pro Tyr Arg Asn Arg Val Cys Leu Ala 145 150 155 Gly Asn Gly Ser Leu Gly Gly Asp Leu His Ser Gly Ala Gly Leu Pro 165 170 175 Cys Arg His Gly Leu Arg Gly Arg Gly Ile Ala Gly Leu Cys Leu Arg 180 185 190 Gln Ser Gly Gly Ser Ala Val Ser Val Asp Arg Pro Ala Asn Arg 195 200 205 Ala Arg Arg Cys Arg Met Met Leu Thr Gln Glu Thr Pro Val Pro Val 210 215 220 Ser Thr Ala Lys Gln Arg lle Asn Trp Ala Lys Leu Phe Trp Met Leu 225 230 235 Arg Lys Ser Pro Leu Thr Leu Ile Gly Gly Val Ile Met Ile Val Met 245 250 255 Leu Leu Leu Met Val Val Ser Pro Trp Ile Val Pro His Asp Pro Asn 260 265 270 Ala Leu Asp Leu Thr Ala Arg Leu Gln Ala Pro Ser Ala Gln His Trp 275 280 285 Phe Gly Thr Asp Glu Val Gly Arg Asp Leu Phe Ser Arg Val Leu Val 290 295 300 Gly Ser Gln Gln Ser Ile Thr Ala Gly Leu Ala Val Val Val Ile Ala 305 310 315 Gly Gly Ile Gly Ser Leu Leu Gly Cys Leu Ser Gly Val Leu Gly Gly

```
330
Arg Gly Asp Ala Ile Ile Met Arg Ile Met Asp Ile Met Leu Ser Ile
          340
                           345
Pro Ser Leu Val Leu Thr' Met Ala Leu Ala Ala Ala Leu Gly Pro Ser
       355
                     360
                             365
Leu Phe Asn Ala Met Leu Ala Ile Ala Ile Val Arg Ile Pro Phe Tyr
          375
                           380
Val Arg Leu Ala Arg Gly Gln Thr Leu Leu Val Arg Gln Phe Thr Tyr
        390 395 400
Val Gln Ala Ala Arg Thr Phe Gly Ala Ser Arg Trp His Leu Ile Ser
             405 410 415
Trp His Ile Leu Arg Asn Ala Leu Pro Pro Leu Ile Val Gln Ala Ser
         420
              425 430
Leu Asp Ile Gly Ser Ala Ile Leu Met Ala Ala Thr Leu Gly Phe Ile
   435 440 445
Gly Leu Gly Ala Gln Gln Pro Thr Ala Glu Trp Gly Ala Met Val Ala
 450 455 460
Val Gly Arg Asn Tyr Val Leu Asp Gln Trp Trp Tyr Cys Ala Phe Pro
465 470 475
Gly Ala Ala Ile Leu Ile Thr Ala Val Gly Phe Asn Leu Phe Gly Asp
       485 490 495
Gly Leu Arg Asp Leu Leu Asp Pro Lys Ser Gly Gly Lys Gln Ser
          500
                          505
<210> 8025
<211> 329
<212> PRT
<213> Enterobacter cloacae
<400> 8025
Phe Pro Arg Ala Gln Lys Ala Asn Arg Leu Pro Ala Gly Thr His Asn
                             10
Arg Arg Asp Ala Met Ser Glu Val Leu Leu Glu Leu Asp Ser Val His
                        25
                                           3.0
Val Asn Phe Pro Ala Arg Lys Asn Trp Leu Gly Arg Val Thr Glu Gln
                     4.0
Val His Ala Leu Asn Gly Met Asp Leu Arg Ile His Arg Gly Glu Thr
 50 55
                                     60
Leu Gly Val Val Gly Glu Ser Gly Cys Gly Lys Ser Thr Leu Ala Gln
                70
                                 75
Leu Leu Met Gly Met Leu Lys Pro Ser Thr Gly Ala Cys Gln Arg Ala
                              90
Asn Ala Ala Gly Gly Met Gln Met Val Phe Gln Asp Pro Leu Ser Ser
         100
                          105
Leu Asp Pro Arg Leu Pro Val Trp Arg Ile Ile Thr Glu Pro Val Trp
      115
                       120
Ile Gln Gln Arg Arg Ser Glu Arg Glu Arg Arg Gln Leu Ala Glu Thr
                   135
                                     140
Leu Ala Gln Gln Val Gly Ile Arg Ala Glu Tyr Leu Asp Arg Leu Pro
                150
His Ala Phe Ser Gly Gly Gln Arg Gln Arg Ile Ala Ile Ala Arg Ala
            165
                              170 175
Leu Ser Ser Asp Pro Asp Ile Ile Val Leu Asp Glu Pro Thr Ser Ala
         180
                           185
                                          190
Leu Asp Ile Ser Val Gln Ala Gln Ile Leu Asn Leu Leu Val Ala Leu
      195
                       200
                                        205
Gln Gln Gln Arg Asn Leu Thr Tyr Val Leu Ile Ser His Asn Val Ser
                   215
                                    220
Val Val Arg His Met Ser Asp Arg Val Ala Val Met Tyr Leu Gly Gln
                230
                                235
Ile Val Glu Leu Gly Pro Ala Asp Gln Val Leu Ser Gln Pro Arg His
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250 Pro Tyr Thr Gln Leu Leu Asp Ser Val Pro Arg Thr Gly Glu Pro 260 265 Leu Asp Glu Asp Leu Ala Leu Arg Lys Thr Asp Leu Pro Gly Asn Arg 275 280 285 His Leu Pro Val Gly Cys Tyr Phe Arg Asp Arg Cys Pro Leu Ala Met 290 295 300 Gln Gly Cys Glu Arg Pro Gln Pro Leu Gln Pro Ala Ala Glu Gly Arg 310 315 Ser Val Arg Cys Trp Arg Asn Arg <210> 8026 <211> 307 <212> PRT <213> Enterobacter cloacae <400> 8026 Ser Glu Glu Ile Tyr Val Asp Gln Leu Met Ala Met Arg Ala Phe Thr 10 Arg Val Val Glu Ser Gly Ser Phe Thr Arg Ala Ala Asp Ser Leu Asn 2.5 Met Pro Ile Ala Thr Leu Ser Lys Leu Val Lys Ser Leu Glu Ala His 35 40 Leu Glu Thr Arg Leu Leu His Arg Thr Thr Arg Arg Val Val Thr Thr 60 Ala Glu Gly Met Glu Tyr Tyr Glu Lys Ala Leu Arg Val Leu Ile Asp 65 70 75 Ile Glu Asp Ile Asp Thr Ala Phe Arg Ala Ser Cys Cys Thr Pro Lys 85 90 Gly His Leu Arg Ile Asp Val Gly Gly Ser Thr Ala Arg Asp Val Leu 100 105 110 Ile Pro Leu Leu Pro Asp Phe Phe Gln Arg Tyr Pro Asp Leu Arg Ile 115 120 125 Asn Leu Gly Val Ala Asp Arg Pro Val Asp Leu Ile Ser Gly Asn Val 130 135 140 Asp Cys Val Ile Arg Gly Gly Pro Leu Asp Asp Ser Ser Leu Ile Ala 145 150 155 Arg His Ile Gly Asp Ala Gly Met Ile Ala Cys Ala Ala Pro Gly Tyr 165 170 175 Leu Lys Ala His Gly Ile Pro Ala Tyr Pro Gln Glu Leu Arg Asn Gly 180 185 190 His Lys Leu Ile Ser Tyr Leu Ser Pro Val Thr Gly Arg Ala Phe Pro 195 200 205 Phe Arg Phe Leu Asp Arg Gly Glu Pro Leu Glu Ile Ser Val Pro His 210 215 220 His Leu Gly Val Asn Glu Ser Asn Ala His Leu Ala Ala Ala Leu Ala 225 230 235 Gly Leu Gly Ile Ile Gln Thr Phe Gly Tyr Ala Ala Arg Ala His Leu 245 250 255 Glu Thr Gly Ala Leu Val Glu Ile Leu Ser Asp Trp Arg Pro Lys Ala 260 265 Tyr Pro Phe His Val Val Tyr Pro Gln Ser Arg His Leu Thr His Arg 275 280 285 Leu Arg Val Phe Ile Ala Trp Leu Ala Glu Val Phe Pro Ala Ala Val 295 300 Lys Gly 305

<210> 8027 <211> 595

<212> PRT <213> Enterobacter cloacae

<400> 8027 Tyr Gln Pro Thr Ala Pro Arg Ser Thr Gly Gln Lys Asp Asp Lys Gln Gln Cys Gln Gly Arg Ile Phe Leu Lys Arg Val Ser Asp Met Asp Asn 2.0 25 30 Lys Leu Lys Lys His Arg Ser Leu Tyr Ile Pro Tyr Ala Gly Pro Val 40 4.5 Leu Leu Glu Phe Pro Leu Leu Asn Lys Gly Ser Ala Phe Ser Met Glu 55 60 Glu Arg Ser Ser Phe Asn Leu Leu Gly Leu Leu Pro Glu Val Val Glu 70 75 Thr Ile Glu Glu Gln Ala Glu Arg Ala Trp Ile Gln Tyr Gln Gly Phe 85 90 Lys Thr Glu Ile Asp Lys His Ile Tyr Leu Arg Asn Ile Gln Asp Thr 100 105 110 Asn Glu Thr Leu Phe Tyr Arg Leu Val Gln Asn His Leu Glu Glu Met 115 120 125 Met Pro Val Ile Tyr Thr Pro Thr Val Gly Ala Ala Cys Glu Arg Phe 130 135 140 Ser Glu Ile Tyr Arg Arg Ser Arg Gly Val Phe Ile Ser Tyr Gln Asn 145 150 155 160 Arg His Asn Met Asp Asp Ile Leu Gln Asn Val Pro Asn His Asn Ile 165 170 175 Lys Val Ile Val Val Thr Asp Gly Glu Arg Ile Leu Gly Leu Gly Asp 180 185 190 Gln Gly Ile Gly Gly Met Gly Ile Pro Ile Gly Lys Leu Ser Leu Tyr 195 200 205 Thr Ala Cys Gly Gly Ile Ser Pro Ala Tyr Thr Leu Pro Val Val Leu 210 215 220 Asp Val Gly Thr Asn Asn Gln Gln Leu Leu Asn Asp Pro Leu Tyr Met 225 230 235 Gly Trp Arg His Pro Arg Ile Thr Asp Asp Glu Tyr Tyr Gln Phe Val 245 250 255 Asp Asp Phe Ile Gln Ala Val Lys His Arg Trp Pro Asp Val Leu Leu 260 265 270 Gln Phe Glu Asp Phe Ala Gln Lys Asn Ala Met Pro Leu Leu Asn Arg 275 280 285 Tyr Arg Asp Glu Ile Cys Ser Phe Asn Asp Asp Ile Gln Gly Thr Ala 290 295 300 Ala Val Thr Val Gly Thr Leu Ile Ala Ala Ser Arg Ala Ala Gly Ser 310 315 320 Gln Leu Ser Tyr Gln Lys Ile Val Phe Leu Gly Ala Gly Ser Ala Gly 325 330 335 Cys Gly Ile Ala Glu Gln Ile Ile Ala Gln Thr Gln Arg Glu Gly Leu 340 345 350 Ser Glu Glu Leu Ala Arg Ser Arg Val Phe Met Val Asp Arg Phe Gly 360 365 Leu Leu Thr Asp Gly Met Pro Asn Leu Leu Pro Phe Gln Thr Lys Leu 375 380 Val Gln Lys Arg Glu Asn Leu Lys Asn Trp Asp Thr Asp Asn Glu Val 385 390 395 Leu Ser Leu Leu Asp Val Val Arg Asn Val Lys Pro Asp Ile Leu Ile 405 410 Gly Val Ser Gly Gln Thr Gly Leu Phe Thr Glu Glu Ile Ile Arg Glu 420 425 Met His Lys His Cys Glu Arg Pro Ile Val Met Pro Leu Ser Asn Pro 440

Thr Ser Arg Val Glu Ala Thr Pro Gln Asp Ile Ile Ala Trp Thr Glu

```
455
                                  460
Gly Asn Ala Leu Val Ala Thr Gly Ser Pro Phe Asp Pro Val Val Trp
         470
                               475
Lys Asp Lys Leu Tyr Pro Ile Ala Gln Cys Asn Asn Ser Tyr Ile Phe
          485
                         490
Pro Gly Ile Gly Leu Gly Val Ile Ala Ser Gly Ala Ser Arg Ile Thr
         500
                        505
Asp Glu Met Leu Met Ser Ala Ser Glu Thr Leu Ala Gly His Ser Pro
                   520
Leu Val Asn Asn Gly Glu Gly Leu Val Leu Pro Glu Leu Lys Asp Ile
 530
                535
                             540
His Lys Val Ser Arg Ala Ile Ala Phe Ala Val Gly Lys Met Ala Gln
               550
                       555
Gln Gln Gly Val Ala Val Lys Thr Ser Ala Asp Ala Leu Gln Gln Ala
          565
                       570 575
Ile Asp Asp Asn Phe Trp Met Pro Glu Tyr Arg Ser Tyr Arg Arg Thr
       580 585
Ser Ile
     595
<210> 8028
<211> 572
<212> PRT
<213> Enterobacter cloacae
<400> 8028
Ala Thr Met Ser Thr Leu Leu Thr Ala His Ser Leu Arg Val Asp Thr
                           10
Ala Phe Gly Thr Leu Phe Asp Ser Leu Ser Phe Thr Leu Lys Lys Gly
 20 25
Asp Arg Ile Gly Leu Leu Gly Asp Asn Gly Cys Gly Lys Ser Thr Leu
35 40
                                    45
Leu Lys Ile Leu Asp Gly Thr Gln Ser Pro Ala Ala Gly Thr Val Ser
50 55
Leu Ala Gly His Cys Leu Leu Ala Arg Val Glu Gln His Leu Pro Glu
         70 75
Thr Leu Tyr Pro Leu Thr Met Leu Asp Ala Val Leu Ala Gln Leu Pro
                           90
         85
Thr Gly Glu Arg Asp Ser Leu Arg Trp Lys Ala Glu Thr Leu Leu Ala
        100 105
Gly Met Gly Phe Thr Thr Gln Glu Thr Ala Leu Gln Ser Ala Thr Leu
    115 120 125
Ser Gly Gly Gln His Thr Arg Leu Leu Leu Ala Arg Ala Leu Ile Ser
 130 135 140
Asp Pro Asp Leu Leu Leu Asp Glu Pro Ser Asn His Leu Asp Leu
145 150 155 160
Pro Thr Leu Leu Trp Leu Glu Gln Phe Leu Gln Ser Trp Ser Gly Ser
           165 170
Phe Val Leu Val Ser His Asp Arg Gln Leu Leu Asp Ala Ile Thr Asn
                        185
                             190
Gly Ser Trp Ile Leu Arg Asp Lys Thr Leu His Tyr Phe Ala Leu Pro
  195 200 205
Cys Thr Ala Ala Arg Gln Ala Leu Glu Ala Lys Asp Glu Ser Asp Ala
                215
                                  220
Leu Arg His Lys Ala Glu Gln Lys Glu Ile Asp Arg Val Thr Ala Ser
              230
                               235
Ala Lys Arg Leu Ala Thr Trp Gly Lys Val Tyr Asp Asn Glu Asp Leu
                           250 255
Ser Arg Lys Ala Lys Gln Met Glu Lys Gln Val Glu Arg Leu Lys Glu
                       265
                                        270
Asn Gln Thr Glu Leu Thr Ala Gly Ser Pro Trp Thr Leu Thr Leu Arq
```

```
280
Gly Asp Ala Leu Arg Ala Asp Arg Leu Leu Glu Ile Thr Asp Leu Gly
                295
                        300
Val Pro Pro Ala Pro Gly Leu Pro Asp Leu Phe Thr Leu Val Ser Ala
             310
                     315
Arg Leu Lys Ser Gly Asp Arg Val Ala Ile Val Gly Arg Asn Gly Cys
           325
               330 335
Gly Lys Ser Ser Leu Leu Lys Leu Ile Trp Arg His Phe Arg Asp Glu
      340
            345 350
Ile Ser Asp Glu Arg Leu Lys Arg His Pro Arg Val Ser Pro Gly Tyr
     355
           360 365
Tyr Asp Gln Thr Leu His Gln Leu Pro Asp Asp Thr Ala Leu Leu Asp
          375 380
Ala Leu Glu Pro Phe Ala Pro Asp Pro Gln Thr Arg Lys Met Ala Leu
        390 395
Ile Ser Ala Gly Phe Pro Trp Ala Arg His Gly Gln Lys Val Ser Thr
         405 410
Leu Ser Gly Gly Glu Arg Ser Arg Leu Leu Phe Val Gly Leu Thr Leu
       420 425
                                    430
Ala Arg Tyr Ser Leu Leu Met Leu Asp Glu Pro Thr Asn His Leu Asp
 435 440 445
Met Glu Gly Lys Glu Ala Leu Ala Glu Thr Leu Gln Gln Phe Glu Gly
 450 455 460
Gly Val Leu Leu Val Ser His Asp Arg Gln Leu Ile Ser Gln Cys Cys
465 470 475
Asn Arg Phe Trp Leu Ile Glu Asp Gly Arg Leu Ser Glu Trp His Asp
        485 490
Ala Glu Ala Val Phe Glu Arg Leu Arg Glu Asp Ala Gly Pro Ala Val
 500 505
                                    510
Pro Glu Ala Ser Asn Ala Ala Leu Lys Ala Pro Ser Ser Ala Ser Asp
515 520
                       525
Asp Leu Leu Glu Arg Leu Val Ala Leu Glu Thr Leu Leu Glu Glu Asp
530 535 540
Leu Ala Arg Lys Pro Lys Tyr Gln Lys Pro Gln Leu Gln Ala Gln Trp
545 550 555
Arg Lys Glu Ile Glu Glu Ile Glu Ala Gln Leu
          565
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<210> 8029 <211> 350 <212> PRT

<213> Enterobacter cloacae

<400> 8029 Val Thr Ala His Ala Gly Gly Lys Cys Met Thr Phe Trp Ser Ile Val 1.0 Arg Gln Arg Cys Trp Gly Leu Ile Leu Val Val Ala Gly Val Cys Ile Ile Thr Phe Ile Ile Ser His Leu Ile Pro Gly Asp Pro Ala Arg Leu 4.0 Leu Ala Gly Asp Arg Ala Ser Asp Glu Ile Val Gln Gly Ile Arg Gln 55 Gln Leu Gly Leu Asp Gln Pro Leu Tyr Ile Gln Phe Gly Arg Tyr Val 7.0 7.5 Glu Ala Leu Ala His Gly Asp Leu Gly Thr Ser Ile Arg Thr Gly Arg 85 90 Pro Val Ala Glu Asp Leu Lys Ala Phe Phe Pro Ala Thr Leu Glu Leu 100 105 110 Ala Phe Cys Ser Leu Leu Leu Ala Leu Val Ile Gly Val Pro Leu Gly 120 Ile Leu Ser Ala Val Tyr Arg Asn Arg Trp Leu Asp His Leu Val Arg

```
Leu Met Ala Met Thr Gly Ile Ser Thr Pro Ala Phe Trp Leu Gly Leu
            150
                          155
Gly Val Ile Val Leu Phe Tyr Gly Gln Leu Gln Ile Leu Pro Gly Gly
            165
                  170
                               175
Gly Arg Leu Asp Asp Trp Leu Asp Pro Pro Ala His Val Thr Gly Phe
             185 190
        180
Tyr Leu Leu Asp Ala Leu Leu Glu Gly Asn Gly Glu Val Phe Phe Asn
         200 205
Ala Leu Gln His Leu Ile Leu Pro Ser Leu Thr Leu Ala Phe Val His
  210 215 220
Leu Gly Ile Val Ala Arg Gln Val Arg Ser Ala Met Leu Glu Gln Leu
    230 235 240
Ser Glu Asp Tyr Ile Arg Thr Ala Arg Ala Ser Gly Leu Pro Gly Trp
         245 250 255
Tyr Ile Val Leu Arg Tyr Ala Leu Pro Asn Ala Met Ile Pro Ser Ile
       260 265 270
Thr Val Leu Gly Leu Ala Leu Gly Asp Leu Leu Tyr Gly Ala Val Leu
 275 280 285
Thr Glu Thr Val Phe Ala Trp Pro Gly Met Gly Ala Trp Val Val Thr
290 295 300
Ser Ile Gln Ala Leu Asp Phe Pro Ala Val Met Gly Phe Ala Val Val
305 310 315
Val Ser Leu Ala Tyr Val Phe Val Asn Leu Val Val Asp Leu Leu Tyr
     325 330
Leu Trp Ile Asp Pro Arg Ile Gly Arg Gly Gly Ala Glu
<210> 8030
<211> 289
<212> PRT
<213> Enterobacter cloacae
<400> 8030
Gln Arg Gly Gly Met Thr Thr Lys Pro Glu Val Leu Ser Arg Ile Glu
              10
Ala Thr Phe Ser Gln Leu Thr Pro Ser Glu Lys Arg Val Ala Ser Trp
20
                     2.5
Met Leu Ala His Val Gly Gln Ile Pro Pne Glu Thr Ala Glu Ser Val
              40
                                   45
Ala Leu Ala Thr Ala Thr Ser Gly Ile Thr Val Gly Arg Phe Leu Arg
 50 55
Lys Leu Gly Tyr Arg Asn Leu Asp Asp Ala Lys Lys Ser Leu Arg Asp
         70
                  75
Pro His Gln Pro Trp Gly Ile Asn Glu Arg Leu Asp Ser Trp Lys Gln
          8.5
                          90
Gln Gln Pro Leu Ser Asp Arg Leu Gln Asn Ser Leu Ser Leu Glu Val
        100
                       105
                                      110
Asp Ala Ile Ala His Val Tyr Gln Leu Ala Gln Ser Glu Thr Phe Arg
                    120
                                   125
Gln Val Val Gln Gln Leu Thr His Ala Asp Ala Val Phe Val Leu Gly
                135
                                140
Ile Gln Ser Thr Arg Gly Ile Ala Asn Ala Phe Phe Ser His Leu Glu
145 150 155 160
Tyr Leu Arg Pro Arg Val Ser Tyr Ser Glu Gly Leu Ser Gly Ser Trp
         165
                          170
Val Glu Ser Leu Asn Ser Gly Phe Ala Asn Pro Tyr Ile Val Leu Thr
       180
                       185
                                     190
Asp Thr Arg Ala Tyr Ser Ala Ile Ala Arg Gln Tyr Cys Arg Val Ala
                    200
Ser Glu Lys Gly Leu Ala Met Ala Leu Ile Thr Asp Ile Trp Cys Pro
```

<210> 8031 <211> 195 <212> PRT <213> Enterobacter cloacae

<400> 8031 Arg Ser Gly Ala Met Pro Glu Glu Ser Gln Leu Ile Asp Val Ala Lys 10 Thr Phe Pro Thr Leu His Ile Asp Leu Lys Tyr Ala Thr Ala Asp Asn 20 25 Ile Thr Gly Arg Pro Ile Tyr Gln His Ala Ala Cys Leu Leu His Thr 35 40 Asp Ala Ala Thr Ala Leu Ala Lys Ala Ile Gly Ile Ala Ala Leu Ala 55 Gly Leu Lys Leu Val Val Tyr Asp Ala Tyr Arg Pro Gln Gln Ala Gln 70 75 Ser Gln Leu Trp Asp Ala Cys Pro Asn Pro Glu Tyr Val Val Asp Val 85 90 Ala Ile Gly Ser Asn His Ser Arg Gly Thr Ala Ile Asp Val Thr Leu 100 105 110 Met Asp Glu His Asp Asn Val Leu Asp Met Gly Ala Gly Phe Asp Glu 115 120 125 Met His Asp Arg Ser His Ala Trp His Pro Ser Val Pro Pro Glu Ala 130 135 140 Gln Arg Asn Arg Leu Leu Leu Asn Ala Val Met Tyr Gly Gly Phe 150 155 Val Gly Ile Ser Ser Glu Trp Trp His Phe Glu Leu Pro Asn Ala Ala

Ser Tyr Pro Leu Leu Asp Asp Gln Phe Ala Cys Tyr Pro Thr Thr His

Ser Leu 195 <210> 8032 <211> 516

<212> PRT <213> Enterobacter cloacae

```
Leu Ser Thr Gly Trp Lys Ala Ser Asp Asp Gln Lys Glu Trp Thr Phe
           85
                 90
Thr Leu Ala Asp Asn Ala Lys Phe Ser Asp Gly Thr Pro Val Thr Ala
        100
                       105
Glu Ala Val Lys Leu Ser Phe Glu Arg Leu Leu Lys Ile Asn Gln Gly
     115
                  120
Pro Ser Glu Ala Phe Pro Lys Asp Leu Lys Val Asp Ala Val Asp Glu
                 135
His Thr Val Lys Phe Thr Leu Ser Gln Pro Phe Ala Pro Phe Leu Tyr
              150
                             155 160
Thr Leu Ala Asn Asp Gly Ala Ser Ile Val Asn Pro Ala Val Leu Lys
           165
                         170
Ala Asn Ala Ala Asp Asp Ala Arg Gly Phe Leu Ala Gln Asn Thr Ala
        180
             185 190
Gly Ser Gly Pro Phe Met Leu Lys Ser Trp Arg Lys Gly Gln Gln Leu
     195
                    200
                        205
Val Met Val Pro Asn Pro His Trp Pro Gly Glu Lys Pro His Phe Lys
                215
                     220
Arg Val Ser Val Lys Ile Ile Gly Glu Ser Ala Ser Arg Arg Leu Gln
225
      230 235 240
Leu Ser Arg Gly Asp Leu Asp Ile Ala Asp Ala Leu Pro Val Asp Gln
         245 250 255
Leu Ala Ala Leu Lys Gln Glu Gly Lys Val Ala Val Ala Glu Tyr Pro
        260
            265 270
Ser Leu Arg Val Thr Tyr Leu Tyr Leu Asn Asn Ser Lys Pro Pro Met
     275 280 285
Asn Gln Val Asp Leu Arg Arg Ala Val Ser Trp Ala Thr Asp Tyr Gln
 290
      295 300
Gly Met Val Lys Gly Ile Leu Ser Gly Asn Gly Lys Gln Met Arg Gly
305 310 315
Pro Ile Pro Glu Gly Met Trp Gly Phe Asp Ala Asn Ala Met Gln Tyr
     325 330 335
Ser Phe Asp Glu Ala Lys Ala Lys Ala Ala Leu Glu Lys Val Asn Asp
 340 345 350
Lys Pro Ala Ser Leu Thr Phe Leu Tyr Ser Asp Asn Asp Pro Asn Trp
 355 360 365
Glu Pro Ile Ala Leu Ser Thr Gln Ala Ser Leu Gly Lys Leu Gly Ile
 370 375 380
Asn Val Lys Leu Glu Lys Leu Ala Asn Ala Thr Met Arg Asp Arg Val
   390 395
Gly Lys Gly Asp Tyr Asp Ile Ala Ile Gly Asn Trp Ser Pro Asp Phe
        405 410 415
Ala Asp Pro Tyr Met Phe Met Asn Tyr Trp Phe Glu Ser Asp Lys Lys
      420 425
Gly Leu Pro Gly Asn Arg Ser Phe Tyr Glu Asn Lys Glu Val Asp Ala
   435 440
                                  445
Leu Leu Gln Ala Ala Leu Lys Thr Thr Asp Gln Ala Glu Arg Thr Lys
 450 455
                               460
Asp Tyr Gln Gln Ala Gln Lys Val Val Ile Asp Glu Ala Ala Tyr Val
             470
                            475
Tyr Leu Phe Gln Lys Asn Tyr Gln Leu Ala Met Asn Lys Glu Val Lys
     485 490 495
Gly Phe Thr Phe Asn Pro Met Leu Glu Gln Val Phe Asn Ile Ala Thr
                      505
                                     510
Met Ser Lys
    515
```

<210> 8033

<211> 348

<212> PRT <213> Enterobacter cloacae

```
<400> 8033
Ser Val Trp Arg Trp Ser Ser Arg Pro Ala Gly Ser Gln Ile Arg Arg
                      10
Glu Ala Val Met Ser Asp Ser Val Leu Ser Ile Glu Asp Leu His Leu
        20
                       25
                                     30
Ser Phe Pro Ile Phe Arg Gly Asp Val His Ala Leu Asn His Val Ser
                                4.5
Leu Glu Ile Gly Arg Gly Glu Ile Val Gly Val Val Gly Glu Ser Gly
                 55
                               60
Ser Gly Lys Ser Val Thr Ala Met Leu Ala Met Arg Leu Leu Pro Glu
              70 75
Gly Ser Tyr His Val His His Gly Arg Val Thr Leu Leu Gly Glu Asp
       85 90
Val Leu Asn Ala Ser Glu Lys Gln Leu Arg Gln Trp Arg Gly Ala Arg
    100 105 110
Val Ala Met Ile Phe Gln Glu Pro Met Thr Ala Leu Asn Pro Thr Arg
  115 120 125
Arg Ile Gly Arg Gln Met Val Glu Val Ile Arg Gln His Gln Ser Leu
 130 135 140
Ser Arg Arg Asp Ala Gln Gln Lys Ala Ile Ala Leu Leu Gly Glu Met
145 150 155
Gln Ile Pro Asp Ala Ala Gln Val Met Asp Arg Tyr Pro Phe Glu Leu
   165 170 175
Ser Gly Gly Met Arg Gln Arg Val Met Ile Ala Leu Ala Phe Ser Cys
 180 185 190
Glu Pro Glu Leu Ile Ile Ala Asp Glu Pro Thr Thr Ala Leu Asp Val
 195 200
Thr Val Gln Arg Gln Val Leu Arg Leu Leu Lys His Lys Ala Arg Ala
 210 215 220
Ser Gly Thr Ser Val Leu Phe Ile Ser His Asp Met Ala Val Val Ser
225 230
                           235
Gln Leu Cys Asp Arg Met Tyr Val Met Tyr Ala Gly Ser Val Ile Glu
    245 250 255
Ser Gly Ser Thr Gln Thr Leu Ile His His Pro Val His Pro Tyr Ser
   260 265
                                    270
Ile Gly Leu Leu Arg Cys Ala Pro Glu Asn Gly Glu Pro Arg Glu Ile
 275 280 285
Leu Pro Ala Ile Pro Gly Thr Val Pro Asn Leu Ser His Leu Pro Arg
 290 295
                               300
Gly Cys Ala Phe Arg Glu Arg Cys Phe Ala Ala Gly Ala Lys Cys Ser
305 310 315
Glu Thr Pro Arg Leu Ile Ser Thr Gly Ala Glu Gly Gln Gln Ala Ala
   325 330
Cys Trp Tyr Pro Gln Gln Glu Arg Arg His Val
                      345
<210> 8034
<211> 310
<212> PRT
<213> Enterobacter cloacae
```

<400> 8034 Ala Ser Pro Val Ser Gly Ile Leu Ala Asn Glu Glu Ile Arg Thr Ile 1.0 Glu Thr Phe Leu Lys Asn Arg Asp Met Thr Met Thr Ile Ala Arg Leu 2.0 25 Ala Leu Leu Thr Thr Leu Phe Thr Pro Ala Val Phe Ala Ala Pro Leu 45 35 40 Thr Val Asp Thr Tyr Asn Pro Gln Glu Lys Gly Ile Phe Ala Val Ser

```
Ser Thr Leu Val Ser Gly Pro Lys Glu Ala Val Leu Phe Asp Ala Gln
               7.0
Phe Ser Val Lys Asp Gly Glu Ala Leu Val Glu Lys Ile Arg His Ser
            85
                           90
Gly Lys Thr Leu Asn Lys Ile Val Ile Thr Ser Gly Asp Pro Asp Phe
         100
                        105 110
Tyr Phe Gly Leu Gln Pro Leu Val Lys Ala Phe Pro Asn Ala Lys Val
                   120 125
     115
Val Ala Thr Gln Gln Val Val Asp His Ile Arg Ala Thr Lys Asp Ala
      135
                      140
Lys Leu Ala Phe Trp Gly Pro Gln Met Lys Asp Gly Ala Pro Ser Gln
    150 155 160
Leu Tyr Leu Pro Gln Val Leu Ala Ser Thr Thr Phe Met Ile Asp Gly
       165 170 175
Glu Arg Val Asn Ile Glu Glu Pro Glu Ser Tyr Ala Ala Tyr Val Trp
       180 185 190
Ile Pro Ser Ala Lys Thr Ile Leu Gly Gly Thr Gly Val Ser Trp Gly
 195 200 205
Ile His Val Trp Thr Ala Asp Thr Gln Thr Pro Glu Ser Arg Lys Gln
 210 215 220
Trp Gln Gln Thr Leu Asp Ser Met Ala Ala Leu Lys Pro Glu His Val
225 230 235
Ile Pro Gly His Tyr Leu Gly Thr Pro Pro Ala Gly Thr Gly Ala Ile
  245 250 255
Asp Phe Thr Arg Arg Tyr Leu His Gln Phe Glu Gln Ala Leu Met Thr
 260 265 270
His Lys Ala Ser Thr Gly Val Ile Ser Thr Met Lys Lys Gln Trp Pro
 275 280 285
Asn Leu Ala Glu Ala Ser Ser Leu Glu Leu Ser Ala Lys Val Asn Thr
290 295
Gly Glu Met Lys Trp
305
<210> 8035
<211> 89
<212> PRT
<213> Enterobacter cloacae
<400> 8035
Ile Thr Ile Leu His Ala Val Thr Leu Asn Arg Gln Arg His Gly Gly
1 5
               10
Ser Met Phe Thr Tyr Tyr Pro Ala His Thr Thr Ala Ala Gln Pro Glu
      20
                       25
Leu Val Asn Ala Ile Ala Gln Gly Leu Gln Ala Glu His Gly Val Val
                 4.0
Thr Glu Asp Asp Ile Leu Met Glu Leu Thr Lys Trp Val Glu Ala Thr
               5.5
                                 60
Asp Asn Asp Ile Leu Ser Asp Ile Tyr Gln Gln Thr Ile Asn Tyr Val
            70
Val Ser Gly Gln Asn Ala Pro Leu
           8.5
<210> 8036
<211> 341
<212> PRT
```

<213> Enterobacter cloacae

<400> 8036

Lys Glu Lys His Met Lys Ala Ala Val Val Thr Gln Asp His Gln Val 1 5 10 15 Asn Val Thr Glu Lys Thr Leu Arg Ala Leu Lys His Gly Glu Ala Leu

```
Leu Lys Met Glu Cys Cys Gly Val Cys His Thr Asp Leu His Val Lys
                      40
Asn Gly Asp Phe Gly Asp Lys Thr Gly Val Ile Leu Gly His Glu Gly
Ile Gly Ile Val Lys Glu Ile Gly Pro Gly Val Thr Ser Leu Lys Val
              70
Gly Asp Arg Ala Ser Val Ala Trp Phe Phe Glu Gly Cys Gly His Cys
                         9.0
Glu Tyr Cys Asn Thr Gly Asn Glu Thr Leu Cys Arg Asp Val Lys Asn
              105
Ala Gly Tyr Ser Val Asp Gly Gly Met Ala Glu Glu Cys Ile Val Thr
              120 125
Ala Asp Tyr Ala Val Lys Val Pro Asp Gly Leu Asp Ser Ala Ala Ala
           135 140
Ser Ser Ile Thr Cys Ala Gly Val Thr Thr Tyr Lys Ala Val Lys Val
    150 155
Ser Asp Ile Lys Pro Gly Gln Trp Ile Ala Ile Tyr Gly Leu Gly Gly
       165 170 175
Leu Gly Asn Leu Ala Leu Gln Tyr Ala Lys Asn Val Phe Asn Ala Lys
    180 185
Val Ile Ala Ile Asp Val Asn Asp Glu Gln Leu Lys Leu Ala Ala Ser
 195 200 205
Met Gly Ala Asp Leu Thr Val Asn Ser Arg Ser Glu Asp Ala Ala Lys
 210 215 220
Val Ile Gln Glu Lys Thr Gly Gly Ala His Ala Ala Val Val Thr Ala
     230 235
Val Ala Lys Ala Ala Phe Asn Ser Ala Val Asp Ala Val Arg Ala Gly
          245 250
Gly Arg Val Val Ala Val Gly Leu Pro Pro Glu Ala Met Ser Leu Asp
    260 265 270
Ile Pro Arg Leu Val Leu Asp Gly Ile Gln Val Val Gly Ser Leu Val
 275 280 285
Gly Thr Arg Gln Asp Leu Leu Glu Ala Phe Gln Phe Ala Ala Glu Gly
       295 300
Lys Val Ile Pro Lys Val Thr Met Arg Pro Leu Glu Asp Ile Asn Ala
305 310 315 320
Ile Phe Lys Glu Met Glu Gln Gly Gln Ile Arg Gly Arg Met Val Ile
Asp Leu Arg Ser
         340
<210> 8037
<211> 407
<212> PRT
<213> Enterobacter cloacae
<400> 8037
Arg Thr Lys Gly Ser Ser Met Lys Lys Gln Ile Leu Ile Val Gly Ser
                            10
Gly Phe Ser Gly Met Trp Ala Ala Val Ser Ala Ala Arg Leu Ser Ala
                        25
Leu Ala Gly Asn Asn Ser Leu Ser Ile Ala Val Leu Ala Pro Val Ala
                     4.0
Glu Leu Arg Val Arg Pro Arg Phe Tyr Glu Glu Asn Val Ser Thr Met
Val Ala Pro Leu Thr Glu Leu Phe Ala Glu Leu Gly Ile Thr Phe Ile
             70
                               75
Ala Gly Glu Ala Gln Arg Ile Asp Thr Ser Ser Lys Thr Val Leu Tyr
                            90
Arg Asp Ser Asn Gly Ala Ile Ala Asp Val Ala Trp Glu Arg Leu Ile
```

```
105
Leu Ala Thr Gly Ser Gln Thr Lys Arg Pro Pro Val Ala Gly Leu Ala
               120
Glu Tyr Ala Phe Asp Ile Asp Glr. Leu Asp Ser Ala Arg Leu Phe Glu
               135
                               140
Gln His Leu Asp Ser Leu Val Ser Arg Pro Ser Thr Pro Glu Arg Asn
        150
                    155
Thr Val Val Val Cys Gly Gly Gly Phe Thr Gly Ile Glu Leu Ala Thr
         165
              170 175
Glu Leu Pro Ala Arg Leu Arg Thr Arg Phe Gly Ala Asn Thr Lys Thr
       180
            185 190
Lys Ile Ile Val Val Glu Arg Gly Ala Thr Ile Gly Gly Arg Tyr Ser
     195 200 205
Glu Ala Leu Arg Asn Thr Ile Glu Glu Ala Ser Ser Ala Leu Gly Val
 210 215 220
Glu Trp Arg Leu Asn Ser Glu Val Glu Ala Ile Asp Ala Ser Gly Val
225 230 235
Thr Leu Lys Asn Gly Glu Arg Ile Ala Ser Ala Thr Val Val Trp Thr
        245 250 255
Ala Gly Val Glu Ala Asn Pro Leu Ser Leu Gln Ile Asp Gly Glu Arg
 260 265 270
Asp Thr Gln Gly Arg Leu Ile Val Thr Asp Thr Leu Gln Val Pro Ala
275 280 285
His Arg Glu Val Tyr Ala Thr Gly Asp Met Ala His Ala Lys Thr Asp
290 295
Asp Val Gly Asn Thr Ala Leu Met Thr Cys Gln His Ala Ile Gln Leu
305 310 315
Gly Lys Phe Ala Gly His Asr Ala Ala Ala Ser Leu Leu Asn Val Glu
          325 330 335
Pro Tyr Pro Tyr Arg Gln Val Asn Tyr Val Thr Cys Leu Asp Leu Gly
   340 345 350
Ser Trp Gly Ala Val Tyr Thr Glu Gly Trp Asp Gln Arg Ile Lys Ser
355 360 365
Val Arg Glu Glu Gly Lys Lys Ile Lys Val Ala Ile Thr Asn Glu Leu
370 375
                               380
Ile Tyr Pro Pro Ala Ala Asp Lys Ala Val Ala Phe Ala Ala Asp
Pro Leu Ala Lys Phe Val
          405
```

<210> 8038 <211> 704 <212> PRT

<213> Enterobacter cloacae

<400> 8038 Thr Glu Arg Gln Leu Ile Gly Thr Glu Gln Ile Thr Phe Leu Gln Ser 10 Gly Ile Asn Ala Leu Arg Arg Val Val Ile Asn Tyr Ser Val Val Val 2.5 Leu Thr Leu Ser Gly Ala Phe Gln Pro Gly Glu Ile Ile Met Ser Thr 4.0 4.5 Gly Lys Phe Ile Leu His Ser Gly Tyr Ile Pro Ser Gly Asp Gln Pro 5.5 Glu Ala Ile Ala Arg Leu Ile Ala Gly Val Glu Ala Gly Ala Thr His Gln Thr Leu Gln Gly Ile Thr Gly Ser Gly Lys Thr Phe Thr Met Ala 85 90 Asn Val Ile His Arg Leu Gln Arg Pro Thr Leu Ile Leu Ala Pro Asn 105 110 Lys Thr Leu Thr Ala Gln Leu Tyr Leu Glu Met Lys Gln Phe Pho Pro

Glu Asn Ala Val Glu Tyr Phe Val Ser Tyr Tyr Asp Phe Phe Gln Pro 135 140 Glu Val Tyr Ile Pro Gly Ser Asp Arg Phe Ile Pro Lys Asp Ser Ala 150 155 Ile Asn Asp His Leu Glu Arg Leu Arg Leu Ser Thr Thr Lys Ala Leu 170 175 165 Ile Glu Arg Gln Asp Val Ile Val Val Ala Ser Val Ser Ser Ile Tyr 180 185 190 Gly Leu Gly Asp Pro Asp Ala Tyr Arg Glu Ile Gln Ile Pro Val Tyr 195 200 205 Pro Gly Arg Gln Leu Ala Gln Arg Glu Leu Ile His Gln Leu Ala Arg 215 220 210 Leu Gln Tyr Ala Arg Thr Asp Lys Thr Leu Gly Arg Ala Met Phe Arg 230 235 240 Val Arg Gly Asp Val Ile Asp Ile Phe Pro Ala Asp Ser Glu His Gln 245 250 255 Ala Ile Arg Val Glu Leu Phe Asp Asp Val Ile Glu Ser Ala Lys Trp 260 265 270 Ile Asp Pro Val Ser Gly Lys Ile Ala Gly Asp Ile Glu His Tyr Leu 275 280 285 Ile Ser Pro Lys Thr Leu Phe Val Thr Pro Thr Ala Lys Ile Pro Ser 290 295 300 Ala Thr Lys Ser Ile Leu Thr Asp Met Glu Lys Arg Val Ala Glu Leu 305 310 315 320 Asn Lys Ala Asn Arg Leu Ile Glu Ala Glu Arg Leu Tyr Glu Arg Val 325 330 335 Asn Asn Asp Val Glu Met Ile Arg Glu Leu Gly Tyr Cys Ser Gly Met 340 345 350 Glu Asn Tyr Ser Cys Tyr Phe Ser Asp Arg Asn Pro Glu Leu Pro Pro 355 360 365 Thr Thr Leu Leu Asp Tyr Leu Pro Lys Asn Gly Leu Leu Phe Val Asp 370 375 380 Glu Ser His Val Met Val Pro Gln Ile Ser Ala Met Tyr Ser Gly Asp 385 390 395 Gln Ser Arg Lys Asp Thr Leu Ile Asp Phe Gly Phe Arg Leu Pro Ser 405 410 415 Ser Lys Asn Asn Arg Pro Leu Ser Phe Ala Glu Phe Glu Lys Ile Lys 420 425 430 Pro Gln Thr Val Phe Val Ser Ala Thr Pro Gly Lys Tyr Glu Leu Gln 435 440 445 Lys Ser Lys Lys Asn Val Val Gln Gln Ile Ile Arg Pro Thr Gly Leu 450 455 460 Leu Asp Pro Glu Ile Glu Val Arg Ser Lys Asp Gln Cys Val Glu Asn 465 470 475 Leu Leu Glu Glu Ile Arg His Cys Val Asn Arg Asn Asn Arg Val Leu 485 490 495 Val Thr Val Leu Thr Lys Lys Thr Ala Glu Glu Leu Asn Asp Phe Leu 500 505 510 Thr Glu Asn Gly Ile Leu Ser Arg Tyr Leu His Ser Asp Ile Lys Thr 520 525 Asp Glu Arg Gln Glu Ile Ile Asn Gly Leu Arg Ala Gly Glu Phe Asp 530 535 540 Val Leu Ile Gly Ile Ser Leu Leu Arg Glu Gly Leu Asp Ile Pro Glu 545 550 555 Ala Ser Leu Val Ala Ile Leu Asp Ala Asp His Ala Gly Phe Leu Arg 565 570 Ser Ser His Ala Leu Ile Gln Met Ile Gly Arg Val Ala Arg Asn Val 585 580 Glu Gly Lys Ala Val Leu Tyr Ala Asn Arg Ile Thr Pro Ala Met Lys 600

<210> 8039 <211> 903 <212> PRT <213> Enterobacter cloacae

<400> 8039 Ala Pro His Gly Lys Glu Thr Met Thr Val Gly Ser Arg Trp Phe Lys 10 Phe Asp Phe His Asn His Thr Pro Ala Ser Asp Asp Tyr Lys Val Pro 20 25 3.0 Asp Leu Gln Pro Arg Glu Trp Leu Leu Ala Tyr Met Arg Gln Gln Val 35 40 45 Asp Cys Val Val Ile Ser Asp His Asn Ser Gly Ala Trp Ile Asp Val 50 55 60 Leu Lys Ala Glu Leu Ala Asn Met Ser Arg Asp Ala Ser Ser Gly Glu 70 75 80 Leu Ala Asp Phe Arg Pro Leu Thr Leu Phe Pro Gly Val Glu Leu Thr 85 90 Ala Thr Gly Asn Val His Ile Leu Ala Val Leu His Thr Gln Ser Thr 100 105 110 Ser Ala Glu Val Glu Arg Leu Leu Ala Gln Cys Asn Asn Asn Cys Pro 115 120 125 Ile Ser Arg Glu Thr Pro Asn His His Leu Val Leu Gln Leu Gly Pro 130 135 140 Ala Gly Ile Ile Ser Asn Ile Arg Arg Asn Pro Glu Ala Ile Cys Ile 145 150 155 Leu Ala His Ile Asp Ala Ala Lys Gly Val Leu Thr Ser Leu Thr Asn 165 170 Gln Gly Glu Leu Thr Ala Ala Phe Gln Ser Asn Pro His Ala Val Glu 180 185 190 Ile Arg His Arg Glu Glu Glu Ile Thr Asn Gly Thr His Arg Arg Leu 200 Ile Ala Asp Leu Pro Trp Leu Arg Gly Ser Asp Ala His His Pro Glu 215 Gln Ala Gly Val Arg Thr Cys Trp Leu Lys Met Ser Glu Pro Asp Phe 225 230 235 Asp Gly Leu Arg His Ala Leu Leu Asp Pro Glu Asn Cys Val Leu Phe 245 250 255 Asp Asp Asn Pro Pro Glu Ala Pro Ala Ser His Leu Arg Ser Leu Thr 260 265 Phe Arg Thr Arg Leu Cys Gln Pro Ala Asp Gln Tyr Gly Ala Ser Val 280 Glu Phe Ser Pro Phe Tyr Asn Ala Val Ile Gly Ser Arg Gly Ser Gly 295 300 Lys Ser Thr Leu Ile Glu Ser Ile Arg Leu Ala Met Arg Lys Thr Glu 305 310 315 320 Gly Leu Thr Val Ser Gln Arg Asn Lys Leu Asn Gln Phe Ser Gln Met 325 330

Gly Met Gly Met Asp Ala Asp Ser Phe Ile Glu Cys Val Phe Arg Lys 340 345 Glu Gly Thr Asp Phe Arg Leu Ser Trp Arg Pro Asp Gly Arg Asn Glu 355 360 365 Leu His Ile Phe Ser Glu Gly Gln Trp Val Gln Asp Asn His Trp Ser 375 380 Pro Asp Arg Phe Pro Leu Ser Ile Tyr Ser Gln Lys Met Leu Tyr Glu 390 395 400 Leu Ala Ser Asp Thr Gly Ala Phe Leu Arg Val Cys Asp Glu Ser Gln 405 410 415 Val Val Asn Lys Arg Ala Trp Lys Glu Arg Trp Asp Gln Leu Glu Arg 425 430 420 Glu Tyr Leu Asn Glu Gln Ile Thr Leu Arg Gly His Leu Ala Ser Gln 435 440 445 Thr Ile Ala Asp Lys Leu Gln Gly Glu Leu Ser Asp Ala Glu Arg Ala 450 455 460 Val Ser Gln Leu Arg Ser Ser Ala Tyr Tyr Pro Val Cys Thr Arg Leu 470 475 Ala Thr Ala Arg Ala Glu Leu Ser Ala Ala Thr Leu Pro Leu Glu His 485 490 495 His Glu Gln His Val Ala Gly Leu Arg Ala Gln Glu Lys Glu Pro Val 500 505 510 Gln Val Pro Glu Leu Gln Val Glu Pro Ser Ala Thr Leu Thr Ala Phe 515 520 525 Met Thr Arg Leu Ser Asp Val Gln Gln Lys Tyr Asp Gln Arg Leu Asp 530 535 540 Thr Leu Leu Ser Asp Tyr Ala Ala Glu Leu Ser Thr Ile Arg Gln Asp 545 550 555 560 Pro Pro Leu Leu Ala Leu Glu Glu Ala Val Arg Asn Gln Glu Glu Thr 565 570 575 Val Gln Arg Glu Ala Met Val Leu Arg Glu Gln Gly Leu Asn Pro Asn 580 585 Val Leu Asp Glu Leu Met Thr Arg Cys Glu Ser Leu Lys Ser Glu Leu 605 600 Arg Asn Tyr Ala Asp Leu Asp Gly Thr Ile Ala Ala Ser Ala Ala Arg 615 620 Ser Thr Gly Leu Leu Ala Glu Met Arg Asn His Arg Met Val Leu Thr 625 630 635 Glu Lys Arg Lys Ala Phe Leu Ser Ser Leu Ser Leu Ser Ala Leu Asp 645 650 Ile Lys Ile Leu Pro Leu Cys Ala Pro His Glu Asp Thr Val Ser Gly 660 665 670 Tyr Gln Ala Val Thr Gly Ile Gly Asn Phe Ala Asp Arg Ile Tyr Asp 675 680 685 Asp Gly Asp Gly Ser Gly Leu Leu His Ser Phe Ile Ser Leu Arg Pro 695 700 Tyr Ser Pro Leu Pro Ser Ala Thr Glu Asn Lys Tyr Leu Ala Leu Asp 710 715 Thr Leu Lys Ala Leu His Leu Ala Ile His Arg Glu Glu Pro Gly Ala 725 730 Gly Ser Glu Leu His Gly Ala Phe Arg Asn Arg Leu Lys Gly Leu Asn 740 745 750 Asp Ala Gln Leu Asp Ala Leu Gln Cys Trp Tyr Pro Asp Asp Gly Ile 755 760 765 His Ile Arg Tyr Gln Thr Pro Gly Gly Gly Met Glu Asp Ile Ser Ser 775 780 Ala Ser Pro Gly Gln Lys Gly Ala Ser Met Leu Gln Phe Leu Leu Ser 790 795 Tyr Gly Thr Asp Pro Leu Leu Leu Asp Gln Pro Glu Asp Asp Leu Asp 805 810 Cys Leu Met Leu Ser Met Ser Val Ile Pro Ala Ile Met Ala Asn Lys

```
820
                            825
Lys Arg Arg Gln Leu Ile Ile Val Ser His Ser Ala Pro Ile Val Val
                       840
                                        845
Asn Gly Asp Ala Glu Tyr Val Ile Ser Met Gln His Asp Arg Ser Gly
  850
                    855
                                     860
Leu His Pro Gly Leu Cys Gly Ala Leu Gln Glu Thr Pro Val Lys Glu
              870
                         875
Leu Ile Cys Arg Gln Met Glu Gly Gly Glu Lys Ala Phe Arg Ser Arg
             885
                      890
Tyr Glu Arg Ile Leu Ser
          900
<210> 8040
<211> 147
<212> PRT
<213> Enterobacter cloacae
<400> 8040
Arg Ala Phe Pro Gly Leu Ser Ser Gly Trp Pro Pro Asp Val Pro Arg
                              10
Ser Lys Pro Leu Gln Ile Ser Leu His Asp Trp Leu Val Glu Lys Arg
 20
                          2.5
Ala Thr Leu Ser Lys Lys Ser Arg Leu Gly Glu Ala Phe Ala Tyr Ala
 35
                  40
Leu Asn Gln Trp Asp Ala Leu Cys Tyr Tyr Cys Asp Asp Gly Leu Ala
50 55
Glu Pro Asp Asn Asn Ala Ala Glu Arg Ala Leu Arg Ala Val Cys Leu
65 70 75
Gly Lys Lys Asn Tyr Ile Phe Phe Gly Ser Asp His Gly Gly Glu Arg
        85 90
Gly Ala Leu Leu Tyr Gly Leu Ile Gly Thr Cys Arg Leu Asn Gly Ile
       100
                           105
Asp Pro Glu Gly Tyr Leu Arg His Ile Leu Ser Val Leu Pro Glu Trp
 115 120 125
Pro Ile Asn Lys Val Ala Glu Leu Leu Pro Trp Asn Val Asp Leu Thr
        135
Asn Lvs
145
<210> 8041
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 8041
Ser Ala Pro Leu Asn Thr Gly Glu Leu Met Ile Thr Phe Glu Ile Arg
                            10
Met Glu Ile Lys Val Leu His Lys Arg Gly Met Ser Ile Arg Ala Ile
         20
                         25
                                            3.0
Ala Arg Glu Leu Gly Ile Ser Arg Asn Thr Val Arg Ser His Leu Lys
      35
                       40
Ala Lys Ser Glu Lys Pro Gln Tyr Ser Pro Arg Pro Ala Pro Ser Ser
                    5.5
Leu Leu Asp Glu Tyr Arg Asp Tyr Ile Ser Lys Arg Ile Ser Asp Ala
              70
                                  75
His Pro Tyr Lys Ile Pro Ala Thr Val Ile Ala Arg Glu Ile Met Glu
            8.5
                              90
Leu Gly Tyr Arg Gly Gly Leu Thr Ile Leu Arg Glu Phe Ile Arg Lys
                           105
                                      110
Gln Thr Leu Pro Ala Gln Ala Glu Pro Val Val Arg Phe Glu Thr Glu
                       120
```

```
Pro Gly Arg Gln Met Gln Val Asp Trp Gly Thr Met Arg Asn Gly Lys
 130
                  135
                                  140
Ser Pro Leu His Val Phe Val Ala Val Leu Gly Tyr Ser Arg Met Leu
               150
                     155
Tyr Ile Glu Phe Thr Asp Asn Met Arg Tyr Asp Thr Leu Glu Ala Cys
                170 175
            165
His Arg Asn Ala Phe Ser Phe Phe Gly Gly Val Pro Gln Glu Val Leu
             185 190
Tyr Asp Asn Met Lys Thr Val Val Leu Gln Arg Asp Ala Tyr Gln Thr
      195 200 205
Gly Gln His Arg Phe His Pro Ser Leu Trp Gln Phe Gly Lys Glu Met
        215 220
Gly Phe Ser Pro Arg Leu Cys Arg Pro Phe Arg Ala Gln Thr Lys Gly
       230
                   235
Lys Val Glu Arg Met Val Gln Tyr Ala Arg Asn Ser Phe Tyr Ile Pro
           245 250 255
Leu Met Thr Arg Leu Arg Pro Met Gly Ile Thr Val Asp Val Glu Thr
        260 265 270
Ala Asn Arg Tyr Gly Leu Arg Trp Leu Tyr Asp Val Ala Asn Gln Arg
 275
                    280 285
Lys His \operatorname{\overline{Glu}} Thr Ile \operatorname{Gln} Thr Arg Pro Cys Asp Arg Trp Val \operatorname{Glu} \operatorname{Glu}
 290 295 300
Gln Gln Ser Met Leu Ala Leu Pro Pro Glu Lys Lys Gln Tyr Asp Val
305 310 315
Gln Val Asp Glu Ser Leu Met Thr Phe Asp Arg Gln Pro Leu His His
 325 330
Pro Leu Ser Ile Tyr Asp Thr Phe Cys Arg Gly Ala Ala
                        345
<210> 8042
<211> 81
```

<212> PRT <213> Enterobacter cloacae

<400> 8042

Arg Ser Glu Ile Asn Ser Ser Trp Arg Thr Leu Pro Asp Val Phe Leu I 5 10 15
Lys Thr Ile Arg Leu Pro Arg Asp Leu Asp Phe Glu Gly Val Ser Glu 20 25
Leu Lys Ile Val Arg Glu Gly Asp Cys Ile Ile Leu Arg Pro Val Arg 35
Pro Thr Trp Cys Ser Phe Ala Gln Leu Glu Lys Ala Glu Pro Asp Phe 50 60
Met Val Glu Arg Gly Asp Val Val Ser Asp Glu Gly Arg Phe Asp Leu 65 70 75

<210> 8043 <211> 254 <212> PRT <213> Enterobacter cloacae

```
Gln Gly Trp His Ser Ile Glu Asp Ser Arg Asp Trp Thr Tyr Leu Pro
                                75
Asp Glu Arg Pro Pro Thr Lys Gln Ala Thr His Ser Tyr Ile Gln Gln
                              90
Leu Ile Gln Gln Lys Gly Val Tyr His Tyr Ala Ile Ile Glu Asn Asn
         100
                           105
Ser Glu Asn Ala Val Gly Thr Leu Ser Leu Tyr Asn Leu Asp Asn Lys
    115
                     120
                            125
Asn Asp Val Ala Glu Ile Gly Gly Val His Leu Thr Pro Val Ile Lys
 130
                 135
                            140
Arg Thr Ser Val Ser Thr Glu Ala Ile Phe Leu Ile Leu Ser Tyr Val
145 150 155
Phe Asp Val Leu Lys Tyr Arg Arg Cys Glu Trp Gln Thr Asp Arg Leu
           165 170 175
Asn Ser Gln Gly Met Arg Ser Ala Glu Arg Leu Gly Phe Gln Lys Glu
       180 185 190
Gly Val Leu Arg Asn Lys Gln Ile Leu Lys Ser Arg Ser Val Asp Val
 195 200 205
Val Met Tyr Ser Ile Ile Gln Asp Glu Trp Glu Arg Ile Ser Ser Ala
210 215 220
Ile Thr Ile Trp Leu Arg Thr Val Asn Phe Asp Asp Arg Gly His Gln
225 230 235
Ile His Pro Leu Arg His Tyr Leu Ala Thr Thr Glu Pro
            245
<210> 8044
<211> 89
<212> PRT
<213> Enterobacter cloacae
<400> 8044
Met Lys Ile Met Asn Ala Glu Ile Glu Arg Gln Ile Trp His His Asn
Leu Ser Tyr Leu Leu Leu Ala Gln Arg Val Leu Asn His Tyr Glu Asp
                          25
                                            30
Thr Ala Leu Phe Arg Leu Gly Ile Asp Lys Cys Thr Gly Asp Lys Leu
                      4.0
Leu Gln Leu Ser Leu Pro Glu Leu Val Arg Leu Ala Glu Arg Pro Glu
              55
                                  60
Leu Ile Thr Val Leu Arg Leu Arg Asp His His Gln Ile Asp Val Leu
            70
Leu Ser Gln Ser Thr Gly Met Gly
             8.5
<210> 8045
<211> 371
<212> PRT
<213> Enterobacter cloacae
<400> 8045
His Met Lys Ser Arg Ala Ala Val Ala Phe Ala Pro Gly Lys Pro Leu
                             10
Glu Ile Val Glu Ile Asp Val Glu Pro Pro Arg Lys Gly Glu Val Leu
        20
                           25
Val Lys Ile Thr His Thr Gly Val Cys His Thr Asp Ala Phe Thr Leu
                       40
Ser Gly Asp Asp Pro Glu Gly Val Phe Pro Ala Val Leu Gly His Glu
                 5.5
Gly Ala Gly Val Val Val Glu Val Gly Glu Gly Val Thr Ser Val Lys
```

```
Pro Gly Asp His Val Ile Pro Leu Tyr Thr Ala Glu Cys Gly Glu Cys
                          90
Leu Phe Cys Lys Ser Gly Lys Thr Asn Leu Cys Val Ser Val Arg Ala
        100
                     105 110
Thr Gln Gly Lys Gly Leu Met Pro Asp Gly Thr Thr Arg Phe Ser Tyr
      115
           120 125
Lys Gly Gln Pro Leu Phe His Tyr Met Gly Cys Ser Thr Phe Ser Glu
         135 140
Tyr Thr Val Val Ala Glu Val Ser Leu Ala Lys Ile Asn Pro Gln Ala 145 $150$
Asn His Glu His Val Cys Leu Leu Gly Cys Gly Val Thr Thr Gly Ile
        165 170 175
Gly Ala Val His Asn Thr Ala Lys Val Gln Pro Gly Asp Thr Val Ala
     180 185 190
Ile Phe Gly Leu Gly Gly Ile Gly Leu Ala Ala Val Gln Gly Ala Arg
  195 200 205
Gln Ala Lys Ala Gly Arg Ile Phe Ala Ile Asp Thr Asn Pro Glu Lys
 210 215 220
Phe Asp Leu Ala Arg Ser Phe Gly Ala Thr Asp Cys Ile Asn Pro Lys
225 230
                           235
                                           240
Asp Tyr Asp Lys Pro Ile Gln Asp Val Leu Ile Glu Leu Thr Gly Trp
                         250 255
    245
Gly Val Asp His Thr Phe Glu Cys Ile Gly Asn Val Asn Val Met Arg
       260
                      265 270
Ser Ala Leu Glu Ala Ala His Arg Gly Trp Gly Gln Ser Val Val Ile
275 280
                          285
Gly Val Ala Gly Ala Gly Lys Glu Ile Ser Thr Arg Pro Phe Gln Leu
290 295
                               300
Val Thr Gly Arg Val Trp Lys Gly Ser Ala Phe Gly Gly Val Lys Gly
305 310 315
Arg Thr Gln Leu Pro Gly Met Val Glu Asp Ala Met Lys Gly Glu Ile
          325
                         330
Tyr Leu Ala Pro Phe Val Thr His Thr Met Gly Leu Glu Glu Ile Asn
 340 345 350
Asp Ala Phe Asn Leu Met His Glu Cys Lys Ser Ile Arg Thr Val Ile
                   360
                                   365
His Tyr
```

370 <210> 8046

<211> 454 <212> PRT

115

<213> Enterobacter cloacae

<400> 8046 Leu Ala Val Arg Lys Arg Glu Ser Leu Met Lys Glu Ser Ala Leu Ser 10 Ala Ile Arg Ser Asp Met Gln Ser Pro Glu Thr Val Tyr Gly Met Pro 25 Ala His Lys Asp Arg Thr Ala Ala Val Asn Glu Val His Ala Arg Pro 4.5 4.0 His Leu Leu Ile Thr Ser Pro Gln Thr Leu Leu Gln Phe Ala Phe Met 60 55 Thr Lys Gly Asp Gln Ser Gly Asp Gln Arg Phe Met Val Glu Leu Ser 70 Asp Arg Leu Gly Leu Thr Pro Ser Glu Asn Ser Ala Pro Leu His Gly 85 90 Ile Thr Trp Arg Glu Gly Ala Leu Tyr Cys Glu Lys His Gly Glu Phe 100 105 110 Ser Thr Tyr Leu Trp Ser Thr Thr Cys Asp Pro Arg Asp Gly Gln Leu

```
Arg Gly Glu Asn Pro Phe Arg His Gly Phe Thr Pro Pro Gly Ser Val
           135
Ile Cys Gly Thr Arg Leu Asp Ile Leu Pro Trp Thr Ala Glu Ser Glu
             150
                            155
Ala Ala Val Thr Asn Leu Asp Pro Val Ser Arg Cys Tyr Ser Val Thr
                         170
           165
Glu Asn Gly Arg Ala Ala Ile Ile Ser Asp Phe Arg Gln Asp Lys Asp
        180
                      185
Gly Leu Thr Arg Ile Leu Ile Leu Glu Arg Asp Leu Thr Glu Ala Gln
                   200
Leu Gly Ala Leu Val Gln Arg Leu Leu Glu Ile Glu Asn Tyr Arg Thr
 210 215 220
Leu Ala Leu Leu Ser Leu Pro Leu Thr Arg Thr Met Ala Ser Glu Leu
225 230 235 240
Arg Arg Val Glu Asn Arg Leu Ala Glu Ile Thr Glu Glu Met Arg Thr
         245 250 255
Gly Glu His Arg Lys Asn Glu Gln Leu Leu Ser Ala Leu Thr Asn Leu
       260 265 270
Ala Ala Glu Leu Glu Ala Gly Ala Ala Ala Asn Leu Tyr Arg Phe Gly
 275 280 285
Ala Ser Gln Ala Tyr Tyr Glu Ile Val Glu Glu Arg Leu Asn Thr Leu
290 295 300
Ser Glu Thr Pro Val Pro Gly Tyr Tyr Thr Trp Ser Asp Phe Leu Gln
305 310 315 320
Arg Arg Ile Ala Pro Ala Met Arg Thr Cys Arg Ser Val Lys Glu Arg
          325 330 335
Gln Ala Lys Leu Ser Asp Lys Leu Met Arg Ala Ile Ser Leu Leu Arg
 340 345 350
Ser Trp Ile Asp Val Glu Leu Glu His Gln Asn Arg Asp Leu Leu Ala
355 360 365
Ser Met Asn Asn Arg Ala Arg Gln Gln Leu His Leu Gln Gln Thr Val
370 375 380
Glu Gly Leu Ser Val Ala Ala Ile Ser Tyr Tyr Val Val Ser Leu Ile
385 390 395 400
Ser Tyr Leu Val Lys Gly Val Pro Gly Ile His Asp Val Met Pro Pro
     405 410 415
Glu Leu Ala Val Ala Ile Leu Val Pro Phe Ile Val Leu Ala Ile Trp
      420 425 430
Trp Val Val Arg Arg Ile Arg Asn Ser His Thr Asp Pro Glu His Asn
  435
               440
Glu Asn Arg Ser Asp
  450
```

<210> 8047 <211> 124 <212> PRT <213> Enterohactor closes

<213> Enterobacter cloacae

3905 Pro Gly His Asp His Ser Tyr Tyr Phe Ile Ser Ser Tyr Ile Gly Asp 100 105 His Ile Ala His His Ala Ala Ala Leu Thr Arg 115 <210> 8048 <211> 885 <212> PRT <213> Enterobacter cloacae <400> 8048 Thr Met Ser Lys Lys Leu Phe Gly Ala Pro Pro Thr Leu Thr Asp Ala 10 Ser Asn Ser Val Val Val Arg Gly Ala Arg Glu His Asn Leu Lys Glu 20 25 Val Asp Val Ser Val Pro Arg Asp Ala Leu Val Val Phe Ser Gly Val 3.5 40 4.5 Ser Gly Ser Gly Lys Ser Ser Leu Ala Phe Gly Thr Ile Tyr Ala Glu 50 55 Ala Gln Arg Arg Tyr Phe Glu Ser Val Ala Pro Tyr Ala Arg Arg Leu 65 70 75 Ile Asp Gln Ala Gly Val Pro Asp Val Asp Ala Ile Asp Gly Leu Pro 85 90 Pro Ala Val Ala Leu Gln Gln Gln Arg Gly Thr Ser Asn Ala Arg Ser 100 105 110 Ser Val Gly Ser Val Thr Thr Leu Ser Ser Leu Val Arg Met Met Tyr 115 120 125 Ser Arg Ala Gly Ala Tyr Pro Ala Glu Gln Pro Met Leu Tyr Ala Glu 130 135 140 Asp Phe Ser Pro Asm Thr Pro Gln Gly Ala Cys Pro Ser Cys His Gly 145 150 155 160 Leu Gly His Ile Tyr Asp Val Thr Glu Ala Leu Met Val Pro Asp Pro 165 170 175 Ser Leu Ser Ile Arg Asp Arg Ala Ile Ala Ser Trp Pro Pro Ala Trp 180 185 190 His Gly Gln Asn Leu Arg Asp Ile Leu Val Thr Leu Gly Tyr Asp Val 195 200 205 Asp Ile Pro Trp Lys Glu Leu Ser Glu Glu Glu Arg His Trp Ile Leu 210 215 220 Phe Thr Glu Asp Thr Pro Thr Val Pro Val Tyr Pro Gly Leu Ser Pro 225 230 235 Glu Asp Thr Arg Val Ala Val Arg Glu Lys Met Thr Pro Gly Tyr Met 245 250 Gly Thr Phe Thr Gly Ala Arg Arg Tyr Val Leu His Thr Phe Ala His 265 Thr Gln Ser Ala Leu Met Arg Lys Arg Val Ser Ser Phe Met Glu Gly 285 280 Lys Leu Cys Pro Val Cys His Gly Lys Arg Leu Lys Pro Glu Ser Leu 295 300 Ser Val Thr Phe Ala Gly Val Asp Ile Gly Glu Phe Met Gln Met Pro 310 315 320 Leu Asp Gln Leu Ala Glu Leu Leu Pro Ile Ser Arg Gly Asp Phe 330 325 Ser Thr His His Ala Gly Ala Asp Thr Asp Arg Asp Ile Thr Arg Arg 340 345 Asp Arg Thr Glu Arg Ala Gly Ser Gly Arg Ala Val His Ser Val Thr 355 360 Pro Asp Val Arg Arg Thr Ser Ala Leu Ser Thr Glu Lys Arg Leu Ala 380 375

Ala Gln Arg Leu Thr Arg Gly Val Met Asp Arg Leu Tyr Gln Leu Gln

395

Lys Leu Gly Leu Gly Tyr Leu Thr Leu Asp Arg Thr Thr Pro Thr Leu 405 410 Ser Ala Gly Glu Leu Gln Arg Leu Arg Leu Ala Thr Gln Leu Ser Ser 420 425 Met Leu Phe Gly Val Val Tyr Val Leu Asp Glu Pro Ser Ala Gly Leu 440 445 435 His Pro Ala Asp Ser His Ala Leu Tyr Asp Ala Leu Glu Asn Leu Arg 460 455 Asp Ala Gly Asn Ser Val Phe Val Val Glu His Asp Leu Asp Leu Met 470 475 Arg Arg Ala Gln Trp Leu Val Asp Val Gly Pro Ala Ala Gly Glu Gln 485 490 495 Gly Gly His Ile Leu Tyr Ser Gly Val Pro Glu Gly Leu Lys Ala Ile 500 505 510 Ala Glu Ser Arg Thr Ala Arg Tyr Leu Phe Asp Glu Ile Arg Pro Pro 515 520 525 Gln Ser Tyr Ala Arg Gln Pro Ala Gly Trp Leu Lys Leu Gln Asp Ile 530 535 540 His Arg His Asn Leu Lys Gly Leu Asp Ala Cys Ile Pro Leu Gly Val 545 550 555 560 Leu Thr Ala Val Thr Gly Ile Ser Gly Ser Gly Lys Ser Ser Leu Ile 565 570 575 Ala Gln Ala Leu Pro Glu Leu Val Leu Ser Ser Leu Gly His Glu Pro 580 585 590 Glu Asp Val Leu Ser Glu Gly Ser Asp Ala Glu Gly Pro Thr Val Thr 595 600 605 Glu Lys Thr Tyr Gly Thr Leu Thr Gly Asp Thr Gly Leu Ile Lys Arg 610 620 Leu Val Gln Val Asp Gln Lys Pro Ile Gly Arg Thr Pro Arg Ser Asn 625 630 635 640 Leu Ala Thr Tyr Thr Gly Leu Phe Asp His Ile Arg Lys Leu Phe Ala 645 650 655 Gly Thr Pro Ala Ala Lys Asn Tyr His Tyr Asp Ala Gly Gln Phe Ser 660 665 Phe Asn Val Ala Lys Gly Arg Cys Glu Thr Cys Glu Gly Glu Gly Phe 675 680 685 Val Ser Val Glu Leu Leu Phe Met Pro Ser Val Tyr Ala Pro Cys Pro 690 695 700 Thr Cys His Gly Ala Arg Tyr Asn Pro Asp Thr Leu Arg Val Arg Trp 705 710 715 Lys Glu Arg Asn Ile Ala Glu Val Leu Gln Met Thr Val Asp Glu Ala 725 730 Cys Ser Phe Phe Ala Asp Val Glu Pro Val Ala Arg Pro Leu Arg Leu 740 745 750 Leu Gly Glu Ile Gly Leu Gly Tyr Leu Arg Leu Gly Gln Pro Ala Thr 755 760 765 Glu Leu Ser Gly Gly Glu Ala Gln Arg Ile Lys Leu Ala Thr Glu Leu 775 780 Gln Arg Ser Gln Arg Gly His Thr Leu Tyr Val Leu Asp Glu Pro Thr 790 795 Thr Gly Leu His Ala Ser Asp Ala Asp Arg Leu Leu Val Gln Leu Gln 805 810 Arg Leu Val Glu Thr Gly Asn Thr Val Val Val Ile Glu His Asp Met 820 825 830 Arg Ala Val Val Gln Ala Asp Trp Val Met Asp Ile Gly Pro Gly Ala 835 840 845 Gly His Glu Gly Gly Asn Leu Val Ala Glu Gly Thr Pro Ala Gln Val 850 855 860 Ser Gln Val Cys Glu Ser Arg Thr Ala Pro Phe Ile Ala Arg Glu Leu 870 875 Ser Arg Asn Trp

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<210> 8049
<211> 93
<212> PRT
<213> Enterobacter cloacae
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<400> 8049

Glu Met Pro Ser Thr Pro Glu Glu Lys Lys Lys Val Leu Thr Arg Val 10 Arg Arg Ile Arg Gly Gln Ile Asp Ala Leu Glu Arg Ala Leu Glu Asn 20 25 30 Gly Ala Glu Cys Arg Ala Ile Leu Gln Gln Ile Ala Ala Val Arg Gly 35 40 4.5

Ala Ser Asn Gly Leu Met Ala Glu Val Leu Glu Ser His Ile Arg Glu 5.5 60 Thr Phe Asp Gln Asn Asp Asn Tyr Ser His Glu Val Ser Lys Ser Val

65 70 7.5 Asp Asp Thr Ile Glu Leu Val Arg Ala Tyr Leu Lys

8.5

<210> 8050 <211> 268 <212> PRT

<213> Enterobacter cloacae

<400> 8050

His Val Leu Gln Arg Ser Arg Met Met Val Glu Leu Gln His Gln Arg 10 Leu Met Val Leu Ala Glu Gln Leu Gln Leu Asp Ser Leu Ile Gly Ala

20 25 3.0 Ala Pro Ala Leu Ser Gln Gln Ala Val Asp Gln Glu Trp Ser Tyr Met 35 40

4.5 Asp Phe Leu Glu His Leu Leu His Glu Glu Lys Leu Ala Arg His Gln 50 55

Arg Lys Gln Ala Met Tyr Thr Arg Met Ala Ala Phe Pro Ala Val Lys 65 70 7.5 8.0 Thr Phe Glu Glu Tyr Asp Phe Thr Phe Ala Thr Gly Ala Pro Gln Lys

85 90 Gln Ile Gln Ser Leu Arg Ser Leu Ser Phe Ile Glu Arg Asn Glu Asn 100 105 110

Ile Val Leu Leu Gly Pro Ser Gly Val Gly Lys Thr His Leu Ala Ile 115 120 125

Ala Met Gly Tyr Glu Ala Val Arg Ala Gly Ile Lys Val Arg Phe Thr 130 135 140

Thr Ala Ala Asp Leu Leu Gln Leu Ser Thr Ser Gln Arg Gln Gly 145 150 155 160 Arg Tyr Lys Thr Thr Leu Asn Arg Gly Val Met Ala Pro Lys Leu Leu

165 170 175 Ile Ile Asp Glu Ile Gly Tyr Leu Pro Phe Ser Gln Glu Glu Ala Lys

180 185 190 Leu Phe Phe Gln Val Ile Ala Lys Arg Tyr Glu Lys Ser Ala Met Ile 200 205

Leu Thr Ser Asn Leu Pro Phe Gly Gln Trp Asp Gln Thr Phe Ala Gly 210 215 220

Asp Ala Ala Leu Thr Ser Ala Met Leu Asp Arg Ile Leu His His Ser 225 230 235 His Val Val Gln Ile Lys Gly Glu Ser Tyr Arg Leu Lys Gln Lys Arg 245 250 255

Lys Ala Gly Val Ile Ala Glu Ala Asn Pro Glu

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<210> 8051
<211> 73
<212> PRT
<213> Enterobacter cloacae
<400> 8051
Pro Val Asn Lys Ile Tyr Met Leu Asp Thr Asn Ile Cys Ser Phe Ile
Met Arg Glu Gln Ser Glu Val Val Leu Lys Arg Leu Glu Pro Ala Val
          20
                             25
Leu Arg Asp Gln Arg Ile Val Val Ser Val Ile Thr Tyr Ser Glu Met
                       40
                                      4.5
Arg Phe Gly Ala Thr Gly Pro Lys Ala Ser Pro Pro Arg Glu Gln Leu
                     55
Val Asp Ala Phe Cys Val Pro Phe
<210> 8052
<211> 96
<212> PRT
<213> Enterobacter cloacae
<400> 8052
Gln Gly Gln Ser Met Pro His Ser Pro Glu Glu Lys Lys Gln Ala Leu
                                1.0
Val Arg Val Arg Arg Ile Lys Gly Gln Ile Ala Ala Leu Glu Gln Ala
 20
                             25
Ile Glu Asn Glu Ala Glu Cys Ser Ser Leu Leu Gln Gln Leu Ala Ser
35
                         40
Val Arg Gly Ala Val Lys Gly Leu Met Thr Val Val Leu Glu Ser Tyr
 50
                     5.5
                                        60
Leu Arg Glu Glu Phe Pro Asp Thr Asn Lys Arg Arg Gly Ser Gln Thr
65 70
                         75
Lys Ser Ile Asn Asp Ala Ile Ser Ile Val Arg Ser Tyr Leu Arg
              8.5
<210> 8053
<211> 207
<212> PRT
<213> Enterobacter cloacae
<400> 8053
Leu Ser Cys Tyr Val Val Ala Glu Leu Ser Cys Arg Tyr Thr Glu Lys
Ile Met Glu Arg Leu Glu His His Ala Ser Phe Asp Gly Trp Gln Glu
                             25
Val Tyr Gln His Glu Ser Gly Thr Leu Gly Cys Thr Met Lys Phe Gly
                       4.0
                                            4.5
Val Tyr Thr Pro Pro Gln Ala Leu Asn Gly Asn Val Pro Val Leu Tyr
                     55
Trp Leu Ser Gly Leu Thr Cys Thr Glu Gln Asn Phe Ile Thr Lys Ser
                  7.0
Ser Val Gln Arg Tyr Ala Ala Glu His Gly Ile Met Ile Val Ala Pro
                                 90
              8.5
Asp Thr Ser Pro Arg Gly Thr Asp Ile Pro Asp Asp Pro Asp Tyr Ala
         100
                          105
Leu Gly Gln Gly Ala Gly Phe Tyr Val Asn Ala Thr Gln Glu Pro Trp
                   120
```

Ala Thr His Tyr Lys Met Tyr Asp Tyr Val Val Asn Glu Leu Pro Ser 130 135 140

```
Leu Ile Glu Glu Trp Phe Pro Ala Ser Asp Lys Arg Ser Ile Ser Gly
                 150
                      155
145
                                               160
His Ser Met Gly Gly His Gly Ala Leu Met Ile Ala Leu Arg Asn Pro
           165
                   170
Gly Arg Tyr Gln Ser Val Ser Ala Phe Ser Pro Ile Val Ala Pro Ser
        180 185 190
Gln Val Pro Trp Gly Arg Lys Cys Ile Val Cys Leu Ser Gly
             200
<210> 8054
<211> 211
<212> PRT
<213> Enterobacter cloacae
<400> 8054
Thr Pro Asp Ala Asp Asp Ala Ala Gly Thr Ala Cys Ala Gly Cys Asp
                             10
Gly Thr Thr Cys Thr Arg Thr Gly Ser Gly Asp Gly Val Asn Ala Ala
          20
                         25
Ala Ala Gly Cys Ala Ala Thr Ala Ala Ser Leu Gly Trp Arg Ala Val
                 40
Val Ala Ser Tyr Arg Ser Gln Gly Arg Trp Val Ile Trp Leu Ser Phe
                    55
Leu Val Ala Leu Leu Gln Ile Met Pro Trp Pro Asp Asp Ile Leu
                7.0
                                75
Val Phe Arg Pro Asn Trp Val Leu Leu Ile Leu Leu Tyr Trp Ile Leu
             85
                  90
                                                 95
Ala Leu Pro His Arg Val Asn Val Gly Thr Gly Phe Val Met Gly Ala
       1.00
                           105
                                           110
Ile Leu Asp Leu Ile Ser Gly Ser Thr Leu Gly Val Arg Ala Leu Ser
 115
Met Ser Ile Ile Ala Tyr Leu Val Ala Leu Lys Phe Gln Leu Phe Arg
 130
                    135
                                      140
Asn Leu Ala Leu Trp Gln Gln Ala Leu Val Val Met Leu Leu Ser Leu
                150
                                  155
                                                    160
Ala Ala Asp Ile Val Val Phe Trp Ala Glu Phe Leu Val Ile Asn Val
             165
                               170
Ser Phe Arg Pro Glu Val Phe Trp Ser Ser Val Val Asn Gly Val Leu
          180
                           185 190
Trp Pro Trp Leu Phe Leu Leu Met Arg Lys Ile Arg Gln Gln Phe Ala
                        200
   195
Val Gln
   210
<210> 8055
<211> 201
<212> PRT
<213> Enterobacter cloacae
<400> 8055
Lys Val Ser Met Thr Ser Leu Tyr Leu Ala Ser Gly Ser Pro Arg Arg
Gln Glu Leu Leu Ala Gln Leu Gly Val Ser Phe Glu Arg Ile Val Thr
          20
                            25
Gly Ile Glu Glu Lys Arg Ala Glu Gly Glu Ser Ala Gln Gln Tyr Val
       35
                        4.0
Ser Arg Leu Ala Arg Glu Lys Ala Gln Ala Gly Val Ala Cys Val Pro
                    55
                                      60
Arg Asp Leu Pro Val Leu Gly Ala Asp Thr Ile Val Ile Leu Asn Gly
                 7.0
                                   75
```

Glu Val Leu Glu Lys Pro Arg Asp Ala Asp His Ala Ala Arg Met Leu

```
Arg Asn Met Ser Gly Gln Thr His Gln Val Met Thr Ala Val Ala Leu
         100
                         105
                                        110
Ala Asp Ser Gln Tyr Val Leu Asp Cys Leu Val Val Thr Glu Val Thr
     115
                    120
                              125
Phe Arg Val Leu Thr Asp Glu Glu Ile Ala Gly Tyr Ile Ala Ser Gly
 130
       135 140
Glu Pro Met Asp Lys Ala Gly Ala Tyr Gly Ile Gln Gly Leu Gly Gly
145 150 155
Cys Phe Val Arg Lys Ile Asn Gly Ser Tyr His Ala Val Val Gly Leu
         165 170 175
Pro Leu Val Glu Thr Tyr Glu Leu Leu Ser Asn Phe Asn Ser Leu Arg
      180 185 190
Glu Gly Arg Asp Asn Tyr Asp Gly
      195
<210> 8056
<211> 482
<212> PRT
<213> Enterobacter cloacae
<400> 8056
Met Ser Leu Asn Leu Val Ser Glu His Leu Leu Ala Ala Asn Gly Leu
                             10
Ser His Gln Asp Leu Phe Ser Ile Leu Gly Gln Leu Thr Glu Arg Arg
                         25
Leu Asp Tyr Gly Asp Leu Tyr Phe Gln Ser Ser Tyr His Glu Ser Trp
35
                      40
Val Leu Glu Asp Ser Ile Ile Lys Asp Gly Ser Tyr Asn Ile Asp Gln
                  5.5
                                    60
Gly Val Gly Val Arg Ala Val Ser Gly Glu Lys Thr Gly Phe Ala Tyr
                70
                       75
Ala Asp Gln Ile Ser Leu Ala Ala Leu Glu Gln Ser Ala Gln Ala Ala
                 90 95
           85
Arg Thr Ile Val Arg Asp Thr Gly Asp Gly Arg Val Lys Thr Leu Gly
                        105
         100
Glu Val Gln His Ala Ala Leu Tyr Thr Ser Ile Asp Pro Leu Gln Ser
                           125
                      120
Met Ser Arg Glu Glu Lys Leu Asp Ile Leu Arg Arg Val Asp Lys Val
                   135 140
Ala Arg Ala Ala Asp Lys Arg Val Gln Glu Val Ser Ala Ser Leu Thr
                150 155
Gly Val Tyr Glu Leu Ile Leu Val Ala Ala Thr Asp Gly Thr Leu Ala
           165
                             170
Ala Asp Val Arg Pro Leu Val Arg Leu Ser Ile Ser Val Gln Val Glu
         180
                          185
                                          190
Asp Asp Gly Lys Arg Glu Arg Gly Ser Ser Gly Gly Gly Arg Phe
      195
                       200
                                       205
Gly Tyr Asp Trp Phe Leu Gly Asp Val Asp Gly Glu Ala Arg Ala Asp
                   215
                                    220
Ala Trp Ala Lys Glu Ala Val Arg Met Ala Leu Val Asn Leu Ser Ala
                230
                                 235
Val Ala Ala Pro Ala Gly Thr Leu Pro Val Val Leu Gly Ala Gly Trp
             245
                             250
Pro Gly Val Leu Leu His Glu Ala Val Gly His Gly Leu Glu Gly Asp
         260
                          265
                                          270
Phe Asn Arg Arg Gly Thr Ser Val Phe Ser Gly Gln Met Gly Gln Leu
    275
                       280
                                       285
Val Ser Ser Glu Leu Cys Thr Val Val Asp Asp Gly Thr Met Leu Asp
  290
                  295
                                    300
```

Arg Arg Gly Ser Ile Ser Ile Asp Asp Glu Gly Thr Pro Gly Gln Tyr

```
310
                                 315
Asn Val Leu Ile Glu Asn Gly Val Leu Lys Gly Tyr Met Gln Asp Lys
            325
                             330
                                     335
Leu Asn Ala Arg Leu Met Gly Val Ala Pro Thr Gly Asn Gly Arg Arg
         340
                 345 350
Glu Ser Tyr Ala His Leu Pro Met Pro Arg Met Thr Asn Thr Tyr Met
           360
       355
                             365
Leu Pro Gly Lys Ser Thr Pro Gln Glu Ile Ile Glu Ser Val Asp Tyr
 370
                 375
                         380
Gly Ile Phe Ala Pro Asn Phe Gly Gly Gly Gln Val Asp Ile Thr Ser
              390 395
Gly Lys Phe Val Phe Ser Thr Ser Glu Ala Tyr Leu Ile Glu Lys Gly
            405 410
                                              415
Lys Val Thr Lys Ala Val Lys Gly Ala Thr Leu Ile Gly Ser Gly Ile
        420 425 430
Glu Ala Met Gln Gln Ile Ser Met Val Gly Asn Asp Leu Lys Leu Asp
      435
           440 445
Asn Gly Val Gly Val Cys Gly Lys Glu Gly Gln Ser Leu Pro Val Gly
 450 455 460
Val Gly Gln Pro Thr Leu Lys Val Asp Asn Leu Thr Val Gly Gly Thr
465
Ala
<210> 8057
<211> 77
<212> PRT
<213> Enterobacter cloacae
<400> 8057
Pro Ala Leu Ser Leu Ile Lys Val Asn Met Ser Leu Phe Pro Val Ile
          5
                            10
Val Val Phe Gly Leu Ser Phe Pro Pro Ile Phe Phe Glu Leu Leu Leu
 20 25
                                          30
Ser Leu Ala Ile Phe Trp Leu Val Arg Lys Val Leu Val Pro Thr Gly
 35 40
                              4.5
Ile Tyr Asp Phe Val Trp His Pro Ala Leu Phe Asn Thr Ala Leu Tyr
 50 55
Cys Cys Leu Phe Tyr Leu Ile Ser Arg Met Phe Val
                70
<210> 8058
<211> 677
<212> PRT
<213> Enterobacter cloacae
<400> 8058
Cys Gln Pro Gly Phe Asp Leu Pro Ser Asn Arg Pro Ser Pro Ala Arg
                           10
Val Trp Leu Ile Ala Met Gly Ile Phe Ser Ile Ala Ser Gln His Ile
         20
                         25
                                          3.0
Arg Phe Ala Val Lys Leu Ala Cys Ala Ile Val Leu Ala Leu Phe Val
    35
                      40
Gly Phe His Phe Gln Leu Glu Thr Pro Arg Trp Ala Val Leu Thr Ala
                 5.5
Ala Ile Val Ala Ala Gly Pro Ala Phe Ala Ala Gly Gly Glu Pro Tyr
              7.0
                       7.5
                                                 80
Ser Gly Ala Ile Arg Tyr Arg Gly Met Leu Arg Ile Ile Gly Thr Phe
                             90
Ile Gly Cys Ile Ala Ala Leu Thr Ile Ile Ile Leu Met Ile Arg Thr
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Pro Leu Leu Met Leu Ile Val Cys Cys Ile Trp Ala Gly Phe Cys Thr 115 120 Trp Val Ser Ser Leu Val Lys Val Glu Asn Ser Tyr Ala Trp Gly Leu 135 140 Ala Gly Tyr Thr Ala Leu Ile Ile Ile Ile Thr Ile Gln Ser Glu Pro 150 155 Leu Leu Ala Pro Gln Phe Ala Val Glu Arg Cys Ser Glu Ile Val Ile 165 170 175 Gly Ile Val Cys Ala Ile Val Ala Asp Leu Leu Phe Ser Pro Arg Ser 185 190 Ile Lys Gln Glu Val Asp Arg Glu Leu Asp Ala Leu Ile Val Ala Gln 195 200 205 Tyr Gln Leu Met Gln Leu Cys Ile Lys His Gly Asp Ser Glu Glu Val 210 215 220 Asp Lys Ala Trp Ser Ala Leu Val Arg Arg Thr Gln Ala Leu Glu Gly 225 230 235 240 Met Arg Ser Asn Leu Asn Met Glu Ser Ser Arg Trp Glu Arg Ala Asn 245 250 255 Arg Arg Leu Lys Ala Ile Asn Thr Val Ser Leu Thr Leu Ile Thr Gln 260 265 270 Ala Cys Glu Thr Tyr Leu Ile Gln Asn Thr Arg Pro Glu Val Val Thr 275 280 285 Asp Thr Phe Arg Glu Leu Phe Asp Glu Pro Val Glu Thr Val Gln Asp 290 295 300 Val His Arg Gln Leu Lys Arg Met Arg Arg Val Ile Ala Trp Thr Gly 305 310 315 Glu Arg Asp Thr Pro Val Thr Ile Tyr Thr Trp Val Gly Ala Ala Thr 325 330 Arg Tyr Leu Leu Lys Arg Gly Val Ile Ser Asn Thr Lys Ile Ser 340 345 Ala Ala Glu Glu Val Leu Gln Gly Glu Val Val Ile Lys Pro Glu 355 360 365 Ser Ala Glu Arg His His Ala Met Val Asn Phe Trp Arg Thr Thr Leu 370 375 380 Ala Cys Ile Leu Gly Thr Leu Phe Trp Leu Trp Thr Gly Trp Thr Ser 385 390 395 Gly Ser Gly Ala Met Val Met Ile Ala Val Val Thr Ala Leu Ala Met 405 410 Arg Leu Pro Asn Pro Arg Met Val Ala Ile Asp Phe Leu Tyr Gly Thr 420 425 430 Ile Ala Ala Leu Pro Ile Gly Ala Leu Tyr Phe Leu Val Ile Ile Pro 435 440 445 Ser Thr Gln Gln Ser Met Leu Leu Leu Cys Ile Ser Leu Ala Val Met 450 455 460 Ala Phe Phe Ile Gly Ile Glu Val Gln Lys Arg Arg Leu Gly Ser Leu 465 470 475 Gly Ala Leu Ala Ser Thr Ile Asn Ile Ile Val Leu Asp Asn Pro Met 485 490 495 Thr Phe His Phe Ser Gln Phe Leu Asp Ser Ala Leu Gly Gln Leu Val 500 505 510 Gly Cys Phe Leu Ala Met Met Val Ile Leu Leu Val Arg Asp Asn Ser 520 525 Gln Ala Arg Thr Gly Arg Val Leu Leu Asn Gln Phe Val Ser Ala Ala 530 535 540 Val Ser Ser Leu Thr Thr Asn Thr Ala Arg Arg Lys Glu Asn His Leu 550 555 Pro Ala Leu Tyr Gln Gln Leu Phe Leu Leu Asn Lys Phe Pro Gly 565 570 575 Asp Val Ala Arg Phe Arg Leu Ala Leu Thr Met Ile Ile Ala His Gln 585 590 580 Arg Leu Arg Asn Ala Pro Val Pro Ile Asn Asp Asp Leu Ser Ala Phe

600 His Arg Gln Leu Arg Arg Thr Ala Asp His Val Ile Ser Ala Ser Ser 615 620 Asp Asp Lys Arg Arg Arg Tyr Phe Lys Gln Leu Leu Glu Glu Leu Asp 630 635 Ile Tyr Gln Glu Lys Leu Arg Ile Trp Glu Ala Pro Pro Gln Val Thr 645 650 655 Glu Pro Val Glu Arg Leu Val Phe Met Leu His Arg Tyr Gln Asn Ala 665 Leu Thr Asp Ser 675 <210> 8059 <211> 321 <212> PRT <213> Enterobacter cloacae <400> 8059 Val Asn His Asn Lys Glu Phe Arg Met Lys Val Ala Val Leu Gly Ala 10 Ala Gly Gly Ile Gly Gln Ala Leu Ala Leu Leu Leu Lys Thr Gln Leu 20 25 Pro Ser Gly Ser Glu Leu Ser Leu Tyr Asp Ile Ala Pro Val Thr Pro 35 40 Gly Val Ala Val Asp Leu Ser His Ile Pro Thr Ala Val Lys Ile Lys 50 55 Gly Phe Ser Gly Glu Asp Ala Arg Pro Ala Leu Gln Gly Ala Asp Val 65 70 75 80 Val Leu Ile Ser Ala Gly Val Ala Arg Lys Pro Gly Met Asp Arg Ser 85 90 95 Asp Leu Phe Asn Val Asn Ala Gly Ile Val Lys Asn Leu Val Gln Gln 100 105 110 Ile Ala Glu Thr Cys Pro Lys Ala Cys Ile Gly Ile Ile Thr Asn Pro 115 120 125 Val Asn Thr Thr Val Ala Ile Ala Ala Glu Val Leu Lys Lys Ala Gly 130 135 140 Val Tyr Asp Lys Asn Lys Leu Phe Gly Val Thr Thr Leu Asp Ile Ile 145 150 155 160 Arg Ser Asn Thr Phe Val Ala Glu Leu Lys Gly Lys Gln Pro Thr Glu 165 170 175 Val Glu Val Pro Val Ile Gly Gly His Ser Gly Val Thr Ile Leu Pro 180 185 190 Leu Leu Ser Gln Ile Pro Gly Val Ser Phe Thr Glu Gln Glu Val Ala 200 205 Asp Leu Thr Lys Arg Ile Gln Asn Ala Gly Thr Glu Val Val Glu Ala 210 215 220 Lys Ala Gly Gly Gly Ser Ala Thr Leu Ser Met Gly Gln Ala Ala Ala 225 230 235 Arg Phe Gly Leu Ser Leu Val Arg Ala Leu Gln Gly Glu Lys Gly Val 245 250 255 Val Glu Cys Ala Tyr Val Glu Gly Asp Gly Glu His Ala Arg Phe Phe 260 265 270 Ser Gln Pro Leu Leu Gly Lys Asn Gly Val Glu Glu Arg Lys Ser 275 280 Ile Gly Thr Leu Ser Ala Phe Glu Gln Asn Ala Met Glu Gly Met Leu 290 295 300 Asp Thr Leu Lys Lys Asp Ile Thr Leu Gly Glu Glu Phe Val Asn Lys

310

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<213> Enterobacter cloacae
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Ile Leu Ala Val Leu Val Ala Leu Gly Val Ile Ile Ala Asp Ser Arg
       20
                       2.5
                                       3.0
Leu Gly Thr Phe Ser Gln Ile Arg Thr Tyr Met Asp Thr Ala Val Ser
                    4.0
                              45
Pro Phe Tyr Phe Ile Ser Asn Gly Pro Arg Glu Leu Leu Asp Ser Val
             55
                      60
Ser Gln Thr Leu Ser Ser Arg Asp Gln Leu Glu Leu Glu Asn Arg Ala
          70 75
Leu Arg Gln Glu Leu Leu Leu Lys Asn Ser Glu Leu Leu Met Leu Gly
       85 90
Gln Tyr Lys Gln Glu Asn Ala Arg Leu Arg Glu Leu Leu Gly Ser Pro
   100 105 110
Leu Arg Gln Asp Glu Gln Lys Met Val Thr Gln Val Ile Ser Thr Val
 115 120 125
Asn Asp Pro Tyr Ser Asp Gln Val Val Ile Asp Lys Gly Ser Val Asn
 130 135 140
Gly Val Tyr Glu Gly Gln Pro Val Ile Ser Asp Lys Gly Val Val Gly
145 150 155
Gln Val Val Ala Val Ala Lys Leu Thr Ser Arg Val Leu Leu Ile Cys
      165 170
                              175
Asp Ala Thr His Ala Leu Pro Ile Gln Val Leu Arg Asn Asp Ile Arg
      180 185 190
Val Ile Ala Ala Gly Asn Gly Cys Thr Asp Asp Leu Gln Leu Glu His
 195
                    200 205
Leu Pro Ala Asn Thr Asp Ile Arg Val Gly Asp Val Leu Val Thr Ser
210 215
                                220
Gly Leu Gly Gly Arg Phe Pro Glu Gly Tyr Pro Val Ala Val Val Ser
225 230
                            235
Ser Val Lys Leu Asp Thr Gln Arg Ala Tyr Thr Val Ile Gln Ala Arg
         245 250
Pro Thr Ala Gly Leu Gln Arg Leu Arg Tyr Leu Leu Leu Trp Gly
        260 265
Ala Asp Arg Asn Gly Ala Asn Pro Met Thr Pro Glu Asp Val His Arg
 275 280
                                   285
Val Ala Asn Glu Arg Leu Met Gln Met Met Pro Gln Val Leu Pro Ala
 290 295
                                300
Pro Asp Ala Met Gly Pro Pro Ala Pro Val Pro Ala Pro Ala Thr Gly
305 310 315 320
Leu Thr Gln Pro Leu Pro Asp Ala Pro Pro Pro Pro Gln Val Ser Gly
           325
                          330
Gly Gly Gln
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<212> PRT
<213> Enterobacter cloacae
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                        10
                                         15
Leu Leu Val Asn Val Thr Pro Ser Glu Thr Arg Val Ala Tyr Ile Asp
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Gly Gly Ile Leu Gln Glu Ile His Ile Glu Arg Glu Ala Arg Arg Gly Ile Val Gly Asn Ile Tyr Lys Gly Arg Val Ser Arg Val Leu Pro Gly Met Gln Ala Ala Phe Val Asp Ile Gly Leu Asp Lys Ala Ala Phe Leu His Ala Ser Asp Ile Met Pro His Thr Glu Cys Val Ala Gly Glu Glu 8.5 90 Gln Lys Gln Phe Ala Val Arg Asp Ile Ser Glu Leu Val Arg Gln Gly 100 105 110 Gln Asp Leu Met Val Gln Val Val Lys Asp Pro Leu Gly Thr Lys Gly 115 120 125 Ala Arg Leu Thr Thr Asp Ile Thr Leu Pro Ser Arg Tyr Leu Val Phe 130 135 140 Met Pro Gly Ala Ser His Val Gly Val Ser Gln Arg Ile Glu Ser Glu 145 150 160Ser Glu Arg Glu Arg Leu Lys Lys Val Val Ser Ala Tyr Cys Asp Glu 165 170 175 Gln Gly Gly Phe Ile Ile Arg Thr Ala Ala Glu Gly Ile Ser Glu Glu 180 185 Asp Leu Ala Ser Asp Ala Ala Tyr Leu Lys Arg Val Trp Thr Lys Val 195 200 205 Met Glu Arg Lys Lys Arg Asn Gln Thr Arg Tyr Arg Leu Tyr Gly Glu 210 215 220 Leu Ala Leu Ala Gln Arg Val Leu Arg Asp Phe Ala Asp Ala Gln Leu 230 235 Asp Arg Ile Arg Val Asp Ser Arg Leu Thr Tyr Glu Ala Leu Leu Glu 245 250 255 Phe Thr Ala Glu Tyr Ile Pro Glu Met Pro Gly Leu Leu Glu His Tyr 260 265 270 Thr Gly Arg Gln Pro Ile Phe Asp Leu Tyr Asp Val Glu Asn Glu Ile 275 280 285 Gln Arg Ala Leu Glu Arg Lys Val Glu Leu Lys Ser Gly Gly Tyr Leu 290 295 300 Ile Ile Asp Gln Thr Glu Ala Met Thr Thr Val Asp Ile Asn Thr Gly 305 310 315 320 Ala Phe Val Gly His Arg Asn Leu Asp Asp Thr Ile Phe Asn Thr Asn 325 330 335 Ile Glu Ala Thr Gln Ala Ile Ala Arg Gln Leu Arg Leu Arg Asn Leu 340 345 350 Gly Gly Ile Ile Ile Asp Phe Ile Asp Met Asn Asn Glu Asp His 360 365 Arg Arg Arg Val Leu His Ser Leu Glu Gln Ala Leu Ser Lys Asp Arg 375 380 Val Lys Thr Ser Ile Asn Gly Phe Ser Gln Leu Gly Leu Val Glu Met 390 395 Thr Arg Lys Arg Thr Arg Glu Ser Val Glu His Val Leu Cys Asn Glu 405 410 Cys Pro Thr Cys His Gly Arg Gly Thr Val Lys Thr Val Glu Thr Val 420 425 430 Cys Tyr Glu Ile Met Arg Glu Ile Val Arg Val His His Ala Tyr Asp 440 445 Ser Asp Arg Phe Leu Val Tyr Ala Ser Pro Ala Val Ala Glu Ala Leu 450 455 460 Lys Gly Glu Glu Ser His Ala Leu Ala Glu Val Glu Ile Phe Val Gly 465 470 475 Lys Gln Val Lys Val Gln Ile Glu Pro Leu Tyr Asn Gln Glu Gln Phe 485 490 Asp Val Val Met Met

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<210> 8062
<211> 1283
<212> PRT
<213> Ente
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<213> Enterobacter cloacae

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Glu Gly Ser Val Glu Asn Gly Arg Leu Thr Ala Glu Met Gln Asp Ala

440 445 Lys Met Pro Tyr Glu Thr Val Phe Arg Ala Pro Leu Glu Ile Glu Lys 455 460 Gly Asn Ala Thr Leu Asn Trp Leu Lys Asn Asp Lys Gly Phe Gln Leu 470 475 Asp Gly Arg Asp Ile Asp Val Lys Ala Lys Ala Val His Ala Arg Gly 485 490 495 Asn Phe Arg Tyr Leu Gin Pro Glu Gly Asp Glu Pro Trp Leu Gly Ile 500 505 510 Leu Ala Gly Ile Ser Thr Asp Asp Gly Ser Gln Ala Trp Arg Tyr Phe 515 520 525 Pro Glu Asn Leu Met Gly Lys Ala Leu Val Asp Tyr Leu Ser Gly Ala 530 535 540 Ile Gln Gly Gly Gln Ala Asp Asn Ala Thr Leu Val Tyr Gly Gly Asn 545 550 555 Pro His Leu Phe Pro Tyr Lys His Asn Glu Gly Gln Phe Gln Val Leu 565 570 575 Val Pro Leu Arg Asn Ala Thr Tyr Ala Phe Gln Pro Asp Trp Pro Ala 580 585 590 Leu Lys Asn Leu Asp Ile Glu Leu Asn Phe Leu Asn Asp Gly Leu Trp 595 600 605 Met Lys Thr Asp Ser Val Ala Leu Gly Gly Val Thr Ala Ser Asn Leu 610 615 Thr Ala Asn Ile Pro Asp Tyr Ser Lys Glu Lys Leu Leu Ile Asp Ala 625 630 635 Asp Ile Lys Gly Pro Gly Lys Ala Val Gly Pro Tyr Phe Glu Asp Thr 645 650 655 Pro Leu Asn Asp Ser Leu Ala Ala Thr Leu Gln Gln Leu Gln Leu Asp 660 665 Gly Asp Val Asn Ala Arg Leu His Leu Asp Ile Pro Leu Asp Gly Glu 675 680 685 Leu Thr Thr Ala Lys Gly Asp Val Arg Leu Asn Asn Asn Ser Leu Tyr 690 695 700 Ile Lys Pro Leu Asp Ser Thr Leu Lys Asn Leu Ser Gly Gln Phe Ser 705 710 715 Phe Val Asn Gly Thr Leu Lys Ser Glu Pro Leu Lys Ala Thr Trp Phe 725 730 735 Asn Gln Pro Val Asn Ile Asp Phe Ser Thr Thr Glu Gly Asp Lys Ala 740 745 750 Tyr Gln Val Ala Val Asn Met Asp Ala Asn Trp Gln Pro Ser Arg Met 760 765 Asp Val Leu Pro Lys Pro Ile Glu Asn Ala Val Asp Gly Ala Val Ser 775 780 Trp Asn Gly Lys Val Ala Ile Asp Leu Pro Tyr His Ala Gly Ala Arg 785 790 795 Tyr Asn Val Asp Ile Thr Gly Asp Leu Lys Asn Leu Ser Ser Gln Leu 805 810 Pro Ala Pro Leu Asn Lys Lys Ser Gly Glu Ala Leu Pro Val Asn Val 820 825 830 Lys Val Ala Gly Asn Leu Asn Ser Phe Asp Leu Thr Gly Asn Ala Gly 835 840 845 Gly Thr Asn His Phe Asn Ser Arg Trp Leu Leu Asn Arg Lys Leu Thr 850 855 Leu Asp Arg Ala Ile Trp Thr Thr Asp Ser Arg Thr Thr Pro Pro Leu 870 875 Pro Glu Gln Ala Gly Val Glu Leu Asn Leu Pro Ser Met Asp Gly Ala 885 890 Glu Trp Leu Ala Leu Phe Gln Lys Gly Val Gly Gln Asn Val Asp Gln 905 Thr Ala Gln Phe Pro Gln Ser Ile Thr Leu Arg Thr Pro Ala Leu Thr 915 920

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Leu Gly Gly Gln Gln Trp Asn Asn Leu Ser Ile Val Ser Arg Pro Thr
                 935
Val Asn Gly Ser Lys Val Glu Ala Gln Gly Arg Glu Ile Asn Gly Ser
         950 955
945
Leu Ile Met Arg Asp His Ala Pro Trp Gln Ala Ala Ile Arg Tyr Leu
           965 970 975
Tyr Tyr Asn Pro Thr Phe Thr Ala Ser Lys Ala Glu Ser Thr Ser Thr
       980 985 990
Ser Pro Val Ser Gly Ser Gly Thr Ser Arg Val Asp Phe Ser Gly Trp
   995 1000 1005
Pro Asp Leu Gln Leu Arg Cys Ala Glu Cys Trp Leu Trp Gly Gln Lys 1010 1015 1020
Tyr Gly Arg Ile Asp Gly Asp Phe Ala Ile Gln Gly Asn Thr Leu Ser
1025 1030 1035 1040
Leu Ser Gly Gly Leu Val Asp Thr Gly Phe Gly Arg Met Thr Ala Ala
1045 1050 1055
Gly Glu Trp Val Asn Lys Pro Gly Glu Gln Arg Thr Ser Leu Lys Gly
   1060 1065 1070
Asp Ile Lys Gly Asn Lys Leu Asp Ala Ala Ala Asn Phe Phe Gly Ile
1075 1080 1085
Ser Thr Pro Leu Arg Gly Ser Ser Phe Asp Val Asn Tyr Asp Leu His
1090 1095 1100
Trp Arg Ala Ala Pro Trp Thr Pro Asp Glu Ala Ser Leu Asn Gly Ile
1105 1110 1115 1120
Leu Lys Thr Asn Phe Gly Lys Gly Glu Ile Ala Asp Val Ser Thr Gly
     1125 1130 1135
Arg Ala Gly Gln Ile Leu Arg Leu Leu Ser Phe Asp Ala Leu Leu Arg
       1140 1145 1150
Lys Leu Arg Phe Asp Phe Ser Asp Thr Phe Ser Glu Gly Phe Tyr Tyr
1155 1160 1165
Asp Ser Ile Arg Ser Thr Ala Trp Ile Lys Asp Gly Val Leu His Thr
1170 1175 1180
Asp Asp Thr Leu Val Asp Gly Leu Glu Ala Asp Ile Ala Met Lys Gly
1185 1190 1195 1200
Ser Val Asn Leu Val Arg Arg Glu Leu Asp Met Glu Ala Val Val Ala
          1205 1210 1215
Pro Glu Ile Ser Ala Ser Val Gly Val Ala Ala Ala Phe Val Val Asn
        1220 1225 1230
Pro Ile Val Gly Ala Ala Val Phe Ala Ala Ser Lys Val Leu Gly Pro
    1235 1240 1245
Leu Trp Ser Lys Val Ser Ile Leu Arg Tyr Arg Ile Thr Gly Pro Val
 1250 1255 1260
Asp Lys Pro Gln Ile Asn Glu Val Leu Arg Gln Pro Arg Lys Glu Ala
            1270
                             1275
Pro Gln
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<211> 320
<212> PRT
<213> Enterobacter cloacae
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Gly Leu Ile Thr Ala Val Asn Val His Asp Asn Gln Leu Val Lys Lys
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Asp Gln Val Leu Phe Thr Ile Asp Gln Pro Arg Tyr Gln Lys Ala Leu
Glu Glu Ala Glu Ala Asp Val Ala Tyr Tyr Asn Ala Leu Ala Ser Glu
        100
                        105
Lys Arg Arg Glu Ala Gly Arg Arg Asn Lys Leu Gly Ile Gln Ala Met
   115
                                   125
Ser Arg Glu Glu Ile Asp Gln Ser Asn Asn Val Leu Gln Thr Val Leu
      135 140
 130
His Gln Leu Ala Lys Ala Gln Ala Thr Arg Asp Leu Ala Lys Leu Asp
    150 155 160
Leu Glu Arg Thr Val Ile Arg Ala Pro Ser Asp Gly Trp Val Thr Asn
         165 170 175
Leu Asn Val Tyr Ala Gly Glu Phe Ile Thr Arg Gly Ser Thr Ala Val
   180 185 190
Ala Leu Val Lys Gln Asn Ser Phe Tyr Val Leu Ala Tyr Met Glu Glu
                        205
 195 200
Thr Lys Leu Glu Gly Val Arg Pro Gly Tyr Arg Ala Glu Ile Thr Pro
 210 215 220
Leu Gly Ser Asn Arg Val Leu Lys Gly Thr Val Asp Ser Val Ala Ala
225 230 235 240
Gly Val Thr Asn Ser Ser Ser Thr Asn Asp Ser Lys Gly Met Ala Thr 245 \\ 255 \\ 250 \\ 255
Val Asp Ser Asn Leu Glu Trp Val Arg Leu Ala Gln Arg Val Pro Val
 260 265 270
Arg Ile Arg Leu Asp Glu Gln Gln Ser Asn Leu Trp Pro Ala Gly Thr
275 280 285
Thr Ala Thr Val Val Ile Thr Gly Glu Lys Asp Arg Asp Ala Ser Gln
290 295 300
Asp Ser Ile Phe Arg Gln Ile Ala His Arg Leu Arg Glu Phe Gly
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<211> 661 <212> PRT <213> Enterobacter cloacae

<400> 8064

<210> 8064

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Ser Gly Gln Glu Leu Leu Glu Thr Arg Ser Val Arg Ile Leu Asn Gly 180 185 Glu Arg Gly Pro Gln Val Arg Gly Ser Val Tyr Glu Trp Pro Ser Arg 200 195 Thr Ser Ser Ala Leu Asp Val Leu Leu Ser Glu Ile Gln Phe Ala Ser 215 220 Asp Gln Arg Ser Arg Met Asp Thr Leu Ile Arg Ser Tyr Ala Ala Gln 230 235 Asp Asn Lys Thr Gly Leu Asn Asn Arg Leu Phe Phe Asp Asn Gln Leu 245 250 Ala Thr Leu Leu Asp Asp Pro Glu Lys Val Gly Thr His Gly Val Val 260 265 270 Met Met Ile Arg Leu Pro Asp Phe Asp Leu Leu Arg Asp Thr Trp Gly 275 280 285 Gln Arg Val Ala Glu Glu Asn Leu Phe Thr Leu Ile Asn Leu Leu Ser 290 295 300 Thr Phe Ile Met Arg Tyr Pro Gly Ala Leu Leu Ala Arg Tyr His Arg 305 310 315 Ser Asp Phe Ala Val Leu Leu Pro His Arg Thr Leu Lys Glu Ser Glu 325 330 335 Ser Ile Ala Ser Gln Leu Leu Lys Ala Val Asp Ala Leu Pro Gln Ser 340 345 350 Lys Met Leu Asp Arg Asp Asp Met Val His Ile Gly Ile Cys Ala Trp 355 360 365 Arg Gly Gly Gln Ser Thr Glu Gln Val Met Glu His Ala Glu Ala Ala 370 375 380 Thr Arg Asn Ala Val Leu Gln Gly Ala Asn Gly Trp Ala Val Tyr Asp 385 390 395 Asp Thr Leu Pro Glu Lys Gly Arg Gly Asn Val Arg Trp Arg Thr Leu 405 410 415 Ile Glu Gln Met Leu Ser Arg Gly Gly Pro Arg Ile Tyr Gln Lys Pro 420 425 430 Ala Val Met Lys Ser Gly His Val His His Arg Glu Leu Met Cys Arg 435 440 Ile Phe Asp Gly Thr Glu Glu Val Ile Ser Ala Glu Tyr Leu Pro Met 450 455 460 Val Leu Gln Phe Gly Leu Ser Glu Glu Tyr Asp Arg Gln Gln Ile Thr 465 470 475 Arg Leu Ile Pro Phe Leu Ser Tyr Trp Pro Glu Glu Asn Leu Ala Leu 485 490 495 Gln Val Thr Val Glu Ser Leu Ile Arg Pro Arg Phe Gln Arg Trp Leu 500 505 Arg Asp Thr Leu Met Gln Cys Glu Lys Ser Gln Arg Lys Arg Ile Ile 515 520 Phe Glu Leu Ala Glu Ala Asp Val Gly Gln His Ile Ser Arg Leu Arg 535 540 Pro Val Val Arg Leu Ile Asn Ala Leu Gly Ala Arg Val Ala Val Thr 545 550 555 Gln Ala Gly Leu Thr Leu Val Ser Thr Ser Trp Ile Lys Glu Leu Asp 565 570 575 Val Glu Leu Leu Lys Leu His Pro Gly Leu Val Arg Asn Ile Glu Lys 580 585 590 Arg Thr Glu Asn Gln Leu Leu Val Gln Ser Leu Val Glu Ala Cys Lys 600 605 Gly Thr Gln Thr Gln Val Phe Ala Thr Gly Val Arg Ser Arg Ser Glu 615 620 Trp Gln Met Leu Thr Glu Arg Gly Val Thr Gly Gly Gln Gly Asp Phe 625 630 635 Phe Ala Ala Ser Gln Pro Leu Asp Thr Asn Val Lys Lys Tyr Leu Gln 650 Arg Tyr Ser Val

<211> 558

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<211> 390
<212> PRT
<213> Enterobacter cloacae
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 20 25
Pro Pro Gln Leu Ser Gly Leu Ser Leu Ser Met Leu Lys Lys Phe Arg
35 40 45
Gly Met Phe Ser Asn Asp Leu Ser Ile Asp Leu Gly Thr Ala Asn Thr
 50 55
Leu Ile Tyr Val Lys Gly Gln Gly Ile Val Leu Asn Glu Pro Ser Val 65 70 75 80
Val Ala Ile Arg Gln Asp Arg Ala Gly Ser Pro Lys Ser Val Ala Ala
      85 90
Val Gly His Asp Ala Lys Gln Met Leu Gly Arg Thr Pro Gly Asn Ile
       100 105 110
Ala Ala Ile Arg Pro Met Lys Asp Gly Val Ile Ala Asp Phe Phe Val
 115
                           125
                    120
Thr Glu Lys Met Leu Gln His Phe Ile Lys Gln Val His Ser Asn Ser
130 135
                                 140
Phe Met Arg Pro Ser Pro Arg Val Leu Val Cys Val Pro Val Gly Ala
145 150 155
                                             160
Thr Gln Val Glu Arg Arg Ala Ile Arg Glu Ser Ala Gln Gly Ala Gly
           165 170 175
Ala Arg Glu Val Phe Leu Ile Glu Glu Pro Met Ala Ala Ala Ile Gly
       180 185 190
Ala Gly Leu Pro Val Ser Glu Ala Thr Gly Ser Met Val Val Asp Ile
195
                    200
                                   205
Gly Gly Gly Thr Thr Glu Val Ala Val Ile Ser Leu Asn Gly Val Val
 210
               215
                                220
Tyr Ser Ser Ser Val Arg Ile Gly Gly Asp Arg Phe Asp Glu Ala Ile
225 230
                             235
Ile Asn Tyr Val Arg Arg Asn Tyr Gly Ser Leu Ile Gly Glu Ala Thr
           245
                          250
Ala Glu Arg Ile Lys His Glu Ile Gly Ser Ala Tyr Pro Gly Asp Glu
        260
                       265
                                      270
Val Arg Glu Ile Glu Val Arg Gly Arg Asn Leu Ala Glu Gly Val Pro
 275 280
                                    285
Arg Gly Phe Thr Leu Asn Ser Asn Glu Ile Leu Glu Ala Leu Gln Glu
 290 295
                                 300
Pro Leu Thr Gly Ile Val Ser Ala Val Met Val Ala Leu Glu Gln Cys
              310
                              315
Pro Pro Glu Leu Ala Ser Asp Ile Ser Glu Arg Gly Met Val Leu Thr
           325
                           330
Gly Gly Gly Ala Leu Leu Arg Asn Leu Asp Arg Leu Leu Met Glu Glu
         340
                       345
Thr Gly Ile Pro Val Val Val Ala Glu Asp Pro Leu Thr Cys Val Ala
     355
                    360 365
Arg Gly Gly Lys Ala Leu Glu Met Ile Asp Met His Gly Gly Asp
 370
                 375
                                 380
Leu Phe Ser Glu Glu
               390
385
<210> 8066
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<212> PRT <213> Enterobacter cloacae

<400> 8066 Ala Thr Ala Gly Gly Ala Gly Tyr Leu Pro Gly Glu Thr Ala Asp Leu 10 Gly Ser Ala Ala Ala Gly Tyr Arg Ala Gly Arg Ala Ala Gly Val Tyr 20 25 Ala Ala Pro Leu Pro Glu Cys Ala Asp Arg Gln Leu Thr Lys Arg Lys 35 40 45 Pro Thr Pro Lys Ala Ser Val Phe Leu Trp Leu Tyr Leu Phe Leu Gln 55 Val Gln Thr Phe Arg Lys Gly Gly His Met Thr Thr Gln Ala Leu Gln 65 70 75 Asp Ser Ile Leu Phe Gln Thr Gly Tyr Leu Val Asn Gly Ile Trp Lys 85 90 Thr Leu Asp Thr Thr Phe Asp Val Leu Asn Pro Ala Thr Gly Glu Val 100 105 110 Ile Ala Lys Val Ala Lys Ala Gly Lys Ala Glu Thr Glu Glu Ala Ile 115 120 Val Ala Ala Thr Lys Ala Phe Pro Ala Trp Arq Ala Lys Thr Ala Lys 130 135 140 Glu Arg Ser Ala Ile Leu Tyr Arg Trp Tyr Glu Leu Ile Ile Glu Asn 150 155 160 Lys Ser Trp Leu Gly Arg Leu Met Thr Thr Glu Gln Gly Lys Pro Leu 165 170 Lys Glu Ala Glu Gly Glu Val Asp Tyr Ala Ala Ser Phe Ile Gln Trp 180 185 190 Phe Ala Glu Gln Ala Lys Arg Ala Asn Gly Glu Ile Ile Pro Pro Val 195 200 205 Lys Pro Gly Ser Arg Ile Leu Ala Thr Arg Glu Pro Val Gly Val Val 215 220 Ala Ala Ile Thr Pro Trp Asn Phe Pro Met Ala Met Leu Thr Arg Lys 225 230 235 240 Leu Gly Pro Ala Leu Ala Ala Gly Cys Thr Gly Val Ile Lys Pro Ala 245 250 255 Asn Asn Thr Pro Leu Ser Ala Phe Ala Leu Leu Thr Leu Ala Lys Gln 260 265 270 Ala Gly Val Pro Asp Gly Val Leu Asn Ala Val Ala Gly Ser Thr Ser 275 280 285 Glu Ile Ser Asp Ala Ile Met Ala Ser His Asp Val Arg Lys Ile Ser 290 295 300 Phe Thr Gly Ser Thr Ala Val Gly Lys Thr Leu Val Arg Asn Ser Ala 310 315 Glu Thr Met Lys Lys Val Ser Met Glu Leu Gly Gly Asn Ala Pro Tyr 325 330 Ile Val Phe Glu Asp Ala Asp Ile Asp Ala Ala Val Lys Gly Ala Ile 340 345 350 Ala Asn Lys Phe Arg Asn Ala Gly Gln Val Cys Val Ser Val Asn Arg 355 360 365 Phe Tyr Ile Gln Glu Thr Val Tyr Asp Lys Phe Val Asn Gln Leu Ala 375 380 Asp Ala Val Lys Ala Leu Lys Val Gly Asn Gly Leu Asp Glu Gly Val 390 395 Val Val Gly Pro Leu Ile Glu Pro Ser Ala Val Glu Lys Val Arg Glu 405 410 415 His Val Glu Asp Ala Val Ala Lys Gly Ala Thr Val Leu Ala Gly Gly 420 425 Lys Pro His Glu Leu Gly Gly Asn Phe Trp Met Pro Thr Val Leu Gly 440

Asp Cys His Glu Gly Met Lys Leu Ala Glu Glu Glu Thr Phe Gly Pro

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455
Val Ala Ala Cys Phe Arg Phe Thr Ser Glu Asp Glu Val Val Met Arg
                 470
                                   475
Ala Asn Asn Thr Pro Tyr Gly Leu Ala Ala Tyr Phe Tyr Thr Gln Asn
              485
                                 490
                                                     495
Leu Ser Arg Val Phe Arg Val Ser Gln Ala Ile Glu Ser Gly Met Ile
          500
                          505
Gly Ile Asn Glu Cys Ala Val Ser Thr Glu Leu Gly Pro Phe Gly Gly
     515
                                   525
Val Lys Glu Ser Gly Leu Gly Arg Glu Gly Ser Val Leu Gly Leu Glu
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                  535
                                   540
Glu Phe Leu Glu Val Lys Thr Leu His Ile Gly Gly Leu
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<213> Enterobacter cloacae
<400> 8067
Thr Gly Arg His Leu Pro Pro Ala Cys Thr Gly Trp Leu Ala Met Lys
                                 1.0
Ile Tyr Thr Phe Asp Phe Asp Glu Ile Glu Ser Gln Glu Asp Phe Tyr
                      2.5
Arg Glu Phe Ile Arg Ala Phe Asp Leu Glu Arg Gly Ser Val Ser Asn
                   4.0
Leu Asp Met Leu Trp Asp Val Val Thr Gly Asp Arg Leu Pro Leu Pro
                    5.5
Leu Glu Ile Glu Phe Thr His Leu Pro Glu Lys Leu Arg Arg Phe
                70 75
Gly Ala Leu Ile Leu Leu Phe Asp Glu Ala Glu Glu Glu Leu Glu Gly
              85
Gln Leu Arg Phe Asn Val Arg Gln
<210> 8068
<211> 375
<212> PRT
<213> Enterobacter cloacae
<400> 8068
Cys Pro Asp Asn Ser Cys Tyr Ala Ala Asn Arg Ser Phe Phe Asn Asp
                                 10
Thr Arg Ile Met Leu Leu Lys Leu Phe Arg Ser Ile Val Ile Gly Leu
           20
Ile Val Ala Gly Leu Leu Leu Val Ala Met Pro Ser Leu Arg Gln Phe
                          4.0
Asn Lys Leu Ser Ala Pro Gln Phe Asp Ser Thr Asp Glu Thr Pro Ala
 50
                      55
Thr Tyr Asn Gln Ala Val Arg Arg Ala Ala Pro Ala Val Val Asn Val
                 70
                                     75
Tyr Asn Arg Gly Leu Asn Ser Ser Ala His Asn Gln Leu Glu Ile Arg
                                  90
Thr Leu Gly Ser Gly Val Ile Met Asp Asp Arg Gly Tyr Ile Ile Thr
                              105
                                         110
           100
Asn Lys His Val Ile Asn Asp Ala Asp Gln Ile Ile Val Ala Leu Gln
                          120
                                             125
Asp Gly Arg Val Phe Glu Ala Leu Leu Val Gly Ser Asp Ser Leu Thr
  130
                      135
                                         140
Asp Leu Ala Val Leu Lys Ile Asn Ala Thr Gly Gly Leu Pro Thr Ile
145
                  150
                                     155
```

```
Pro Ile Asn Arg Lys Arg Thr Pro His Ile Gly Asp Val Val Leu Ala
                170
        165
Ile Gly Asn Pro Tyr Asn Leu Gly Gln Thr Ile Thr Gln Gly Ile Ile
                      185
                                     190
      180
Ser Ala Thr Gly Arg Ile Gly Leu Asn Pro Ser Gly Arg Gln Asn Phe
     195
                   200
                                 205
Leu Gln Thr Asp Ala Ser Ile Asn His Gly Asn Ser Gly Gly Ala Leu
                215 220
Val Asn Ser Leu Gly Glu Leu Met Gly Ile Asn Thr Leu Ser Phe Asp
225 230 235
Lys Ser Asn Asp Gly Glu Thr Pro Glu Gly Ile Gly Phe Ala Ile Pro
     245 250 255
Phe Gln Leu Ala Thr Lys Ile Met Asp Lys Leu Ile Arg Asp Gly Arg
   260 265 270
Val Ile Arg Gly Tyr Ile Gly Ile Gly Gly Arg Glu Ile Ala Pro Met
 275 280 285
His Thr Gln Gly Gly Gly Ile Asp Gln Ile Gln Gly Ile Val Val Asn
 290 295 300
Glu Val Ala Pro Gly Gly Pro Ala Ala Asn Ala Gly Ile Gln Val Asn
305 310 315 320
Asp Val Ile Leu Ser Val Asn Gly Thr Pro Ala Val Ser Ala Leu Glu
   325 330 335
Thr Met Asp Gln Val Ala Glu Ile Arg Pro Gly Ser Ile Ile Pro Val
 340 345 350
Glu Val Met Arg Asn Asp Lys Lys Leu Thr Ile Gln Val Thr Ile Gln
355 360
Glu Tyr Pro Ala Thr Asn
370 375
```

<212> PRT <213> Enterobacter cloacae

<210> 8069

<211> 354

<400> 8069 His Ile Arg Ala Asn Pro Pro Pro Pro Ser Cys Leu Glu Lys Arg Leu 10 Thr Glu Asp Ala Met Lys Thr Arg Lys Leu Thr Glu Ala Asp Val Thr 20 25 30 Ser Glu Ser Val Phe Met Leu Gln Arg Arg Gln Ile Leu Lys Met Leu 35 40 4.5 Gly Ile Ser Ala Thr Ala Leu Thr Leu Thr Pro Ala Ala His Ala Asp 55 Leu Leu Asp Trp Phe Lys Gly Asn Asp Arg Pro Lys Ala Pro Ser Gly 75 Ala Pro Leu Asp Phe Thr Lys Pro Ala Gln Trp Gln Asn Lys Leu Thr 90 85 Leu Thr Pro Glu Asp Lys Val Thr Gly Tyr Asn Asn Phe Tyr Glu Phe 100 105 110 Gly Leu Asp Lys Ala Asp Pro Ala Ala Asn Ala Gly Ser Met Lys Thr 115 120 125 Asp Pro Trp Thr Leu Lys Ile Asp Gly Glu Val Ala Lys Pro Val Thr 130 135 140 Leu Asp His His Asp Leu Thr Thr Arg Phe Pro Leu Glu Glu Arg Ile 150 155 160 145 Tyr Arg Met Arg Cys Val Glu Ala Trp Ser Met Val Val Pro Trp Val 165 170 175 Gly Phe Pro Leu His Lys Leu Leu Ala Leu Val Glu Pro Thr Ser Asn 180 185 190 Ala Lys Tyr Val Ser Phe Gln Thr Arg Tyr Ala Pro Asp Glu Met Pro 195 200

Gly Gln Lys Asp Arg Phe Ile Gly Gly Gly Leu Glu Tyr Pro Tyr Val 215 Glu Gly Leu Arg Leu Asp Glu Ala Met His Pro Leu Thr Leu Leu Thr 230 235 Val Gly Val Tyr Gly Lys Ala Leu Pro Pro Gln Asn Gly Ala Pro Ile 245 250 255 Arg Leu Thr Val Pro Trp Lys Tyr Gly Phe Lys Gly Ile Lys Ser Ile 260 265 Val Ser Ile Lys Leu Thr Arg Glu Arg Pro Pro Thr Thr Trp Asn Leu 275 280 285 Ala Ala Pro Asp Glu Tyr Gly Phe Phe Ala Asn Val Asn Pro His Val 290 295 300 Asp His Pro Arg Trp Ser Gln Ala Thr Glu Arg Phe Ile Gly Ser Gly 320 305 310 315 Gly Ala Leu Asp Val Lys Arg Gln Pro Thr Leu Leu Phe Asn Gly Tyr 325 330 335 Ala Asp Glu Val Ala Ser Leu Tyr Arg Gly Leu Asn Leu Arg Glu Asn 345 Phe

<210> 8070 <211> 81 <212> PRT

Lys

<213> Enterobacter cloacae

<210> 8071 <211> 475 <212> PRT <213> Enterobacter cloacae

<400> 8071 His Gln Asp Val Phe Gly Ala Val Leu Phe His Ser Arg Ile Arg Glu Ser Ala Ser Met Lys Lys Lys Asn Gln Leu Leu Ser Ala Leu Ala Leu 25 30 20 Ser Val Gly Leu Ser Leu Ser Ala Ser Phe Pro Ala Ser Ala Ala Leu 45 35 4.0 Pro Ser Gln Val Pro Gly Gln Glu Ala Ile Pro Ser Leu Ala Pro Met 55 60 50 Leu Glu Lys Val Leu Pro Ala Val Val Ser Val Gln Val Glu Gly Thr 75 70 Ala Arg Gln Ser Gln Arg Ile Pro Glu Glu Leu Lys Lys Tyr Phe Gly 90 85 Glu Asp Ala Pro Asp Gln Gln Ala Gln Pro Phe Glu Gly Leu Gly Ser 110 105 Gly Val Ile Ile Asp Ala Ala Lys Gly Tyr Ile Leu Thr Asn Asn His

```
120
Val Ile Ser Gln Ala Asp Lys Ile Ser Val Gln Leu Asn Asp Gly Arg
           135
                           140
Glu Phe Asp Ala Lys Leu Ile Gly Gly Asp Asp Gln Ser Asp Ile Ala
         150
                   155
Leu Leu Gln Val Gln Asn Pro Ser Asn Leu Thr Gln Ile Ala Ile Ala
         165 170
Asp Ser Asp Lys Leu Arg Val Gly Asp Phe Ala Val Ala Val Gly Asn
      180 185 190
Pro Phe Gly Leu Gly Gln Thr Ala Thr Ser Gly Ile Val Ser Ala Leu
 195 200 205
Gly Arg Ser Gly Leu Asn Leu Glu Gly Leu Glu Asn Phe Ile Gln Thr
 210 215 220
Asp Ala Ser Ile Asn Arg Gly Asn Ser Gly Gly Ala Leu Leu Asn Leu
    230 235 240
Asn Gly Glu Leu Ile Gly Ile Asn Thr Ala Ile Leu Ala Pro Gly Gly
         245 250 255
Gly Ser Ile Gly Ile Gly Phe Ala Ile Pro Ser Asn Met Ala Lys Thr
            265 270
        260
Leu Ser Gln Gln Leu Ile Gln Phe Gly Glu Val Lys Arg Gly Leu Leu
     275 280
                                 285
Gly Ile Lys Gly Met Glu Met Ser Ala Asp Ile Ala Lys Ala Phe Lys
      295 300
Leu Asn Val Gln Arg Gly Ala Phe Val Ser Glu Val Leu Pro Asn Ser
      310 315 320
Gly Ser Ala Lys Ala Gly Val Lys Ser Gly Asp Val Ile Val Ser Leu
           325 330 335
Asn Asp Lys Pro Leu Ser Ser Phe Ala Glu Leu Arg Ser Arg Ile Ala
        340 345 350
Thr Thr Glu Pro Gly Ala Lys Val Lys Leu Gly Leu Ile Arg Glu Gly
                    360 365
Lys Pro Leu Thr Val Glu Val Thr Leu Asp Lys Ser Thr Ser Ser Ser
370 375
                              380
Ala Ser Ala Glu Gln Ile Ser Pro Ala Leu Gln Gly Ala Thr Leu Ser
            390
                             395
Asp Gly Gln Leu Lys Asn Gly Thr Lys Gly Ile Ser Val Thr Thr Val
           405 410
Glu Lys Ser Ser Pro Ala Ala Gln Ala Gly Leu His Gln Asp Asp Val
       420 425 430
Ile Val Gly Val Asn Arg Thr Ser Val Gln Ser Ile Ala Glu Met Arg
   435 440
Lys Val Leu Glu Ser Lys Pro Ala Val Ile Ala Leu Gln Ile Ile Arg
               455
 450
Gly Asn Asp Thr Leu Tyr Ile Leu Leu Arg
               470
<210> 8072
<211> 73
<212> PRT
<213> Enterobacter cloacae
<400> 8072
Leu Met Arg Ser Ser Ser Lys Gln Glu Glu Leu Val Lys Ala Phe Lys
                          10
Ala Leu Leu Lys Glu Glu Lys Phe Ser Ser Gln Gly Arg Asn Cys Ser
        20
                       25
Gly Val Ala Gly Thr Arg Leu Arg Gln His Gln Pro Val Glu Gly Leu
                   40
Ser His Val Asn Gln Val Trp Ser Gly Ala Tyr Ala Gln Arg Gln Asn
                 55
```

Gly Asn Gly Leu Leu Pro Ala Cys

3.0

190

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<210> 8073
<211> 328
<212> PRT
<213> Enterobacter cloacae
<400> 8073
Gly Pro Cys Met Gln Ala Leu Ile Leu Glu Gln Gln Asp Gly Lys Thr
                      10
Val Ala Ser Val Gln Ala Ile Glu Glu Asn Arg Leu Pro Glu Gly Asp
      20
                   25
Val Thr Val Asp Ile Asp Trp Ser Ser Leu Asn Tyr Lys Asp Ala Leu
 35
                  40
                         4.5
Ala Ile Thr Gly Lys Gly Lys Ile Ile Arg Asn Phe Pro Met Val Pro
               5.5
                        60
Gly Ile Asp Phe Ala Gly Arg Val His Thr Ser Glu Asp Pro Arg Phe
             70 75
His Ala Gly Gln Gln Val Leu Leu Thr Gly Trp Gly Val Gly Glu Asn
         85
                          90
                               95
His Trp Gly Gly Leu Ala Ala Gln Ala Arg Val Lys Gly Asp Trp Leu
        100 105 110
Val Pro Met Pro Lys Gly Leu Asp Gly Arg Lys Ala Met Ile Ile Gly
115 120 125
Thr Ala Gly Phe Thr Ala Met Leu Cys Val Met Ala Leu Glu Glu Ala
130 135 140
Gly Ile Arg Pro Asp Ser Gly Glu Ile Val Val Thr Gly Ala Ser Gly
145 150 155
Gly Val Gly Ser Thr Ala Val Thr Leu Leu His Lys Leu Gly Tyr Gln
         165 170
```

195 200 205 Pro Leu Glu Lys Gln Val Trp Ala Gly Ala Val Asp Thr Val Gly Asp 210 215 220 Asn Val Leu Ala Lys Val Leu Ala Gln Met Asn Tyr Gly Gly Cys Val 225 230 235 Ala Ala Cys Gly Leu Ala Gly Gly Phe Ala Leu Pro Thr Thr Val Met 245 250 255 Pro Phe Ile Leu Arg Asn Val Arg Leu Gln Gly Val Asp Ser Val Met 265 270 Ser Pro Ala Glu Arg Arg Ala Glu Ala Trp Glu Arg Leu Val Gln Asp

Val Ala Ala Val Ser Gly Arg Glu Ser Thr His Asp Tyr Leu Arg Gln

Leu Gly Ala Ser Arg Ile Leu Ser Arg Asp Glu Phe Ala Glu Thr Arg

180 185

Leu Pro Ala Ser Phe Tyr Glu Gln Ser Ala Thr Glu Ile Thr Leu Ser 290 295 300 Gln Ala Pro Glu Phe Ala Asn Lys Ile Met Asp Asn Gln Phe His Gly 305 310 31.5

280 285

Arg Ala Leu Val Lys Ile Ala 325

<210> 8074 <211> 158

<212> PRT <213> Enterobacter cloacae

<400> 8074

Glu Thr Ser Pro Ser Ser Pro Arg Arg Val Lys Gln Pro Thr Pro Gly 10 5 15 Gly Thr Thr Arg Gln Arg Glu Lys Phe Met Thr Trp Glu Tyr Ala Leu 20 2.5

```
Ile Gly Leu Val Val Gly Ile Ile Ile Gly Ala Val Ala Met Arg Phe
       35
Gly Asn Arg Lys Leu Arg Gln Gln Gln Ser Leu Gln Tyr Glu Leu Glu
                      55
Lys Asn Lys Ala Glu Leu Glu Glu Tyr Arg Glu Glu Leu Val Ser His
                  70
Phe Ala Arg Ser Ala Glu Leu Leu Asp Asn Met Ala Thr Asp Tyr Arg
              85
                                90
Gln Leu Tyr Gln His Met Ala Lys Ser Ser Ser Ser Leu Leu Pro Glu
                           105
          100
Met Thr Ala Glu Thr Asn Pro Phe Arg Asn Arg Leu Ala Asp Ser Glu
                         120
      115
                               125
Ala Gly Asn Asp Gln Ala Pro Val Gln Met Pro Arg Asp Tyr Ser Asp
                           140
 130 135
Gly Ala Ser Gly Leu Leu Arg Gly Gly Val Lys Arg Asp
145 150
<210> 8075
<211> 146
<212> PRT
<213> Enterobacter cloacae
<400> 8075
Arg Arg Leu Lys Arg Tyr Ser Lys Lys Arg Asn Ser Val Leu Arg Gly
                                 10
Glu Ile Val Gln Ala Leu Gln Glu Gln Gly Phe Asp Asn Ile Asn Gln
                             25
                                               30
Ser Lys Val Ser Arg Met Leu Thr Lys Phe Gly Ala Val Arg Thr Arg
                         40
                                            4.5
Asn Ala Lys Met Glu Met Val Tyr Cys Leu Pro Ala Glu Leu Gly Val
                     55
Pro Thr Thr Ser Ser Pro Leu Lys Asn Leu Val Leu Asp Ile Asp Tyr
                 7.0
                                    75
Asn Asp Ala Val Val Ile His Thr Ser Pro Gly Ala Ala Gln Leu
             8.5
Ile Ala Arg Leu Leu Asp Ser Leu Gly Lys Ala Glu Gly Ile Leu Gly
                            105
Thr Ile Ala Gly Asp Asp Thr Ile Phe Thr Thr Pro Ala Asn Gly Phe
     115 120
Ser Val Lys Asp Leu Tyr Glu Ala Ile Leu Val Leu Phe Glu Gln Glu
                                        140
Leu
145
<210> 8076
<211> 90
<212> PRT
<213> Enterobacter cloacae
<400> 8076
Ile Ile Met Lys Ile Lys Thr Thr Val Ala Thr Leu Ser Val Leu Ser
                                 10
Val Leu Ser Phe Gly Ala Phe Ala Ala Asp Thr Ile Asn Ala Glu Gln
          20
Ala Gln Ser Arg Gln Ala Ile Gly Thr Val Ser Val Gly Ala Ile Gly
      35
                         4.0
                                            45
Thr Ser Pro Met Asp Met His Glu Met Leu Asn Lys Lys Ala Glu Glu
                    55
Gln Gly Ala Ser Ser Tyr Arg Ile Ile Glu Ala Arg Ser Gly Asp His
Trp His Ala Thr Ala Glu Leu Tyr Lys
```

```
<210> 8077
<211> 179
<212> PRT
<213> Enterobacter cloacae
```

<400> 8077 Lys Arg Phe Thr Leu Thr Gln Thr Cys Pro Ala Leu Arg Asn Leu Leu 5 10 Ala Ile Ala Pro Leu Thr Ala Ala Ser Ile Ser Ala Ser Ser Lys Thr 20 25 30 Ile Tyr Gly Ala Leu Pro Pro Ser Ser Ile Asp Thr Phe Phe Met Val 40 4.5 Ser Ala Glu Leu Arg Thr Ser Val Phe Pro Thr Ala Val Glu Pro Val 55 60 Asn Glu Ile Leu Arg Thr Ser Trp Leu Ala Ile Met Ala Ser Leu Ile 7.0 7.5 Ser Glu Val Leu Pro Ala Thr Ala Phe Ser Thr Pro Ser Gly Thr Pro 85 90 Ala Cys Phe Ala Ser Val Ser Ser Ala Lys Ala Leu Ser Gly Val Leu 100 105 110 Phe Ala Gly Leu Ile Thr Pro Val His Pro Ala Ala Ser Ala Gly Pro 115 120 125 Ser Leu Arg Val Ser Ile Ala Ile Gly Lys Phe His Gly Val Ile Ala 135 140 Ala Thr Thr Pro Thr Gly Ser Arg Val Ala Arg Ile Arg Glu Pro Gly 145 150 155 Leu Thr Gly Gly Met Ile Ser Pro Leu Ala Arg Leu Ala Cys Ser Ala 165 170

<210> 8078 <211> 310 <212> PRT <213> Enterobacter cloacae

Asn His

<400> 8078 Ile Met Glu Arg Leu Lys Arg Met Ser Val Phe Ala Lys Val Val Glu 10 Gln Gly Ser Phe Thr Ala Ala Ala Arg Gln Leu Gln Met Ser Val Ser 25 30 20 Ser Ile Ser Gln Thr Val Ser Lys Leu Glu Asp Glu Leu Gln Val Lys 35 40 Leu Leu Asn Arg Ser Thr Arg Ser Ile Gly Leu Thr Glu Ala Gly Lys 55 50 60 Ile Tyr Tyr Gln Gly Cys Arg Arg Met Leu His Glu Val Gln Asp Val 75 70 80 His Glu Gln Leu Tyr Ala Phe Asn Asn Thr Pro Ile Gly Thr Leu Arg 90 85 Ile Gly Cys Ser Ser Thr Met Ala Gln Asn Val Leu Ala Ala Met Thr 110 100 105 Ala Glu Met Leu Lys Glu Tyr Pro Gly Leu Thr Val Asn Leu Val Thr 120 125 Gly Ile Pro Ala Pro Asp Leu Ile Ala Asp Gly Leu Asp Val Val Ile 135 140 Arg Val Gly Ala Leu Gln Asp Ser Ser Leu Phe Ser Arg Arg Leu Gly 150 155 Ser Met Pro Met Val Val Cys Ala Ser Lys Ser Tyr Leu Ala Gln Tyr 170 165

275

```
Gly Val Pro Glu Lys Pro Ala Asp Leu Ser Asn His Ser Trp Leu Glu
             185
      180
Tyr Ser Val Arg Pro Asp Asn Glu Phe Glu Leu Ile Ala Pro Glu Gly
  195 200
                        205
Leu Ser Thr Lys Leu Leu Pro Glu Gly Arg Phe Val Thr Asn Asp Pro
 210 215 220
Met Thr Ile Ser Arg Trp Leu Val Ala Gly Ala Gly Ile Ala Tyr Val
225 230 235
Pro Leu Met Trp Val Ile Asn Glu Ile Asn Ser Gly Val Leu Glu Ile
   245 250 255
Leu Phe Pro Arg Tyr Gln Ser Asp Pro Arg Pro Val Tyr Ala Leu Tyr
 260 265 270
Thr Glu Lys Asp Lys Leu Pro Leu Lys Val Gln Val Cys Ile Asn Tyr
275 280 285
Leu Thr Asp Tyr Phe Val Glu Val Ala Glu Leu Phe Gln Gly Met Arg
 290 295 300
Gly Arg Arg Lys Glu
<210> 8079
<211> 577
<212> PRT
<213> Enterobacter cloacae
<400> 8079
Ile Asp Asp Asn Tyr Cys Ser Gly Phe Phe Met Arg Gln Leu Asn Arg
                     10
Leu Asn Gln Tyr Gln Arg Leu Trp His Pro Ser Ala Gly Ala Pro Gln
                     25 30
Gln Val Thr Ile Ser Glu Leu Ala Ser Arg Cys Phe Cys Ser Glu Arg
35
         40 45
His Val Arg Thr Leu Leu Arg Gln Ala Gln Glu Ala Gly Trp Leu Ser
50 55
Trp His Ala Arg Ser Gly Arg Gly Lys Arg Gly Glu Leu Arg Phe His
65 70 75
Val Thr Pro Asp Ser Leu Arg Asn Thr Met Met Glu Glu Ala Leu Lys
           8.5
Ser Gly Gln Gln His Asn Ala Leu Glu Leu Ala Gln Leu Ala Pro Glu
                     105 110
      100
Asp Leu Arg Ser Leu Leu His Pro Phe Met Gly Gly Gln Trp Gln Asn
115 120 125
Asp Thr Pro Thr Leu Arg Ile Pro Tyr Tyr Arg Ser Leu Glu Pro Leu
  130 135 140
Gln Pro Gly Phe Leu Pro Gly Arg Ala Glu Gln His Leu Ala Gly Gln
           150 155
Val Phe Ser Gly Leu Thr Arg Phe Asn Gly Asn Ser Ser Glu Pro Thr
           165 170
Gly Asp Leu Ala His His Trp Glu Val Ser Ala Asp Gly Leu Arg Trp
       180 185 190
His Phe Tyr Ile Arg Ser Thr Leu His Trp His Asn Gly Asp Lys Ile
                 200
                                 205
 195
Glu Thr Ala Gln Leu Arg Gln Ser Leu Thr Ala Leu Leu Ser Gln Pro
                 215
                               220
   210
Gly Met Gly Thr Leu Phe Arg Ser Val Leu Arg Ile Glu Thr Thr His
           230
                           235
Pro Gln Cys Leu Thr Phe Ile Leu His Gln Pro Asp Tyr Trp Leu Ala
           245
                         250
His Arg Leu Ala Thr Tyr Cys Ser Arg Leu Ala His Pro Asp Tyr Pro
       260
            265
Val Val Gly Ser Gly Pro Phe Arg Leu Ser Val Phe Glu Pro Glu Leu
```

```
Val Arg Leu Glu Ser His Glu Gln Tyr His Leu Gly His Pro Leu Leu
       295
Lys Ala Ile Glu Tyr Trp Ile Thr Pro Gln Leu Phe Asp Tyr Ser Leu
                             315
         310
Gly Thr Ser Cys Arg His Pro Val Gln Ile Ala Ile Gly Glu Ala Asp
          325 330 335
Glu Leu Ala Ser Leu Arg Leu Val Ser Asn Ser Thr Ser Leu Gly Phe
       340 345
Cys Tyr Leu Thr Leu Lys Gln Ser Pro Arg Leu Ser Glu Leu Gln Ala
     355 360 365
Lys Arg Leu Ile Asn Ile Ile His Leu Ser Thr Leu Leu His Thr Leu
 370 375 380
Pro Leu Asn Glu Gly Leu Ile Thr Pro Thr Glu Glu Leu Leu Pro Gly
385 390 395 400
Trp Ala Ile Pro Gln Trp Pro Asp Leu Thr Asp Val Ala Leu Pro Glu
           405 410
                               415
Ala Leu Thr Leu Val Tyr His Leu Pro Val Glu Leu His Thr Met Ala
                       425
                                      430
        420
Ser Gln Leu Lys Ala Tyr Leu Thr Arg Gln Gly Cys Glu Leu Thr Val
                                   445
     435
                    440
Ile Phe His Asp Ala Lys Thr Trp Asp Gly Cys Gln Gln Leu Ala Asp
                 455
                                460
 450
Ala Asp Ile Met Met Gly Asp Arg Leu Ile Gly Glu Ala Pro Ala Tyr
              470
                             475
Thr Leu Glu Gln Trp Leu Arg Cys Asp Ala Leu Trp Pro His Leu Leu
                          490 495
           485
Ser Ala Pro Ala Phe Ala His Leu Gln Ala Thr Leu Asp Ala Val Gln
        500
                       505
Ser Gln Ala Asp Glu Arg Asp Arg His Ala Gly Leu Gln Ala Ile Phe
                    520 525
     515
Ser Arg Leu Met Glu Thr Ala Val Leu Thr Pro Leu Phe Asn Tyr Gln
                 535
                                540
 530
Tyr Gln Ile Ser Ala Pro Pro Gly Val Asn Gly Ile Arg Leu Asn Thr
                  555 560
545 550
Arg Gly Trp Phe Asp Phe Thr Glu Ala Trp Leu Pro Pro Pro Asn Ala
           565
                          570
```

<210> 8080 <211> 233 <212> PRT

<213> Enterobacter cloacae

<400> 8080 Ser Met Lys Arg Ala Val Val Phe Ser Gly Gly Gln Asp Ser Thr 10 1.5 Thr Cys Leu Ile Gln Ala Leu His Gln Tyr Asp Glu Val His Cys Val 25 3.0 20 Thr Phe Asp Tyr Gly Gln Arg His Arg Ala Glu Ile Asp Val Ala Arg 40 Glu Leu Ala Leu Lys Leu Gly Ala Arg Ala His Lys Val Leu Asp Val 55 Thr Leu Leu Asn Glu Leu Ala Val Ser Ser Leu Thr Arg Asp Ser Ile 75 70 Pro Val Pro Asp Tyr Glu Pro Asp Ala Ser Gly Ile Pro Asn Thr Phe 85 90 Val Pro Gly Arg Asn Ile Leu Phe Leu Thr Leu Thr Ala Ile Tyr Ala 105 Tyr Gln Val Lys Ala Glu Ala Val Ile Thr Gly Val Cys Glu Thr Asp 120 125

```
Phe Ser Gly Tyr Pro Asp Cys Arg Asp Glu Phe Val Lys Ala Leu Asn
                           140
                  135
His Ala Val Asp Leu Gly Met Ala Lys Glu Thr Arg Phe Glu Thr Pro
            150
                           155
Leu Met Trp Leu Asp Lys Ala Glu Thr Trp Ala Leu Ala Asp Tyr Trp
          165
                           170
                                           175
Gly Lys Leu Asp Val Val Arg Asn Glu Thr Leu Thr Cys Tyr Asn Gly
180 185 190
Ile Lys Gly Asp Gly Cys Gly Gln Cys Ala Ala Cys Asn Leu Arg Ala
     195 200 205
Asn Gly Leu Asn His Tyr Phe Ala Asp Lys Ala Gly Val Met Ala Ala
210 215 220
Met Gln Lys Lys Thr Gly Leu Lys
225 230
<210> 8081
<211> 369
<212> PRT
<213> Enterobacter cloacae
<400> 8081
Gln Gln Phe Phe Leu Cys Phe Ser Leu Cys Trp Ala Gln Asn Asp Lys
1 5
                           10
Arg Ile Thr Thr Met Asn Ser Thr Trp Val Lys His Ala Ile Ser Glu
               25
Ile Asn Ala Asp Tyr Gln Arg Ser Ala Asp Thr His Leu Ile Arg Leu
35 40
Pro Leu Pro Gly Phe Pro Gly Ile Gln Leu Tyr Leu Lys Asp Glu Ser
50 55
Thr His Pro Thr Gly Ser Leu Lys His Arg Leu Ala Arg Ser Leu Phe
65 70 75
Leu Tyr Gly Leu Cys Asn Gly Trp Ile Lys Glu Gly Thr Thr Ile Ile
                          90
Glu Ser Ser Ser Gly Ser Thr Ala Val Ser Glu Ala Tyr Phe Ala Arg
        100
                        105
Leu Leu Gly Leu Pro Phe Ile Ala Val Met Pro Ser Cys Thr Ala Lys
    115 120 125
Arg Lys Val Glu Gln Ile Glu Phe Tyr Gly Gly Arg Cys His Phe Val
                135 140
Asp Ser Ala Cys Glu Ile Tyr Ala Ala Ser Glu Met Leu Ala Arg Glu
             150 155 160
Leu Asn Gly His Tyr Met Asp Gln Phe Thr Phe Ala Glu Arg Ala Thr
            165 170 175
Asp Trp Arg Gly Asn Asn Asn Ile Ala Asp Ser Ile Phe Arg Gln Met
        180
                        185 190
Thr His Glu Pro His Pro Leu Pro Ser Tyr Ile Val Met Ser Ala Gly
      195 200
                                     205
Thr Gly Gly Thr Ser Ala Thr Ile Gly Arg Tyr Ile Arg Cys Gln Gly
 210
                215
                                 220
Tyr Asp Thr Gln Leu Met Val Val Asp Pro Gln Asn Ser Val Phe Leu
      230
                               235
Asp Tyr Trp Gln Ser Arg Asp Ala Ser Leu Arg Ser Pro Val Gly Ser
            245
                            250
Lys Ile Glu Gly Ile Gly Arg Pro Arg Val Glu Pro Ser Phe Ile Pro
                                         270
         260
                         265
Asp Val Val Asp Glu Met Leu Arg Val Pro Asp Ala Ala Ser Val Ala
                     280
                                     285
Thr Ala His Trp Leu Glu Thr Gln Leu Gly Arg Lys Val Gly Ala Ser
 290 295
                                  300
Thr Gly Thr Asn Met Trp Gly Ala Leu Gln Leu Ala Ala Arg Met Arg
               310
                               315
```

Glu Glu Gly Arg Thr Gly Ser Val Val Thr Leu Leu Cys Asp Ser Gly 325 330 335 Glu Arg Tyr Leu Asp Thr Tyr Tyr Asn Ala Glu Trp Val Gln Ala Asn 345 345 350 345 Ala Glu Asp Val Glu Pro Trp Lys Ala Glu Ile Ser Gln Leu Val Lys 355 365

<210> 8082 <211> 522 <212> PRT <213> Enterobacter cloacae

340

355

<400> 8082 Asn Ser Met Arg Thr Arg His Leu Val Ser Leu Val Thr Gly Val Leu 10 Ile Phe Ser Val Leu Val Pro Val Cys Leu Ser Ile Trp Leu Ala His 20 25 Arg Gln Ala Glu Glu Lys Phe Val Asp Ala Leu Asp Ser Tyr Ala Ser 40 Arg Val Leu Ile Arg Thr Asp Arg Val Val Ala Gln Ala Lys Gln Ala 55 Leu Thr His Leu Gln Thr Phe His Ala Pro Pro Cys Thr Pro Pro His 70 75 Leu Arg Glu Met Arg Arg Val Ala Phe Ser Trp Arg Tyr Ile Gln Glu 85 90 Val Met Tyr Ile Asp Asn Leu Lys Pro Leu Cys Ser Ser Leu Glu Gln 100 105 110 Ser Ser Asp Thr Ala Ile Leu Pro Pro Pro Met Arg Ile Thr Glu Asn 115 120 125 Gly Tyr Ser Ala Trp Leu Thr Ser Gln Asn Asp Leu Gly Ile Gln Arg 1.30 135 140 Tyr Met Ala Val Leu Gly Lys Gly His Tyr Leu Val Met Val Asp Pro 150 155 Ala Ser Leu Val Asp Val Val Pro Phe Gly Glu Ile Ser Met Asp Ala 165 170 Ala Leu Val Gly Ser Ser Thr His His Ile Phe Ala Arg Ser Asn Val 185 180 190 Leu Asp Pro Tyr Ile Leu Ser Val Val Lys Glu Gln Gln Asp Val Thr 200 205 Arg Val Gln Tyr Asn Gly Ser Met Tyr Val Met Lys Pro Val Pro Glu 215 220 Leu Gly Phe Thr Val Ile Ala Trp Ala Ser Leu Lys Pro Leu Ala Ala 230 235 Ser Trp His Gln Gln Leu Ile Ile Trp Leu Pro Ala Gly Ile Leu Leu 245 250 Ser Leu Val Ala Ala Leu Ile Val Leu Arg Ile Leu Arg Arg Leu Leu 265 260 270 Ser Pro Arg His Arg Leu Ile Asp Ala Ile Asn Asn Arg Glu Ile Glu 285 280 Val His Tyr Gln Pro Ile Val Ala Leu Cys Ser Gly Lys Leu Val Gly 295 300 Ala Glu Ala Leu Met Arg Trp Pro Gln Pro Glu Gly Ser Asn Leu Ser 310 315 Pro Asn Leu Phe Val Pro Leu Ala Glu Gln Thr Gly Leu Ile Ser Thr

330

345 350

365

Leu Thr Arg Leu Val Val Asn Glu Val Phe Glu Asp Leu Gly Ala Trp

Leu His His His Pro Glu Leu His Ile Ser Val Asn Leu Ala Pro Ser

```
Asp Leu Thr Ser Pro Glu Leu Pro Arg Gln Leu Ser Gln Leu Leu Asn
            375
Lys Trp Gly Val His Pro Arg Gln Ile Ala Leu Glu Leu Thr Glu Arg
          390
385
                               395
Gly Phe Ala Asp Pro Ala Val Ser Val Pro Ala Ile Ala Ala Phe Arg
         405 410
                                           415
Arg Ala Gly His Ala Ile Tyr Ile Asp Asp Phe Gly Thr Gly Tyr Ser
        420 425
Ser Leu Ser Tyr Leu Gln Asp Leu Asp Val Asp Thr Leu Lys Ile Asp
 435 440 445
Lys Ser Phe Val Asp Ala Leu Glu Tyr Lys His Val Thr Pro His Ile
450 455 460
Ile Glu Met Ala Lys Ser Leu Lys Leu Ala Met Val Ala Glu Gly Ile
465 470 475
Glu Thr Glu Gly Gln Ile Glu Trp Leu His Arg His Gly Val Gln Tyr
       485 490 495
Gly Gln Gly Trp Tyr Phe Ser Lys Ala Leu Pro Lys Glu Asp Phe Ile
       500 505
Leu Trp Ala Ala His Asn Leu Arg Lys
<210> 8083
<211> 513
<212> PRT
<213> Enterobacter cloacae
<400> 8083
Thr Asp Ile Lys Leu Tyr Gln Thr Thr Tyr His Phe Leu Phe Ser Glu
                 10
Val Pro Gly Ser Ile Phe Gly Glu Asn Gly Thr Met Ile Asn Val Gln
20
                      25
Phe Ser Asn Ser Gly Leu His Met Ser Ser Arg Arg Phe Gly Ser Gln
35 40
                                     45
Ser Leu Val Arq Leu Leu Gly His Trp Gln Gln Ala Ser Ser Arg Thr
                55
Pro Leu Trp Arg Gln Leu Ala Asp Ala Leu Arg Leu Leu Ile Leu Asp
            70 75
Gly Arg Leu Ala Leu Asn Thr Arg Leu Pro Gly Glu Arg Glu Leu Ala
                          90
            8.5
Thr Ala Leu Ser Val Ser Arg Thr Thr Ile Ser Ser Ala Leu Ala His
                       105 110
      100
Leu Arg Glu Glu Gly Tyr Leu Glu Ser Arg His Gly Ser Gly Ser Arg
      115 120 125
Ala Ile Leu Pro Asp Ser Arg Ala Val Pro Thr Leu Ser Thr Ala Ser
 130 135 140
Ala Ala Leu Asp Leu Ser Thr Ala Ala Leu Asn Ala Gly Pro Glu Ile
145 150
                   155
His Gln Ala Tyr Ala His Ala Leu Thr Ala Ile Thr Pro Asn Leu Ala
            165 170 175
Leu Thr Gly Tyr Asp Gln Leu Gly Leu Pro Ala Leu Arg Glu Ala Ile
             185 190
         180
Ala Ala Arg Tyr Thr Ala Arg Gly Leu Pro Thr Arg Ala Asp Glu Val
                     200 205
 195
Met Val Val Asn Gly Ala Val Ser Gly Phe Ala Leu Ile Leu Arg Met
                  215
                                  220
   210
Met Thr Gly Pro Gly Asp Arg Val Val Val Asp His Pro Thr Tyr Pro
                              235
               230
Leu Ala Ile Ala Ala Ile Gln Gly Ala Leu Cys Arg Pro Val Gly Val
                            250 255
            245
Ser Leu Pro Glu Thr Gly Trp Asp Thr Asp Gly Phe Ala Ala Thr Leu
                        265
```

```
Ala Gln Thr Ala Pro Arg Leu Ala Tyr Leu Met Pro Asp Phe His Asn
 275 280
Pro Thr Gly Arg Cys Met Asp Ala Ala Thr Arg Gln Thr Ile Thr Asp
            295
 290
                                300
Ile Ala Ala Gln Thr Arg Thr Thr Leu Val Val Asp Glu Thr Met Val
305 310 315
Asp Leu Trp Phe Asp Ala Pro Pro Pro Pro Pro Leu Ala Ala Phe Asn
         325 330 335
Pro Glu Ala Ala Val Met Thr Leu Gly Ser Ala Gly Lys Ser Phe Trp
        340 345 350
Gly Gly Leu Arg Leu Gly Trp Ile Arg Ala Ser Ser Arg Thr Ile Ala
     355 360 365
Thr Leu Ala Gln Thr Arg Asp Thr Leu Asp Leu Gly Ser Pro Val Leu
      375 380
Glu Gln Leu Ala Thr Leu Trp Leu Ile Glu Asn Ser Glu Thr Phe Leu
              390
                             395
Pro Ala Arg Arg Glu Met Leu Ala Glu Arg Arg Asp Arg Cys Gly Gln
           405
                          410 415
Met Leu Arg Glu His Phe Pro Glu Trp Arg Phe Gln Glu Ala Glu Gly
        420 425
Gly Leu Ser Tyr Trp Ile Glu Leu Pro Gly Met Leu Ala Thr Gln Leu
                        445
                    440
435
Ala Ala Arg Ala Glu Thr Thr Gly Ile Ile Met Gly Thr Gly Thr Arg
               455
                                460
Phe Gly Leu Ser Gly Ala Phe Asp Arg Tyr Leu Arg Met Pro Phe Ser
              470
                            475 480
Leu Ser Pro Pro Glu Leu Glu Glu Ala Leu Leu Arg Ile Lys Pro Leu
           485
                          490 495
Trp Arg Ala Leu Asn Lys Ser Val Ala Pro Val Lys Arg Ser Leu Val
        500
                       505
```

<210> 8084 <211> 110 <212> PRT

<213> Enterobacter cloacae

<400> 8084

Phe Pro Ala Gly Glu Thr Met Asp Glu His Asp Thr Phe Pro Gln Arg 10 Val Trp Gln Ile Val Ala Ser Ile Pro Glu Gly Cys Val Thr Thr Tyr 25 30 2.0 Gly Glu Val Ala Arg Leu Ala Gly Ser Pro Arg Ala Ala Arg Gln Val 45 35 40 Gly Gly Val Leu Arg Arg Leu Pro Glu Gly Ser Thr Leu Pro Trp His 50 55 Arg Val Val Asn Arg His Gly Ala Ile Ser Leu Thr Gly Pro Asp Leu 75 80 65 7.0 Gln Arg Gln Arg Gln Ala Leu Leu Ser Glu Gly Val Gln Val Ser Gly 8.5 90 Ala Gly Gln Ile Asp Met Gln Lys Tyr Arg Trp Glu Tyr

105

<210> 8085 <211> 314

<212> PRT

<213> Enterobacter cloacae

1.00

<400> 8085

Asp Tyr Ser Thr His Arg Thr Thr Ile Val Ser Ala Leu Tyr Ser Ala

```
Tyr Leu Ser Pro Arg Arg Leu Leu Arg Thr Thr Met Ser Gln Ala Leu
                        25
Asn Asn Leu Leu Thr Leu Leu Asn Leu Glu Lys Ile Glu Glu Gly Leu
Phe Arg Gly Gln Ser Glu Asp Leu Gly Leu Arg Gln Val Phe Gly Gly
Gln Val Val Gly Gln Ala Leu Tyr Ala Ala Lys Glu Thr Val Pro Ala
              7.0
                               75
Asp Arg Leu Val His Ser Phe His Ser Tyr Phe Leu Arg Pro Gly Asp
           8.5
                           90
Ser Ala Lys Pro Ile Val Tyr Asp Val Glu Val Leu Arg Asp Gly Gln
        100 105
Ser Phe Ser Ala Arg Arg Val Ala Ala Ile Gln His Gly Lys Pro Ile
     115 120 125
Phe Tyr Met Thr Ala Ser Phe Gln Ala Pro Glu Pro Gly Tyr Glu His
130 135 140
Gln Lys Lys Met Pro Pro Ala Pro Ser Pro Asp Asp Leu Lys Ser Glu
      150 155
Thr Glu Ile Ala Arg Ala Leu Ala His Leu Leu Pro Pro Gln Val Lys
                170 175
           165
Glu Lys Phe Leu Cys Asp Lys Pro Leu Glu Ile Arg Pro Val Glu Phe
      180
             185 190
His Asn Pro Met Lys Gly His Thr Ala Glu Pro Ala Arg Gln Val Trp
195 200 205
Ile Arg Ala Asn Gly Ser Val Pro Ala Asp Leu Arg Val His Gln Tyr
                215 220
Leu Leu Gly Tyr Ala Ser Asp Phe Asn Phe Leu Pro Val Ala Leu Gln
            230 235
Pro His Gly Val Gly Phe Leu Glu Lys Gly Met Gln Val Ala Thr Ile
            245 250 255
Asp His Ser Met Trp Phe His Arg Pro Phe Asp Met Asn Glu Trp Leu
         260
             265 270
Leu Tyr Ser Val Glu Ser Thr Ser Ala Ser Ser Ala Arg Gly Phe Val
 275
         280
Arg Gly Glu Phe Tyr Thr Gln Asp Gly Val Leu Val Ala Ser Thr Val
            295
Gln Glu Gly Val Met Arg Asn Arg Gly
```

<210> 8086 <211> 168 <212> PRT <213> Enterobacter cloacae

310

<400> 8086 Arg Cys Asn Arg Val Ile Thr Cys Thr Ala Ala Lys Ile Cys Gln Asp 10 Lys Glu Val Ile Pro Val Met Thr Ser Glu Pro Ile Thr Thr Lys Gly 20 Tyr Cys Ala Met Gln Thr Gln Ile Lys Val Arg Gly Tyr His Leu Asp 40 4.5 Val Tyr Gln His Val Asn Asn Ala Arg Tyr Leu Glu Phe Leu Glu Glu 55 60 50 Ala Arg Trp Asp Gly Leu Glu Asm Ser Glu Ser Phe Leu Trp Leu Thr 70 Ala His Asn Ile Ala Phe Val Val Val Asn Ile Asn Ile Asn Tyr Arg 90 85 Arg Pro Ala Val Leu Gly Asp Val Leu Thr Val Thr Ser Glu Val Gln 105 Gln Leu Asn Gly Lys Ser Gly Val Leu Ser Gln Val Val Thr Leu Glu

3937 120 Pro Glu Gly Gln Ile Val Ala Asp Ala Leu Ile Thr Phe Val Cys Ile 130 135 140 Asp Leu Lys Thr Gln Lys Ala Leu Pro Leu Glu Gly Glu Leu Arg Glu 145 150 155 Lvs Leu Glu Leu Met Ile Ala 165 <210> 8087 <211> 121 <212> PRT <213> Enterobacter cloacae <400> 8087 Ile Thr Gly Lys Ile Ile Lys Arg Ile Asn Ser Met Ser Lys Ser Glu 10 Arg Lys Phe Ser Ser Thr Val Ser His Asp Glu Ala Val Val Lys Met 2.5 Leu Arg Glu Asn Pro Ser Tyr Ala Gln Leu Tyr Leu Gln Ile Ala Leu 35 40 Asp Glu Ile Tyr Glu Asp Gln Gly Ile Pro Ala Tyr Leu Ile Ala Leu 5.0 55 60 Arg Arg Val Ile Glu Ala Arg Gly Gly Ile Gly Glu Ile Ser Ala Lys 70 75 Ala Gly Leu Ser Arg Gln Gln Leu Tyr Arg Thr Leu Ser Glu Asn Gly 85 90 Asn Pro Thr Leu Thr Thr Leu Met Lys Ile Thr Arg Ala Ala Gly Val 105 100 Lys Leu Phe Asp Ser Thr Val Arg 115 <210> 8088 <211> 207 <212> PRT <213> Enterobacter cloacae <400> 8088 Ser Ala Phe Ile Ser Leu Met Ala Cys Leu Thr Gln Val Leu Phe Ile

1 10 Val Val Ile Arg Leu Ser Phe Cys Ala Gln His Ser Glu Lys His Arg 20 Lys Asn Cys Cys Tyr Leu Thr Phe Lys Ile Glu Cys Lys Glu Asn Asn 35 40 45 Phe Leu Phe Glu Val Ala Met Leu Asp Lys Ile Asp Arg Lys Leu Leu 5.0 55 Ser Leu Leu Gln Ser Asp Cys Tar Leu Ser Leu Gln Ala Leu Ala Asp 70 75 Ala Val Asn Leu Thr Thr Pro Cys Trp Lys Arg Leu Lys Lys Leu 95 85 90 Glu Asp Asp Gly Ile Leu Leu Gly Arg Val Ala Leu Leu Asp Pro Glu 100 105 Lys Leu Gly Leu Gly Leu Thr Ala Phe Val Leu Ile Lys Thr Gln His 120 125 His Ser Ser Glu Trp Tyr Cys Arg Phe Val Thr Gln Val Ser Asp Met 135 140 Pro Glu Val Leu Gly Phe Trp Arg Met Ala Gly Glu Tyr Asp Tyr Leu 150 155 Met Arg Val Gln Val Ala Asp Met Lys Arg Tyr Asp Asp Phe Tyr Lys 165 170 Arg Leu Val Asn Ser Val Pro Gly Leu Ser Asp Val Thr Ser Ser Phe 185

3938 Ala Met Glu Gln Ile Lys Tyr Thr Thr Ala Leu Pro Ile Glu 200 <210> 8089 <211> 595 <212> PRT <213> Enterobacter cloacae <400> 8089 Leu Leu Lys Ile Pro Ser Gly Lys Asp Arg Val Arg Leu Phe Ala Gln 5 10 Leu Ser Trp Tyr Phe Arg Arg Glu Trp Gln Arg Tyr Leu Gly Ala Val 30 25 Ala Leu Leu Ile Ile Ile Ala Ile Leu Gln Leu Phe Pro Pro Lys Val 40 4.5 Val Gly Tyr Val Val Asp Gly Val Thr Glu Gln His Tyr Thr Ala Ala 5.5 Arg Val Met Met Trp Val Gly Thr Leu Val Leu Thr Ala Val Val Val 7.0 75 Tyr Leu Leu Arg Tyr Val Trp Arg Val Leu Leu Phe Gly Ala Ser Tyr 90 95 Gln Leu Ala Val Glu Leu Arg Glu Asp Phe Tyr Arg Gln Leu Ser Arg 105 110 100 Gln His Pro Glu Phe Tyr Leu Arg His Arg Thr Gly Asp Leu Ile Ala 115 120 125 Arg Ala Thr Asn Asp Val Asp Arg Val Val Phe Ala Ala Gly Glu Gly 130 135 140 Val Leu Thr Leu Val Asp Ser Leu Val Met Gly Cys Ala Val Leu Ile 145 150 155 Val Met Ser Thr Gln Ile Ser Trp Glu Leu Thr Leu Leu Ala Leu Leu 165 170 175 Pro Met Pro Leu Met Ala Leu Ala Ile Asn Arg Tyr Gly Glu Gln Leu 180 185 190 His Glu Arg Phe Lys Leu Ala Gln Ala Ala Phe Ser Ser Leu Asn Asp 195 200 205 Arg Thr Gln Glu Ser Met Thr Ser Ile Arg Met Ile Lys Ala Phe Gly 215 220 210 Leu Glu Asp Arg Gln Ser Ala Leu Phe Ala Ala Asp Ala Ala Asp Thr 225 230 235 Gly Ala Lys Asn Met Arg Val Ala Arg Ile Asp Ala Arg Phe Asp Pro 245 250 255 Thr Ile Tyr Ile Ala Ile Gly Met Ala Asn Leu Leu Ala Val Gly Gly 265 260 Gly Ser Trp Met Val Val Arg Gly Thr Met Thr Leu Gly Gln Leu Thr 275 280 285 Ser Phe Ala Met Tyr Leu Gly Leu Met Ile Trp Pro Met Leu Ala Leu 295 300 Ala Trp Met Phe Asn Ile Val Glu Arg Gly Ser Ala Ala Tyr Ser Arg 315 310 Ile Arg Ala Met Leu Ala Glu Val Pro Val Val Asn Asp Gly Ser Glu 325 335 330 Pro Val Pro Glu Gly Pro Gly Ile Leu Lys Ala Asp Ile Arg Ala Phe 350 340 345 Ile Tyr Pro Gln Thr Glu His Pro Val Leu Glu Asn Val Ser Phe Thr 365 360 Leu Arg Pro Gly Gln Met Leu Gly Ile Cys Gly Pro Thr Gly Ser Gly 370 380

Lys Ser Thr Ile Leu Ser Leu Ile Gln Arg His Phe Asp Val Ser Glu 390

Gly Asp Ile Arg Phe His Asp Ile Pro Leu Pro Arg Leu Leu Leu Asp

405

395

```
Asp Trp Arg Ser Arg Leu Ala Val Val Ser Gln Thr Pro Phe Leu Phe
        420
               425
Ser Asp Thr Ile Ala Asn Asn Ile Ala Leu Gly Cys Pro Thr Ala Thr
   435
          440
Gln Asp Gln Ile Glu His Val Ala Arg Leu Ala Ser Val His Glu Asp
 450 455
                                 460
Ile Leu Arg Leu Pro Gln Gly Tyr Asp Thr Glu Val Gly Glu Arg Gly
    470 475
Val Met Leu Ser Gly Gly Gln Lys Gln Arg Ile Ser Ile Ala Arg Ala
       485 490 495
Leu Leu Leu Asp Ala Glu Ile Leu Ile Leu Asp Asp Ala Leu Ser Ala
      500 505 510
Val Asp Gly Arg Thr Glu His Gln Ile Leu His Asn Leu Arg Gln Trp
 515 520 525
Gly Glu Gly Arg Thr Val Ile Ile Ser Ala His Arg Leu Ser Ala Leu
 530 535 540
Thr Glu Ala Ser Glu Ile Leu Val Leu Gln His Gly His Ile Ala Gln 545 550 555 560
Arg Gly Gln His Glu Gln Leu Ala Gly Gln Thr Gly Trp Tyr Arg Asp
      565 570 575
Met Tyr Arg Tyr Gln Gln Leu Glu Ala Ala Leu Asp Glu Glu Val Ala
               585
<210> 8090
<211> 194
<212> PRT
<213> Enterobacter cloacae
<400> 8090
Asn Asp Ile Gly Trp Asp Arg Ser Arg Arg Cys Ile Asp Asp Lys Glu
Thr Ser Met Lys Leu Val Pro Met Leu Ser Gly Val Ala Met Ala Val
      20
                  25
Ala Leu Ser Ala Cys Ala Asp Lys Ser Ala Asp Val Ala Val Pro Thr
                     40
                                 4.5
Ala Thr Pro Asn Gly Ile Asn Thr Leu Ser Gln Gln Ala Ile Arg Gln
                 55
Pro Asn Val Ser Gly Thr Ile Trp Ile Lys Gln Lys Val Ala Leu Pro
65
             70 75
Pro Asp Ala Val Leu Thr Val Thr Leu Ser Asp Ala Ser Leu Ala Asp
           85
               90
Ala Pro Ser Lys Val Leu Ala Gln Arg Ala Val Arg Thr Glu Gly Lys
      100
                     105
                                       110
Gln Ala Pro Phe Ser Phe Val Leu Pro Tyr Asn Pro Ser Asp Val Gln
                         125
 115
                    120
Pro Asn Ala Arg Ile Leu Leu Ser Ala Ala Val Thr Ile Asn Asp Lys
 130 135 140
Leu Val Phe Ile Thr Asp Thr Val Gln Glu Ala Val Asn Lys Gly Gly
              150 155
145
Thr Lys Ile Asp Leu Thr Leu Val Pro Val Gln Gln Thr Glu Val Pro
           165 170
Val Ala Thr Gln Thr Asn Gln Pro Thr Leu Pro Thr Pro Pro Thr Gln
         180
            185
                                       190
Met
```

<210> 8091 <211> 374 <212> PRT

<213> Enterobacter cloacae

```
<400> 8091
Trp Arq Asn Cys Val Arq Ile Glu Thr Ser Leu Phe Thr Thr Pro Glu
                          1.0
Cys Met Lys Ala Ile Thr Leu Tyr Asp Val Ala Arg Val Ala Gly Val
                       25
40
Lys Lys Lys Lys Lys Val Arg Gln Ala Met Ala Ala Leu His Tyr
                55
Val Pro Asn Arg Gly Ala Gln Gln Leu Ala Gly Lys Arg Thr Arg Thr
              70
                          75
Leu Gly Leu Met Thr Ser Asp Leu Ala Leu His Ala Pro Ser Gln Ile
           85
                         90
Ala Ser Ala Val Lys Ser Arg Ala Val Glu Gln Gly Ala Ser Val Leu
            105
       100
                                    110
Ile Ser Met Val Glu Gln Pro Ala Gln Cys Gln Ala Ala Leu Gln Glu
         120
                       125
 115
Leu Leu Ala Gln Arg Val Glu Ala Leu Leu Val Asn Val Pro Leu Glu
130 135 140
Asp Ala Leu Ala Glu Met Leu Gln Glu Met Ala Ser Pro Thr Pro Val
   150 155 160
Leu Phe Leu Asp Val Ser Pro Thr Ala Arg Val Asn Ser Leu Val Phe
      165 170 175
Asn Ala Glu Gln Gly Ala Ala Leu Gly Ala Glu His Leu Leu Ser Leu
 180 185 190
Gly His Gln Arg Ile Ala Leu Leu Ala Gly Pro Glu Ser Ser Val Ser
   195 200 205
Ala Arg Ala Arg Leu Ala Gly Trp Lys Thr Thr Leu Ala Gln Ala Gly
210 215 220
Val Glu Ala Phe Ala Val Ala Gln Gly Asp Trp Ser Ala Ala Ser Gly
225 230 235 240
Tyr Glu Lys Gly His Gln Leu Leu Ala Gly Ala Gln Leu Pro Glu Ala
           245 250 255
Ile Phe Val Ala Asn Asp Gln Met Ala Leu Gly Val Ile Arg Ala Cys
        260 265 270
Ala Glu Lys Gly Val Ala Val Pro Gly Gln Ile Ser Val Val Gly Phe
     275 280 285
Asp Asp Thr Ala Asp Ser Ala Trp Phe Ser Pro Pro Leu Thr Thr Val
      295 300
Arg Gln Ala Phe Arg Glu Ala Gly Glu Arg Ser Val Glu Trp Leu Met
305 310
                           315 320
Ala Pro Ala His His Asp Glu Cys Trp Gln Glu Gln Leu Pro Val Thr
                         330
          325
Leu Ile Val Arg His Ser Thr Ala Pro Arg Ala Ala Gln Gln Ala Asp
                      345
       340
Arg Glu Asp Leu Ala Gln Gln Leu Arg Thr Leu Ala Leu Leu Ala Glu
     355
                    360
Lys Leu Ala Arg Ser
  370
```

<210> 8092

<211> 678

<212> PRT

<213> Enterobacter cloacae

<400> 8092

Cys Ala Phe Phe Val Cys Pro Asp Leu Ile Cys Ala Ser Leu Cys Glu 1 5 10 15 Leu Trp Ala Asp Asn Cys Pro Val Phe Leu Ser Gln Tyr Ala Phe Thr

2.5 Arg Asp Gly Gln Asp Phe Pro Ser Ala Ser Gly Asn Gln Ser Pro Thr 40 4.5 Ala Glu Cys Cys Tyr Thr Met Met Asp Ser Leu Arg Thr Ala Ala Asn 55 60 Ser Leu Val Leu Lys Ile Ile Phe Gly Ile Ile Ile Val Ser Phe Ile 70 75 Leu Thr Gly Val Ser Ser Tyr Leu Ile Gly Gly Gly Ala Asn Tyr Ala 85 90 95 Ala Lys Val Asn Gly Gln Glu Ile Ser Arg Gly Gln Phe Glu Asn Ala 100 105 110 Phe Ala Gly Glu Arg Asn Arg Met Gln Gln Gln Leu Gly Asp Gln Tyr 115 120 125 Ser Glu Leu Ala Ala Asn Glu Gly Tyr Met Lys Asn Leu Arg Gln Gln 130 135 140 Thr Leu Asn Arg Leu Ile Asp Glu Ala Leu Leu Asp Gln Tyr Ala Lys 145 150 155 160 Ser Leu Gly Leu Gly Ile Ser Asp Glu Gln Val Lys Lys Ala Ile Phe 165 170 175 Ser Thr Gln Ala Phe Gln Ser Asn Gly Lys Phe Asp Asn Ala Arg Tyr 180 185 190 Asn Ser Ile Val Asn Gln Met Gly Met Thr Ala Asp Gln Tyr Ala Gln 195 200 205 Ala Leu Arg Asn Gln Leu Thr Thr Gln Gln Leu Ile Asn Ala Val Val 210 215 220 Gly Thr Asp Phe Met Leu Lys Gly Glu Thr Glu Lys Leu Ala Ala Leu 225 230 235 Val Ala Gln Gln Arg Val Val Arg Glu Ala Thr Ile Asp Val Asn Ala 245 250 Leu Ala Ala Lys Gln Gln Val Ser Asp Ala Glu Val Asn Ala Tyr Tyr 260 265 270 Glu Gln Asn Lys Asn Asn Phe Ile Ser Pro Glu Gln Phe Arg Val Ser 275 280 285 Tyr Ile Lys Leu Asp Ala Ala Ala Met Gln Glu Asn Ala Thr Asp Ala 290 295 300 Glu Ile Gln Ser Tyr Tyr Asp Gln His Gln Asp Gln Phe Thr Gln Pro 305 310 315 320 Gln Arg Asn Arg Tyr Ser Val Ile Gln Thr Lys Thr Glu Ala Glu Ala 325 330 Lys Ala Val Leu Asp Glu Leu Asn Lys Gly Ala Asp Phe Ala Thr Leu 340 345 350 Ala Lys Ala Lys Ser Thr Asp Ile Ile Ser Ala Lys Asn Gly Gly Asp 355 360 Met Gly Trp Leu Glu Glu Ser Thr Thr Pro Asp Glu Leu Lys Asn Ala 380 375 Gly Leu Lys Glu Lys Gly Gln Leu Ser Gly Val Ile Lys Ser Ser Val 385 390 395 Gly Phe Leu Val Ala Arg Leu Asp Asp Val Val Ala Ala Lys Thr Lys 410 405 Pro Leu Thr Asp Val Arg Asp Asp Ile Ala Ala Lys Val Lys Gln Glu 430 420 425 Lys Ala Leu Asp Ala Phe Tyr Ala Leu Gln Gln Lys Val Ser Asp Ala 440 Ala Ser Asn Asp Asn Glu Ser Leu Ala Gly Ala Glu Gln Ala Ala Gly 455 Val Lys Ala Val Glu Thr Gly Trp Phe Ser His Glu Asn Leu Pro Glu 475 470 Glu Leu Asn Phe Lys Pro Val Ser Asp Ala Ile Phe Asn Gly Gly Leu 485 490 Val Gly Glu Asn Gly Thr Pro Gly Ser Asn Ser Asp Ile Ile Thr Val 505

```
Asp Gly Asp Arg Ala Phe Val Leu Arg Val Ser Glu His Lys Ala Glu
                     520
    515
Ala Val Lys Pro Leu Ala Glu Val Lys Asp Gln Val Val Ala Leu Val
                                  540
 530 535
Lys His Asn Lys Ala Ala Gln Gln Ala Lys Leu Asp Ala Glu Lys Ile
545 550 555
Leu Ala Asp Leu Lys Ala Gly Lys Asn Asp Ala Leu Lys Ala Ala Gly 565 570 575
Leu Ser Phe Gly Glu Ala Lys Thr Leu Ser Arg Thr Gly Gln Asp Pro
         580 585 590
Val Ser Gln Ala Ala Phe Gly Leu Ser Leu Pro Ala Lys Asp Lys Pro
      595 600 605
Val Phe Gly Thr Thr Thr Asp Met Gln Gly Asn Val Val Leu Ala
 610 615 620
Leu Asp Glu Val Lys Ala Gly Thr Leu Pro Asp Ala Gln Lys Lys Ala
625 630 635
Met Val Gln Gly Ile Thr Gln Asn Asn Ala Gln Ile Ala Phe Glu Ala
           645 650 655
Leu Met Ser Asn Leu Arg Lys Glu Ala Lys Ile Lys Leu Gly Asp Val
         660
                 665
Val Thr Gln Glu Gln
   675
<210> 8093
<211> 682
<212> PRT
<213> Enterobacter cloacae
<400> 8093
Phe Trp Met Met Arg Cys Pro Arg Leu Thr Gly Val Leu Asn Ile Lys
                            10
Phe Cys Ile Thr Phe Ala Ser Gly Glu Arg Gly Ala Arg Ser Ser Leu
                         25
20
Ala Arg Thr Val Cys Arg Arg Leu Pro Lys Pro Val Lys Phe Trp Cys
                                      4.5
35
                      4.0
Phe Ser Thr Gly Ile Leu Pro Ser Val Val Ser Met Ser Ser Ser Pro
50
                   55
Gly Arg Pro Ala Gly Ile Gly Ile Cys Thr Ala Ile Asn Ser Leu Lys
                70
                             75
65
Pro Arg Trp Met Arg Arg Trp Pro Met Arg Lys Phe Gly Gin Met Trp
                      90
            85
Pro Thr Leu Lys Arg Leu Leu Ala Tyr Gly Ser Pro Trp Arg Lys Pro
                                         110
       100
                         105
Leu Ser Ile Ala Val Leu Leu Trp Ile Ala Ala Ile Ala Glu Val
                     120
                                      125
      115
Thr Gly Pro Leu Leu Ile Ser Tyr Phe Ile Asp Asn Met Val Ala Lys
                   135
                                  140
   130
Ser Tyr Leu Pro Leu Gly Leu Val Ala Gly Leu Gly Val Ala Tyr Val
      150
                                155
Gly Leu Gln Leu Thr Ala Ala Gly Leu His Tyr Ala Gln Ser Leu Leu
            165 170
                                             175
Phe Asn Arg Ala Ala Val Gly Val Val Gln Gln Leu Arg Thr Asp Val
                             190
         180
                         185
Met Asp Ala Ala Leu Arg Gln Pro Leu Ser Glu Phe Asn Thr Gln Pro
   195 200
                                      205
Val Gly Gln Val Ile Ser Arg Val Thr Asn Asp Thr Glu Val Ile Arg
                   215
 210
                                  220
Asp Leu Tyr Val Thr Val Val Ala Thr Val Leu Arg Ser Ala Ala Leu
               230
                             235
Ile Gly Ala Met Leu Val Ala Met Phe Ser Leu Asp Trp Arg Met Ala
```

```
Leu Val Ala Ile Thr Ile Phe Pro Ala Val Leu Ile Val Met Val Ile
    260
           265
Tyr Gln Arg Tyr Ser Thr Pro Ile Val Arg Arg Val Arg Ala Tyr Leu
  275 280
                          285
Ala Asp Ile Asn Asp Gly Phe Asn Glu Val Ile Asn Gly Met Ser Val
 290 295
                              300
Ile Gln Gln Phe Arg Gln Gln Ala Arg Phe Gly Glu Arg Met Gly Glu
305 310 315
Ala Ser Arg Ser His Tyr Met Ala Arg Met Gln Thr Leu Arg Leu Asp
     325 330 335
Gly Phe Leu Leu Arg Pro Leu Leu Ser Leu Phe Ser Ala Leu Val Leu
       340 345 350
Cys Gly Leu Leu Met Leu Phe Gly Leu Thr Thr Arg Gly Thr Ile Glu
    355 360 365
Val Gly Val Leu Tyr Ala Phe Ile Ser Tyr Leu Gly Arg Leu Asn Glu
      375 380
Pro Leu Ile Glu Leu Thr Thr Gln Gln Ser Met Leu Gln Gln Ala Val
     390 395 400
Val Ala Gly Glu Arg Val Phe Glu Leu Met Asp Arg Pro Arg Gln Thr
     405 410 415
Tyr Gly Asp Asp Glu Arg Pro Leu Glu Ser Gly Ser Ile Ala Phe Asp
       420 425 430
His Val Ser Phe Ala Tyr Arg Asp Asp Gln Leu Val Leu Gln Asp Ile
 435 440
                                 445
Asn Leu Glu Val Pro Ser Arg Gly Phe Val Ala Leu Val Gly His Thr
450 455
                              460
Gly Ser Gly Lys Ser Thr Leu Ala Ser Leu Leu Met Gly Tyr Tyr Pro
465 470 475
Leu Thr Gln Gly Glu Ile Arg Leu Asp Gly Arg Pro Leu Ala Ser Leu
          485 490 495
Ser His Asn Ala Leu Arg Lys Gly Val Ala Met Val Gln Gln Asp Pro 500 \hspace{1cm} 505 \hspace{1cm} 510
Val Val Leu Ala Asp Thr Phe Tyr Ala Asn Val Thr Leu Gly Arg Pro
 515 520 525
Phe Thr Pro Glu Gln Val Trp Glu Val Leu Glu Thr Val Gln Leu Ala
                535 540
 530
Asp Leu Ala Arg Gly Leu Ser Glu Gly Ile Asn Thr Arg Leu Gly Glu
             550 555
545
Gln Gly Asn Asn Leu Ser Val Gly Gln Lys Gln Leu Leu Ala Leu Ala
           565
                         570 575
Arg Val Leu Ile Glu Thr Pro Gln Val Leu Ile Leu Asp Glu Ala Thr
                       585 590
        580
Ala Ser Ile Asp Ser Gly Thr Glu Gln Ala Ile Gln Gln Ala Leu Ala
                   600
      595
                                 605
Ala Val Arg Asp His Thr Thr Leu Val Val Ile Ala His Arg Leu Ser
      615
                               620
  610
Thr Ile Val Asp Ala Asp Thr Ile Leu Val Leu His Arg Gly Gln Ala
              630
                            635
Val Glu Arg Gly Thr His Arg Ala Leu Leu Glu Ala Lys Gly Arg Tyr
           645
                         650 655
Trp Gln Met Tyr Gln Leu Gln Leu Ala Gly Asp Glu Leu Ala Ala Ser
   660 665
Val Arg Glu Glu Glu Ser Leu Ser Ala
                   680
```

<210> 8094

<211> 446 <212> PRT

<213> Enterobacter cloacae

<400> 8094

Arg Ser Gly Val Val Ser Asn Ser Trp His Thr Val Ile Gly Ile Glu 10 Lys Met Lys Lys Ala Thr Met Lys Thr Gly Leu Gly Ser Leu Ala Leu Leu Pro Gly Leu Ala Met Ala Ala Pro Ala Val Ala Asp Lys Ala Asp 35 40 Asn Ala Phe Met Met Ile Cys Thr Ala Leu Val Leu Phe Met Thr Ile Pro Gly Ile Ala Leu Phe Tyr Gly Gly Leu Ile Arg Gly Lys Asn Val 70 75 Leu Ser Met Leu Thr Gln Val Ala Val Thr Phe Ala Leu Val Cys Val 85 90 Leu Trp Val Val Tyr Gly Tyr Ser Leu Ala Phe Gly Glu Gly Asn Ala 100 105 Phe Phe Gly Asn Val Asn Trp Ala Met Leu Lys Asn Ile Glu Leu Thr 115 120 125 Ala Val Met Gly Ser Phe Tyr Gln Tyr Ile His Val Ala Phe Gln Gly 130 135 140 Ser Phe Ala Cys Ile Thr Val Gly Leu Ile Val Gly Ala Leu Ala Glu 145 150 155 Arg Ile Arg Phe Ser Ala Val Leu Ile Phe Val Val Val Trp Leu Thr 165 170 175 Leu Ser Tyr Ile Pro Ile Ala His Met Val Trp Gly Gly Leu Leu 180 185 190 Ala Ser His Gly Ala Leu Asp Phe Ala Gly Gly Thr Val Val His Ile 195 200 205 Asn Ala Ala Val Ala Gly Leu Val Gly Ala Tyr Leu Ile Gly Lys Arg 210 215 220 Val Gly Phe Gly Lys Glu Ala Phe Lys Pro His Asn Leu Pro Met Val 225 230 235 240 Phe Thr Gly Thr Ala Ile Leu Tyr Phe Gly Trp Phe Gly Phe Asn Ala 245 250 255 Gly Ser Ala Ser Ala Ala Asn Glu Ile Ala Ala Leu Ala Phe Val Asn 260 265 270 Thr Val Val Ala Thr Ala Gly Ala Ile Leu Ser Trp Val Phe Gly Glu 275 280 285 Trp Ala Val Arg Gly Lys Pro Ser Leu Leu Gly Ala Cys Ser Gly Ala 295 300 Ile Ala Gly Leu Val Gly Ile Thr Pro Ala Cys Gly Tyr Val Gly Val 305 \$310\$ \$310 \$315Gly Gly Ala Leu Leu Ile Gly Ile Val Ala Gly Leu Ala Gly Leu Trp 325 330 335 Gly Val Thr Ala Leu Lys Arg Val Leu Arg Val Asp Asp Pro Cys Asp 340 345 Val Phe Gly Val His Gly Val Cys Gly Ile Val Gly Cys Ile Met Thr 355 360 365 Gly Ile Phe Ala Ala Gln Ser Leu Gly Gly Val Gly Tyr Ala Glu Gly 375 380 Val Thr Met Gly His Gln Val Leu Val Gln Leu Glu Ser Ile Ala Ile 390 395 Thr Val Val Trp Ser Gly Val Val Ala Phe Ile Gly Tyr Lys Leu Ala 405 410 415 Asp Met Thr Val Gly Leu Arg Val Pro Glu Glu Gln Glu Arg Glu Gly 420 425 430 Leu Asp Val Asn Ser His Gly Glu Asn Ala Tyr Asn Ala 440 435

<210> 8095 <211> 226

<211> 226 <212> PRT

<213> Enterobacter cloacae

```
<400> 8095
Lys Leu Asp Ile Asn His Ser Ala Ile Phe Thr Glu Asp Gly Thr Trp
Tyr Phe Gly Glu Glu Lys Met Val Arg Arg Leu Val Gln Leu Tyr Val
        20
                        25
Gly Leu Gly Leu Tyr Gly Leu Ser Thr Ala Met Phe Ile Arg Ser Asp
          4.0
Leu Gly Val Asp Pro Trp Asp Val Phe His Leu Gly Val Ala Ile Gln
                5.5
Thr Gly Met Ser Ile Gly Thr Val Ile Ile Leu Thr Gly Ala Ala Val
               70 75
Leu Leu Leu Trp Ile Pro Leu Arg Gln Leu Pro Gly Leu Gly Thr Ile
          8.5
                90
Ser Asn Val Ile Cys Ile Gly Leu Ala Ala Asp Ala Ser Met Ala Leu
             105 110
Ile Pro Glu Leu Thr Ser Leu Pro Val Arg Ile Thr Leu Leu Val Ser
     115
                     120 125
Gly Ile Val Val Asn Ala Leu Ala Thr Gly Met Tyr Ile Gly Ala Gly
   130 135 140
Phe Gly Ala Gly Pro Arg Asp Gly Leu Met Thr Gly Ile His Ala Arg
               150 155 160
Leu Gly Trp Ser Ile Arg Ser Val Arg Thr Ala Ile Glu Val Thr Val
            165 170 175
Leu Ile Val Gly Tyr Leu Leu Gly Gly Ala Phe Gly Val Gly Thr Val
                        185 190
         180
Leu Tyr Ala Leu Thr Ile Gly Pro Leu Ile Gln Leu Cys Leu Pro Trp
      195 200 205
Phe Arg Gln Arg Pro Arg Ile Gln Lys Ala Ala Gln Pro Glu Arg Ile
                   215
Val
225
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<211> 1037 <212> PRT

<213> Enterobacter cloacae

<400> 8096

<210> 8096

Ala Leu Arg Lys Glu Val Asp Met Ser Ser Thr Leu Pro Leu Thr Leu 10 Ser Ala Leu Leu Ala Lys Lys Lys Lys Lys Lys Lys Gly Val Thr Gln 20 Trp Asn Arg Leu Ala Ala His Ala Pro Phe His Ser Trp Arg Asp Glu 40 35 Thr Phe Ala Arg Glu Asp Lys Pro Ser Arg Ser Lys Arg Leu Leu Asn 55 Gly Ile Trp Arg Phe Ser Phe Phe Pro Ala Pro Glu Gln Val Pro Glu 75 70 Ala Trp Ile Thr Asp Asp Leu Ala Asp Ala Val Glu Met Pro Val Pro 85 90 Ser Asn Trp Gln Met Gln Gly Phe Asp Thr Pro Ile Tyr Thr Asn Val 100 105 Thr Tyr Pro Ile Asn Val Asn Pro Pro Tyr Leu Pro Ala Glu Asn Pro 125 115 120 Thr Gly Cys Tyr Ser Leu Thr Phe Glu Met Asp Asp Ala Trp Met Cys 135 140 Ser Gly Gln Thr Arg Ile Ile Phe Asp Gly Val Asn Ser Ala Phe His 150 155 Leu Trp Cys Asn Gly Gln Trp Met Gly Tyr Ser Gln Asp Ser Arg Leu 170 165

Pro Ala Glu Phe Asp Leu Ser Ala Val Leu Arg Pro Gly Gln Asn Arg 185 180 Leu Ala Val Met Val Leu Arg Trp Cys Asp Gly Ser Tyr Leu Glu Asp 195 200 Gln Asp Met Trp Arg Met Ser Gly Ile Phe Arg Asp Val Ser Leu Leu 210 215 220 His Lys Pro Glu Thr Arg Ile Ala Asp Tyr Gln Ile Val Thr Asp Leu 230 235 Asn Ala Glu Cys Asp Arg Ala Ile Leu Arg Val Asp Val Ala Leu Glu 245 250 255 Gly Thr Arg Tyr Ala Glu Cys Glu Val Ala Phe Thr Leu Trp Arg Asn 260 265 270 Gly Glu Ala Cys Ala Gln Thr Thr Gln Gln Pro Gly Ser Ala Ile Val 275 280 285 Asp Glu Arg Gly Ser Trp Ala Glu Arg Leu Arg Val Ala Ile Pro Val 295 300 Asn Ala Pro Ala Leu Trp Ser Ala Glu Thr Pro Glu Cys Tyr Arg Leu 310 315 Thr Ile Ser Leu Arg Asp Ala Gln Gly Asn Val Leu Glu Thr Glu Ala 325 330 335 Cys Asp Val Gly Phe Arg Arg Val Glu Ile Ser Asn Gly Gln Leu Lys 340 345 350 Leu Asn Gly Lys Pro Leu Leu Ile Arg Gly Val Asn Arg His Glu His 360 365 355 His Pro Glu Lys Gly Gln Val Met Asp Glu Ala Thr Met Arg Arg Asp 375 Ile Glu Leu Met Lys Gln His Asn Phe Asn Ala Val Arg Cys Ser His 390 395 Tyr Pro Asn His Pro Leu Trp Tyr Thr Leu Cys Asp Arg Tyr Gly Leu 405 410 Tyr Val Val Asp Glu Ala Asn Ile Glu Thr His Gly Met Val Pro Met 420 425 430 Ser Arg Leu Ala Asp Asp Pro Arg Trp Leu Pro Ala Met Ser Glu Arg 440 445 435 Val Thr Arg Met Val Glm Arg Asp Arg Asm His Pro Ser Ile Ile Ile 450 455 460 Trp Ser Leu Gly Asn Glu Ser Gly His Gly Ala Asn His Asp Ala Leu 470 475 465 Tyr Arg Trp Leu Lys Thr Thr Asp Pro Thr Arg Pro Val Gln Tyr Glu 485 490 495 Gly Gly Gly Ala Ser Thr Ala Ala Thr Asp Ile Val Cys Pro Met Tyr 505 500 510 Ala Arg Val Asp Gln Asp Gln Pro Phe Pro Ala Val Pro Lys Trp Ser 515 520 525 Ile Lys Lys Trp Ile Gly Met Pro Asp Glu Thr Arg Pro Leu Ile Leu 530 535 540 Cys Glu Tyr Ala His Ala Met Gly Asn Ser Phe Gly Gly Phe Ala Ser 545 550 555 Tyr Trp Gln Ala Phe Arg Ser His Pro Arg Leu Gln Gly Gly Phe Val 570 575 565 Trp Asp Trp Val Asp Gln Ala Leu Thr Lys Lys Ala Glu Asp Gly Thr 585 590 580 Val Phe Trp Ala Tyr Gly Gly Asp Phe Gly Asp Lys Pro Asn Asp Arg 600 595 605 Gln Phe Cys Leu Asn Gly Leu Val Phe Pro Asp Arg Thr Pro His Pro 615 620 Ala Leu Tyr Glu Ala Gln Arg Ala Gln Gln Phe Phe Thr Phe Thr Leu 630 635 Val Ser Thr Ala Pro Leu Val Val Glu Ile Gln Ser Asp Tyr Leu Phe 645 650 Arg His Thr Asp Asn Glu Tyr Leu Arg Trp Ser Val Ala Arg Asp Gly

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660
                       665
Ala Val Leu Ala Ser Gly Glu Thr Pro Leu Ser Val Ala Pro Glu Gly
   675
                    680
                                 685
Thr Gln His Val Glu Ile Pro Leu Pro Glu Leu Val Ala Glu Pro Gly
                695
                               700
Glu Val Trp Leu Asn Val Glu Ile Val Gln Pro Gln Ala Thr Ser Trp
705 710
                  715
Ser Pro Pro Gly His Arg Cys Ala Trp Asp Gln Trp Pro Leu Pro Ala
      725 730
Pro Leu Tyr Leu Ala Pro Pro Lys Ala Gly Gly Thr Pro Pro Gln Leu
      740 745 750
Thr Val Glu Asp Glu Ala Leu Asp Ile Thr His Gln Gln Gln Arg Trp
     755 760
                         765
Gln Phe Ser Arg Leu Thr Gly Asn Leu Thr Gln Trp Trp Asn Glu Gly
 770 775 780
Ala Glu Thr Leu Arg Ser Pro Leu Thr Asp Asn Phe Thr Arg Ala Pro
Leu Asp Asn Asp Ile Gly Val Ser Glu Ala Thr Arg Ile Asp Pro Asn
          805 810 815
Ala Trp Val Glu Arg Trp Lys Ala Ala Gly Met Tyr Glu Met Ser Ala
       820 825 830
Arg Leu Leu Gln Cys Glu Ala Glu Gln His Asn Arg Glu Val Ile Val
 835 840 845
Thr Thr Gln His Val Trp Glu His Gln Gly Lys Ala Leu Phe Met Ser
                 855 860
Cys Lys Val Trp Arg Ile Asp Asp His Gly Val Leu Gln Gly Asp Val
              870 875
865
Gln Val Thr Val Ala Ser Asp Ile Pro Glu Pro Ala Arg Val Gly Leu
           885
                          890 895
Ser Val Met Leu Ala Asp Ile Pro Glu Tnr Val Arg Trp Leu Gly Leu
        900
                       905 910
Gly Pro Leu Glu Asn Tyr Pro Asp Arg Lys Leu Ala Ala Gln Gln Gly
     915 920
                        925
Arg Trp Ala Leu Pro Leu Glu Glu Met Gln Thr Pro Tyr Ile Phe Pro
                 935 940
 930
Thr Glu Asn Gly Leu Arg Cys Asp Thr Arg Glu Leu Thr Phe Gly Ser
              950
                  955
945
His Gln Leu Gln Gly Gln Phe His Phe Ser Leu Ser Arg Tyr Ser Gln
           965 970 975
Arg Gln Leu His Glu Thr Thr His Gln His Leu Leu Arg Glu Glu Ala
             985 990
        980
Gly Cys Trp Leu Asn Leu Asp Ala Phe His Met Gly Val Gly Gly Asp
     995 1000 1005
Asp Ser Trp Ser Pro Ser Val Ala Pro Ala Phe Ile Leu Gln Asn Arg
                  1015 1020
   1010
Arg Leu Arg Tyr Thr Phe Ser Trp Gln Gln Asn Gly
               1030
<210> 8097
<211> 174
<212> PRT
<213> Enterobacter cloacae
<400> 8097
Pro Trp Lys Pro Arg Val Phe Arg Gly Lys Gly Lys Leu Thr Tyr Thr
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Asp Gly Pro Ser Ala Gly Ile Ala Met Cys Thr Ala Leu Val Ser Cys 70 Leu Thr Gly Asn Pro Val Arg Ala Asp Val Ala Met Thr Gly Glu Ile 85 90 Thr Leu Arg Gly Gln Val Leu Pro Ile Gly Gly Leu Lys Glu Lys Leu 110 100 105 Leu Ala Ala His Arg Gly Gly Ile Lys Thr Val Leu Ile Pro Tyr Glu 115 120 Asn Lys Arg Asp Leu Glu Glu Ile Pro Asp Asn Val Ile Ala Asp Leu 135 140 Gln Ile His Pro Val Lys Arg Ile Glu Glu Val Leu Thr Leu Ala Leu 145 150 155 Gln Asn Glu Pro Ser Gly Met Gln Val Val Thr Ala Lys 165 <210> 8098 <211> 120 <212> PRT <213> Enterobacter cloacae <400> 8098 Gly His Ser Arg Thr Asp Ile Thr Ala Ala Arg Ser Arg Cys Glu Gly 1.0 Phe Arg Cys Asp Ile Asn Tyr Lys Glu Arg Lys Arg Thr Val Asn Lys 2.5 30 Ser Gln Leu Ile Asp Lys Ile Ala Ala Gly Ala Asp Ile Ser Lys Ala 40 45 35 Ala Ala Gly Arg Ala Leu Asp Ala Leu Ile Ala Ser Val Thr Glu Ser 60 Leu Gln Ala Gly Asp Asp Ile Ser Leu Val Gly Phe Gly Thr Phe Ala 70 75 Val Lys Glu Arg Ala Ala Arg Thr Gly Arg Asn Pro Gln Thr Gly Lys 90 8.5 Glu Ile Thr Ile Ala Ala Ala Lys Val Pro Gly Phe Arg Ala Gly Lys 105 100 Ala Leu Lys Asp Ala Val Asn 115 <210> 8099 <211> 167 <212> PRT <213> Enterobacter cloacae <400> 8099 Arg Ser Ala Lys Thr Lys Gly Arg Phe Arg Gly Phe Phe His Phe Cys 10 Asn Leu Leu Phe Val Pro Val Phe Pro Cys Gly Tyr Arg Gly Met Ala 25 Val Asn Lys Gln Gly Glu Asn Ser Met Lys Cys Gly Ile Lys Ala Leu 40 35 Leu Ile Thr Leu Ala Ile Ala Thr Ser Gly Met Ser Ala Gly Ala Leu 55 Ala Ala Ser Pro Ser Ser Lys Ala Gln Ala Ala Gln Thr Gln Ala Asp 75 Ala Thr Ser Gln Gly Gln Val Lys Ala Asn Ala Thr Ala Ser Thr Lys 90 Ala Ile Glu Asp Glu Gly Thr Arg Val Ser Ile Asn Thr Ala Ser Ala 100 105 Asp Asp Leu Ala Arg Val Met Asn Gly Val Gly Leu Lys Lys Ala Gln 120

3949 Ala Ile Val Ser Tyr Arg Glu Glu Tyr Gly Pro Phe Ile Thr Leu Asp 135 130 Asp Leu Lys Gln Val Pro Gly Met Gly Ser Ala Leu Val Glu Arg Asn 145 150 155 Leu Ala His Leu Thr Leu 165 <210> 8100 <211> 127 <212> PRT <213> Enterobacter cloacae <400> 8100 Lys Thr Arg Arg Val Phe Arg Asp Lys Ile Met Asn Arg Asp Tyr Val 10 Val Lys Arg Tyr Arg Thr Arg Asp Gly Lys Ile Pro Phe Glu Asp Trp 25 Val Ala Lys Leu Arg Arg Lys Asp Pro Glu Leu Ala Phe Arg Ile Leu 35 40 45 Leu Arg Ile Asp Arg Ala Glu Lys Gly Asn Phe Gly Asp Tyr Arg Tyr Leu Arg Glu Gly Val Trp Glu Leu Lys Val Asp Ser Gly Pro Gly Tyr 75 65 70 Arg Val Tyr Phe Ala Val Gln His Arg Glu Ile Leu Leu Leu Ile 85 90 Gly Gly Asp Lys Lys Ser Gln Lys Ala Asp Val Met Leu Ala Ile Asp 100 105 Tyr Trp Lys Asp His Gln Lys Asp Lys Leu His Glu Gln Lys 115 <210> 8101 <211> 281 <212> PRT <213> Enterobacter cloacae <400> 8101 Pro His His Ile Ser Gly Val Ile Met Ala Arg Leu Ala Ala Phe Asp 10 Met Asp Gly Thr Leu Leu Met Pro Asp His Arg Leu Gly Glu Lys Thr 20 Leu Lys Thr Leu Lys Arg Leu Arg Glu Arg Glu Val Thr Leu Thr Phe 35 40 Ala Thr Gly Arg His Val Leu Glu Met Arg His Leu Leu Gly Thr Phe 55 60 Ala Leu Asp Ala Phe Leu Ile Thr Gly Asn Gly Thr Arg Ile His Ser 70 75 Val Asp Gly Asp Val Leu His Arg Gln Asp Leu Asn Pro Glu Val Ala 85 90 Asp Ile Val Leu His Ser Thr Trp Asp Thr Gln Ala Ser Val His Val 105 110 100 Phe Asn Asp Glu Gly Trp Phe Thr Gly Arg Glu Ile Pro Ala Leu Leu 115 120 125 His Ala His Val Tyr Ser Gly Phe Lys Tyr Gln Leu Ile Asp Leu Arg 135 140 Arg Ile Pro Ala His Lys Val Thr Lys Ile Cys Phe Cys Gly Asp His 150 155 Asp Asp Leu Cys Arg Leu Arg Ile Gln Leu Asn Glu Ala Leu Gly Glu 165 170 175 Arg Ala His Leu Thr Phe Ser Ala Val Asp Cys Leu Glu Val Leu Pro

185 Val Gly Cys Asn Lys Gly Ser Ala Leu Ala Val Leu Ser Asp His Leu

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195
                          200
Gly Leu Thr Met Gln Asp Cys Met Ala ?he Gly Asp Ala Met Asn Asp
  210
               215
                              220
His Glu Met Leu Ser Asn Val Gly Arg Gly Leu Ile Met Gly Asn Ala
           230
                                 235
Met Pro Gln Leu Ile Ala Ala Leu Pro His Leu Pro Val Ile Gly His
        245 250 255
Cys Arg Asn Glu Ala Val Ser His Phe Leu Thr His Trp Leu Asp Lys
    260 265
Asn Asn Leu Pro Tyr Ser Pro Glu
<210> 8102
<211> 125
<212> PRT
<213> Enterobacter cloacae
<400> 8102
Leu Arg Pro Leu Pro Asn Ser Asp Trp Arg Gly Tyr Met Lys Leu Val
                                 1.0
Thr Val Val Ile Lys Pro Phe Lys Leu Glu Asp Val Arg Glu Ala Leu
          20
                             25
Ser Ser Met Gly Ile Gln Gly Leu Thr Val Thr Glu Val Lys Gly Phe
                         40
35
Gly Arg Gln Lys Gly His Ala Glu Leu Tyr Arg Gly Ala Glu Tyr Ser
  50
                      5.5
Val Asn Phe Leu Pro Lys Val Lys Ile Asp Val Ala Ile Ala Asp Asp
                  70
                                     7.5
Gln Leu Asp Glu Val Ile Asp Val Val Ser Lys Ala Ala Tyr Thr Gly
                                 90
              8.5
Lys Ile Gly Asp Gly Lys Ile Phe Val Ala Glu Leu Gln Arg Val Ile
                          105
          100
Arg Ile Arg Thr Gly Glu Ser Asp Glu Ala Ala Leu
                          120
      115
<210> 8103
<211> 373
<212> PRT
<213> Enterobacter cloacae
<400> 8103
Asn Ala Arg Ala Leu Phe Met Asn Lys Val Val Leu Tyr Cys Arg Pro
Gly Phe Glu Lys Glu Cys Ala Ala Glu Ile Thr Asp Lys Ala Ala Lys
Arg Glu Val Phe Gly Phe Ala Arg Val Lys Glu Asn Ala Gly Tyr Val
                          40
Val Phe Glu Cys Tyr Gln Pro Asp Asp Ala Asp Lys Leu Ala Arg Glu
Leu Pro Phe Ser Ser Leu Ile Phe Ala Arg Gln Met Phe Val Ala Gly
                  70
                                     75
                                                        8.0
Glu Leu Leu Lys Asp Leu Pro Pro Glu Asp Arg Ile Thr Pro Ile Val
                                 90
Gly Leu Leu Gln Gly Val Val Glu Lys Gly Gly Asp Leu Arg Val Glu
                                                110
Val Ala Asp Thr Asn Glu Ser Lys Glu Leu Met Lys Phe Cys Arg Lys
       115
                          120
                                            125
Phe Thr Val Pro Leu Arg Ala Ala Leu Arg Asp Ala Gly Val Leu Thr
                      135
                           140
Asn Tyr Glu Thr Pro Lys Arg Pro Val Val His Ile Phe Phe Ile Ala
                   150
                                     155
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```
Pro Gly Cys Cys Tyr Ala Gly Tyr Ser Tyr Thr Thr Asn Asn Ser Pro
                          170
         165
Phe Phe Met Gly Ile Pro Arg Leu Arg Phe Pro Ala Asp Ala Pro Ser
     180
                      185
Arg Ser Thr Leu Lys Leu Glu Glu Ala Phe His Val Phe Ile Pro Ala
  195 200
                                   205
Asp Glu Trp Asp Glu Arg Leu Ala Asn Gly Met Tyr Ala Val Asp Leu
 210 215
                               220
Gly Ala Cys Pro Gly Gly Trp Thr Tyr Gln Leu Val Lys Arg Asn Met
225 230 235
Trp Val Ser Ser Val Asp Asn Gly Pro Met Ala Gln Ser Leu Met Asp
      245 250
                                        255
Thr Gly Gln Val Thr Trp Leu Arg Glu Asp Gly Phe Arg Tyr Arg Pro
      260 265 270
Asn Arg Asn Asn Ile Ser Trp Met Val Cys Asp Met Val Glu Lys Pro
     275 280 285
Ala Lys Val Ala Ala Leu Met Ala Ser Trp Leu Val Asn Gly Trp Cys
 290 295 300
Arg Glu Thr Ile Phe Asn Leu Lys Leu Pro Met Lys Lys Arg Tyr Glu
305 310 315
Glu Val Ser Gln Asn Leu Ala Tyr Ile Gln Gln Gln Leu Asp Glu His
           325 330 335
Gly Ile Asn Ala Glu Ile Gln Ala Arg Gln Leu Tyr His Asp Arg Glu
        340 345 350
Glu Val Thr Val His Ile Arg Arg Trp Trp Ala Ala Val Gly Gly Arg
                    360
 355
Arg Asp Glu Arg
```

<211> 154 <212> PRT <213> Enterobacter cloacae

370 <210> 8104

<400> 8104 Ala Gly Ser Thr Tyr Cys Ser Trp Asn Ala Ala Lys Arg Thr Gly Ser 10 5 Thr Val Phe Thr Val Leu Pro Phe Leu Phe Leu Ser Ser Ala Met Leu 25 20 Cys Phe Ala Pro Phe Arg Phe Ser Val Glu Val Tyr Met Ser His His 40 4.5 Asp Ser Val Arg Ala Gln Leu His Ala Ile Glu Ala Leu Met Arg Gln 50 55 His Gln Leu Trp Gln Asp Asn Ala Pro Gln Pro Asp Ala Phe Ala Ser 70 75 Thr Gln Pro Phe Cys Leu Asp Thr Leu Asp Pro Phe Glu Trp Leu Gln 90 85 Trp Val Leu Ile Pro Arg Met His Ala Leu Leu Glu Gly Gly His Ala 105 110 100 Leu Pro Ala Ser Phe Ala Val Ser Pro Tyr Tyr Glu Met Ala Leu Glu 125 120 115 Ala Thr His Pro Ala Arg Ala Met Met Leu Val Glu Leu Glu Lys Leu 135 140 Asp Ala Leu Phe Ala Gly Asp Asp Ala

<210> 8105 <211> 461

<212> PRT <213> Enterobacter cloacae

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<400> 8105
His Gln Thr Asn Arg Thr Glu Thr Cys Trp Gly Ala Arg Met Met Thr
Thr Gln Ser Ser Pro Ile Val Thr Asp Met Lys Val Ile Pro Val Ala
      20
                       25
Gly Gln Asp Ser Met Leu Leu Asn Ile Gly Gly Ala His Asn Ala Trp
                    40
Phe Thr Arg Asn Ile Val Val Leu Thr Asp Asn Ala Gly Asn Thr Gly
              5.5
Val Gly Glu Ala Pro Gly Gly Glu Val Ile Tyr Gln Thr Leu Val Asp
              7.0
Ala Ile Pro His Val Val Gly Gln Glu Val Ala Arg Leu Asn Lys Val
                    90
          85
Val Gln Arg Val His Lys Gly Asn His Ser Ala Asp Phe Asp Thr Phe
       100
               105 110
Gly Lys Gly Ala Trp Thr Phe Glu Leu Arg Val Asn Ala Val Ala Ala
   115 120 125
Leu Glu Ala Ala Leu Leu Asp Leu Leu Gly Lys Ala Leu Asn Val Pro
 130 135 140
Val Cys Glu Leu Leu Gly Pro Gly Lys Gln Arg Asp Ala Val Thr Val
   150 155 160
Leu Gly Tyr Leu Phe Tyr Val Gly Asp Arg Thr Lys Thr Asp Leu Pro
      165 170 175
Tyr Leu Glu Arg Ser Pro Gly Ser His Glu Trp Tyr His Leu Arg His
   180 185 190
Gln Glu Ala Leu Ser Gly Glu Ala Val Val Arg Leu Ala Glu Ala Ala
195 200 205
Gln Asp Arg Tyr Gly Phe Lys Asp Phe Lys Leu Lys Gly Gly Val Leu
210 215 220
Pro Gly Glu Gln Glu Ile Asp Ser Val Arg Ala Leu Lys Lys Arg Phe
225 230 235
Pro Glu Ala Arg Ile Thr Val Asp Pro Ash Gly Ala Trp Leu Leu Asp
          245 250 255
Glu Ala Ile Ala Leu Cys Lys Gly Leu Gly Asp Val Leu Thr Tyr Ala
 260 265 270
Glu Asp Pro Cys Gly Ala Glu Gln Gly Phe Ser Gly Arg Glu Val Met
    275 280 285
Ala Glu Phe Arg Arg Ala Thr Gly Leu Pro Val Ala Thr Asn Met Ile
 290 295
Ala Thr Asn Trp Arg Glu Met Gly His Ala Val Met Leu Asn Ala Val
             310 315
Asp Ile Pro Leu Ala Asp Pro His Phe Trp Thr Leu Ser Gly Ala Val
      325 330
Arg Val Ala Gln Leu Cys Asp Asp Trp Gly Leu Thr Trp Gly Cys His
       340
            345 350
Ser Asn Asn His Phe Asp Ile Ser Leu Ala Met Phe Thr His Val Gly
 355 360 365
Ala Ala Ala Pro Gly Asn Pro Thr Ala Ile Asp Thr His Trp Ile Trp
 370 375 380
Gln Glu Gly Glu Ala Arg Leu Thr Lys Asn Pro Leu Glu Ile Lys Asn
       390 395
Gly Thr Ile Ala Val Pro Asp Ala Pro Gly Leu Gly Val Glu Leu Asp
          405 410
Trp Asp Gln Ile His Lys Ala His Glu Ala Tyr Lys Lys Leu Pro Gly
       420 425
Gly Ala Arg Asn Asp Ala Gly Pro Met Gln Tyr Leu Ile Pro Gly Trp
    435 440 445
Thr Phe Asp Arg Lys Arg Pro Val Phe Gly Arg His
                455
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<211> 450 <212> PRT <213> Enterobacter cloacae

<400> 8106 Lys Asp Arg Thr Met Ser Thr Phe Ser Thr Pro Val Val Thr Ser Met Gln Ile Ile Pro Val Ala Gly His Asp Ser Met Leu Met Asn Leu Ser 2.0 2.5 Gly Ala His Ala Pro Phe Phe Thr Arg Asn Ile Val Val Ile Lys Asp 40 45 Asn Ser Gly His Thr Gly Val Gly Glu Ile Pro Gly Gly Glu Lys Ile 55 Arg Lys Thr Leu Glu Asp Ala Ile Pro Leu Val Val Gly Lys Thr Leu 75 70 Gly Glu Tyr Lys Asn Val Leu Thr Arg Val Arg Thr Thr Phe Ala Asp 85 90 Arg Asp Ala Gly Gly Arg Gly Leu Gln Thr Phe Asp Leu Arg Thr Thr 105 110 100 Ile His Val Val Thr Gly Ile Glu Ala Ala Met Leu Asp Leu Leu Gly 115 120 125 Gln His Leu Gly Val Asn Val Ala Ser Leu Leu Gly Asp Gly Gln Gln 135 140 Arg Ser Glu Val Glu Met Leu Gly Tyr Leu Phe Phe Ile Gly Asn Arg 145 150 155 Lys Leu Thr Pro Leu Pro Tyr Gln Ser Gln Pro Asp Glu Lys Cys Asp 165 170 175 Trp Tyr Arg Val Arg His Asp Glu Ala Met Thr Pro Asp Ala Val Val 180 185 190 Arg Leu Ala Glu Ala Ala Tyr Glu Lys Tyr Gly Phe Asn Asp Phe Lys 200 205 195 Leu Lys Gly Gly Val Leu Ala Gly Glu Glu Glu Ala Glu Ala Ile Ala 210 215 220 Ala Leu Ala Lys Arg Phe Pro Gln Ala Arg Val Thr Leu Asp Pro Asn 230 235 240 Gly Ala Trp Ser Leu Asp Glu Ala Ile Lys Ile Gly Lys Gln Leu Lys 245 250 255Gly Val Leu Ala Tyr Ala Glu Asp Pro Cys Gly Ala Glu Gln Gly Phe 265 270 260 Ser Gly Arg Glu Val Met Ala Glu Phe Arg Arg Ala Thr Gly Leu Pro 280 285 275 Thr Ala Thr Asn Met Ile Ala Thr Asp Trp Arg Gln Met Gly His Thr 295 Leu Ser Leu Gln Ser Val Asp Ile Pro Leu Ala Asp Pro His Phe Trp 315 320 305 Thr Met Gln Gly Ser Val Arg Val Ala Gln Met Cys His Glu Phe Gly 325 330 Leu Thr Trp Gly Ser His Ser Asn Asn His Phe Asp Ile Ser Leu Ala 345 350 340 Met Phe Thr His Val Ala Ala Ala Pro Gly Asn Ile Thr Ala Ile 365 360 355 Asp Thr His Trp Ile Trp Gln Glu Gly Asn Gln Arg Leu Thr Lys Gln 375 380 Pro Phe Glu Ile Lys Gly Gly Met Val Gln Val Pro Ala Thr Pro Gly 395 390 Leu Gly Val Glu Leu Asp Met Asp Gln Val Met Lys Ala His Glu Leu 405 410 Tyr Gln Lys His Gly Leu Gly Ala Arg Asp Asp Ala Leu Ala Met Gln 420 425 Tyr Leu Ile Pro Glu Trp Arg Phe Asp Asn Lys Arg Pro Cys Met Val 440

Arg 450 <210> 8107 <211> 551

<212> PRT

<213> Enterobacter cloacae

<400> 8107 Leu Leu Arg Phe Ser Met Thr Thr Asn Tyr Ile Phe Val Thr Gly Gly 10 Val Val Ser Ser Leu Gly Lys Gly Ile Ala Ala Ala Ser Leu Ala Ala 25 Ile Leu Glu Ala Arg Gly Leu Asn Val Thr Met Met Lys Leu Asp Pro 40 45 Tyr Ile Asn Val Asp Pro Gly Thr Met Ser Pro Thr Gln His Gly Glu 5.5 Val Phe Val Thr Glu Asp Gly Ala Glu Thr Asp Leu Asp Leu Gly His 75 80 70 Tyr Glu Arg Phe Ile Arg Thr Lys Met Thr Arg Arg Asn Asn Phe Thr 90 95 85 Thr Gly Arg Ile Tyr Ser Asp Val Leu Arg Lys Glu Arg Arg Gly Asp 105 110 100 Tyr Leu Gly Ala Thr Val Gln Val Ile Pro His Ile Thr Asn Ala Ile 120 125 Lys Glu Arg Val Leu Ala Gly Gly Glu Gly His Asp Val Val Leu Val 135 140 130 Glu Ile Gly Gly Thr Val Gly Asp Ile Glu Ser Leu Pro Phe Leu Glu 150 155 160 Ala Ile Arg Gln Leu Ala Val Asp Ile Gly Arg Glu His Ala Leu Phe 170 175 165 Met His Leu Thr Leu Val Pro Tyr Met Ala Ala Ala Gly Glu Val Lys 180 185 190 Thr Lys Pro Thr Gln His Ser Val Lys Glu Leu Leu Ser Ile Gly Ile 200 205 195 Gln Pro Asp Ile Leu Val Cys Arg Ser Asp Arg Ala Ile Pro Ala Asn 215 220 210 Glu Arg Ala Lys Ile Ala Leu Phe Cys Asn Val Pro Glu Lys Ala Val 230 235 240 Ile Ser Met Lys Asp Val Asp Ser Ile Tyr Lys Ile Pro Gly Leu Leu 245 250 255 Lys Ser Gln Gly Leu Asp Asp Tyr Ile Cys Lys Arg Phe Ser Leu Asn 265 270 260 Cys Pro Glu Ala Asn Leu Ser Glu Trp Glu Gln Val Ile Tyr Glu Glu 280 285 275 Ala Asn Pro Gly Gly Glu Val Thr Ile Gly Met Val Gly Lys Tyr Ile 295 300 Glu Leu Pro Asp Ala Tyr Lys Ser Val Ile Glu Ala Leu Lys His Gly 310 315 320 Gly Leu Lys Asn Arg Val Ser Val Asn Ile Lys Leu Ile Asp Ser Gln 330 335 325 Asp Val Glu Thr Arg Gly Val Glu Ile Leu Lys Asp Leu Asp Ala Ile 345 350 340 Leu Ile Pro Gly Gly Phe Gly Tyr Arg Gly Val Glu Gly Lys Ile Ala 360 365 Thr Ala Arg Tyr Ala Arg Glu Asn Asn Ile Pro Tyr Leu Gly Ile Cys 380 375 Leu Gly Met Gln Val Ala Leu Ile Glu Phe Ala Arg Asn Val Ala Gly 395 390 Met Glu Asn Ala Asn Ser Thr Glu Phe Val Pro Asp Cys Lys Tyr Pro

410

```
Val Val Ala Leu Ile Thr Glu Trp Arg Asp Glu Asp Gly Asn Val Glu
                         425
Val Arg Thr Glu Lys Ser Asp Leu Gly Gly Thr Met Arg Leu Gly Ala
      435 440
                                       445
Gln Ala Cys Gln Leu Ser Asp Asp Ser Val Val Arg Lys Leu Tyr Gly
       4.55
Glu Pro Val Ile Thr Glu Arg His Arg His Arg Tyr Glu Val Asn Asn
    470
                               475
Met Leu Leu Lys Gln Ile Glu Ala Ala Gly Leu Arg Val Ala Gly Arg
       485 490 495
Ser Gly Asp Asp Gln Leu Val Glu Ile Ile Glu Val Pro Asn His Pro
         500 505 510
Trp Phe Val Ala Cys Gln Phe His Pro Glu Phe Thr Ser Thr Pro Arg
      515 520 525
Asp Gly His Pro Leu Phe Ala Gly Phe Val Lys Ala Ala Ser Glu Tyr
 530 535
Gln Lys Arg Gln Ala Lys
<210> 8108
<211> 450
<212> PRT
<213> Enterobacter cloacae
<221>UNSURE
<222>(421)
<400> 8108
Phe Ser Gln Leu Lys Ile Tyr Val Val Lys Ile Phe Ile Asn Asn Gln
                        10
Gly Asp Lys Lys Met Met Gln Met Phe Ser Gly Ala Ser Ser Gly Gly
          20
                       25
Trp Phe Glu Lys Ala Gln Arg Phe Gly Lys Ser Phe Met Leu Pro Ile
                                     45
Ala Ile Leu Pro Ala Ala Gly Leu Leu Eugly Ile Gly Gly Ala Leu
 50
Ser Asn Pro Asn Thr Leu Thr Ala Tyr Pro Phe Leu Asp Val Gly Trp
              70
                           75
Leu Gln Ala Ile Phe Thr Ile Met Ser Ser Ala Gly Ser Ile Val Phe
                             90
                                             95
             85
Ala Asn Leu Ser Val Leu Phe Ala Val Gly Val Ala Val Gly Leu Ala
                                    110
                          105
    100
 Lys Asn Asp Lys Gly Thr Ala Gly Leu Ala Ala Leu Leu Ala Tyr Leu
                       120
                                       125
  115
Val Met Asn Ala Thr Ile Asn Ala Leu Leu Ile Leu Thr Gly Lys Leu
                    135
Ala His Glu Asn Pro Gly Ala Val Gly Gln Gly Met Thr Leu Gly Ile
                    155
     150
Gln Thr Leu Glu Thr Gly Val Phe Gly Gly Val Val Ile Gly Leu Val
                             170 175
           165
 Thr Cys Ala Leu His His Arg Phe Asn Lys Ile Ala Leu Pro Gln Phe
          180 185
 Leu Gly Phe Phe Gly Gly Ser Arg Phe Val Pro Ile Ile Ser Ser Leu
                       200
 Ala Ala Ile Leu Val Gly Ala Leu Met Thr Val Val Trp Pro His Phe
                    215
                                    220
 Gln Lys Leu Ile Phe Gly Leu Gly Gly Leu Val Asp Ala Thr Gly Tyr
                230
                                235
 Leu Gly Thr Leu Leu Tyr Gly Phe Ile Leu Arg Met Leu Gly Pro Phe
              245
                              250
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```
Gly Leu His His Ile Phe Tyr Leu Pro Phe Trp Thr Thr Ala Leu Gly
    260
                          265
Gly Ser Glu Ile Val Asn Gly His Leu Val Glu Gly Thr Gln Arg Ile
   275
                       280
                                         285
Phe Phe Ala Gln Leu Ala Asp Pro Asn Thr Gln His Phe Tyr Glu Gly
 290 295
                                     300
Thr Ser Arg Phe Met Ser Gly Arg Phe Ile Thr Met Met Phe Gly Leu
305 310
                               315
Leu Gly Ala Cys Leu Ala Met Tyr His Thr Ala Arg Pro Glu Asn Lys 325 330 335
Lys Arg Val Ala Gly Leu Leu Leu Ser Ala Ala Leu Thr Ser Phe Leu
          340 345 350
Thr Gly Ile Thr Glu Pro Ile Glu Phe Ser Phe Leu Phe Ile Ala Pro
      355 360 365
Val Leu Tyr Val Ile His Ala Leu Phe Asp Gly Leu Ala Phe Met Leu
   370
                    375
                         380
Ala His Ile Leu His Ile Thr Ile Gly Gln Thr Phe Ser Gly Gly Phe
                390 395
Ile Asp Phe Val Leu Phe Gly Ile Leu Gln Gly Glu Ala Lys Thr Asn
             405 410 415
Trp Met Phe Val Xaa Leu Val Gly Val Pro Trp Phe Phe Leu Tyr Tyr
                                430
       420 425
Cys Thr Phe Arg Tyr Leu Ile Lys Arg Phe Asp Phe Ala Thr Pro Gly
                        440
      435
   450
<210> 8109
<211> 463
<212> PRT
<213> Enterobacter cloacae
<400> 8109
Thr Arg Arg Lys Leu Cys Phe Arg Ser Ala Thr Met Ser Thr Leu Ser
                            10
His Ala Ala Ser Ser Ala Glu Lys Arg Thr Asn Ala Arg Tyr Trp Ile
                           2.5
                                             3.0
Val Val Met Leu Phe Ile Val Thr Ser Phe Asn Tyr Gly Asp Arg Ala
                        4.0
       35
Thr Leu Ser Ile Ala Gly Ser Glu Met Ala Lys Asp Ile Gly Leu Asp
                    55
Pro Val Gly Met Gly Tyr Val Phe Ser Ala Phe Ser Trp Ala Tyr Val
                                  75
                 70
Ile Gly Gln Ile Pro Gly Gly Trp Leu Leu Asp Arg Phe Gly Ser Lys
                               90
              85
Arg Val Tyr Phe Trp Ser Ile Phe Ile Trp Ser Met Phe Thr Leu Leu
                           105 110
           100
Gln Gly Phe Val Asp Ile Phe Ser Gly Phe Gly Ile Ile Ile Ala Leu
                                         125
                        120
       115
Phe Thr Leu Arg Phe Leu Val Gly Leu Ala Glu Ala Pro Ser Phe Pro
                                     140
                     135
Gly Asn Ser Arg Ile Val Ala Ala Trp Phe Pro Ala Gln Glu Arg Gly
                 150
                                  155
145
Thr Ala Val Ala Ile Phe Asn Ser Ala Gln Tyr Phe Ala Thr Val Ile
                               170
              165
 Phe Ala Pro Ile Met Gly Trp Leu Thr His Glu Val Gly Trp Ser His
                                190
           180
                            185
Val Phe Phe Met Gly Gly Leu Gly Ile Val Ile Ser Phe Ile Trp
                                          205
       195
                         200
 Leu Lys Val Ile His Glu Pro Asn Gln His Pro Gly Val Asn Lys Lys
                                      220
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215

```
Glu Leu Asp Tyr Ile Ala Glu Gly Gly Ala Leu Ile Asn Met Asp Gln
                          235
225
              230
Lys Thr Gln Lys Ala Lys Val Pro Phe Ser Gln Lys Trp Gly Gln Ile
          245 250
Lys Gln Leu Val Gly Ser Arg Met Met Ile Gly Ile Tyr Leu Gly Gln
                                     270
   260 265
Tyr Cys Ile Asn Ala Leu Thr Tyr Phe Phe Ile Thr Trp Phe Pro Val
 275 280
                                285
Tyr Leu Val Gln Ala Arg Gly Met Ser Ile Leu Lys Ala Gly Phe Val
290 295 300
Ala Ser Val Pro Ala Ile Cys Gly Phe Val Gly Gly Val Leu Gly Gly
305 310 315
Val Ile Ser Asp Trp Leu Met Arg Arg Thr Gly Ser Leu Asn Ile Ala
          325 330 335
Arg Lys Thr Pro Ile Val Leu Gly Met Leu Leu Ser Met Thr Met Val
        340 345 350
Phe Cys Asn Tyr Val Ser Ala Glu Trp Met Ile Ile Gly Phe Met Ala
                   360
Met Ala Phe Phe Gly Lys Gly Ile Gly Ala Leu Gly Trp Ala Val Met
                375
                    380
 370
Ala Asp Thr Ala Pro Lys Glu Ile Ser Gly Leu Ser Gly Gly Leu Phe
385 390 395
Asn Met Phe Gly Asn Ile Ser Gly Ile Val Thr Pro Ile Ala Ile Gly
          405 410
Tyr Ile Val Gly Thr Thr Gly Ser Phe Asn Gly Ala Leu Ile Tyr Val
        420
                       425
                                     430
Gly Val His Ala Leu Val Ala Val Leu Ser Tyr Leu Val Leu Val Gly
435 440 445
Asp Ile Lys Arg Ile Glu Leu Lys Pro Val Gly Glu Arg Gly
  450
                 455
```

<210> 8110 <211> 522 <212> PRT <213> Enterobacter cloacae

180

<400> 8110 Leu Thr Asn Gly Phe Thr Val Leu Gln Val His Thr Val Leu Ala Gly 10 Asp Gly Gln Arg Phe Asp Asn Ala Gly Pro Gly Ile Phe Lys Leu Ser 20 25 30 Leu Gln Ile Val Ile Ala Met His His Lys Glu Asn Ala Gln Gln Gln 40 4.5 Thr Asp Glu Asn Gly Arg Ser Glu Asp Gln Asn His His Ala Arg Ala 55 50 Gln Ala Val Val Gly His Gly Val Pro Leu Trp Asp Asn Gln Ala Asn 75 70 Tyr Val Tyr Leu Arg Thr Ile Ser Ala Met Ala Gln Phe Tyr Ser Ala 85 90 Lys Arg Arg Val Thr Thr Arg Gln Ile Ile Thr Val Glu Ala Ser Asp 100 105 Leu Asp Pro Phe Gly Gln Gly Val Ala Arg His Lys Gly Lys Thr Leu 125 115 120 Phe Ile Thr Gly Leu Leu Pro Gly Glu Arg Ala Asp Ile Thr Leu Thr 135 Glu Asp Lys Arg Gln Tyr Ala Arg Gly Gln Val Lys Arg Arg Leu Asn 150 155 Asp Ser Pro Glu Arg Val Thr Pro Arg Cys Pro His Phe Gly Val Cys 165 170 Gly Gly Cys Gln Gln Gln His Ala Ser Thr Glu Leu Gln Gln Lys Ser

185

```
Lys Ser Ser Ala Leu Ala Arg Leu Val Gly His Asp Val Asn Asp Ile
                                     205
      195
                      200
Ile Ala Asp Arg Pro Trp Gly Tyr Arg Arg Arg Ala Arg Leu Ser Leu
 210
                  215
                                  220
Ser Tyr Gln Pro Lys Thr Glu Arg Leu Glu Met Gly Phe Arg Lys Ala
       230
                    235
Gly Ser Ser Asp Ile Val Ser Val Thr Gln Cys Pro Val Leu Val Pro
            245 250 255
His Leu Glu Ala Leu Leu Pro Asp Val His His Cys Leu Ala Ser Leu
        260 265 270
Asp Gly Val Arg Ser Leu Gly His Val Glu Leu Val Leu Ala Asn Ser
     275 280 285
Gly Pro Leu Met Val Leu Arg His Thr Ala Pro Leu Ser Lys Ala Asp
 290 295 300
Arg Glu Lys Leu Glu Arg Phe Ser His Ser His Glu Leu Ala Leu Phe
      310 315
Leu Ala Pro Gln Ser Glu Ile Leu Glu Gln Val Ser Gly Glu Ala Pro
            325
                            330
Trp Tyr Ala Ser Asp Gly Leu Arg Leu Thr Phe Ser Pro Arg Asp Phe
         340
                         345
                                         350
Ile Gln Val Asn Asp Gly Val Asn Gln Gln Met Val Ala Asn Ala Leu
      355
                      360
                                      365
Glu Trp Leu Asp Val Gln Pro Thr Asp Arg Val Leu Asp Leu Phe Cys
  370
                   375
                                   380
Gly Met Gly Asn Phe Thr Leu Pro Leu Ala Arg Arg Ala Ala Ser Val
               390
                                395
Val Gly Val Glu Gly Val Glu Ala Leu Val Ala Lys Gly Gln Glu Asn
            405 410 415
Ala Gln Gln Asn Gly Leu Gln Asn Val Thr Phe Phe His Gln Asn Leu
        420
                         425
                                         430
Glu Asp Asp Val Thr Gln Gln Pro Trp Ala Lys Gln Gly Phe Asp Lys
     435
                      440
                                      445
Ile Leu Leu Asp Pro Ala Arg Ala Gly Ala Pro Gly Val Met Gln His
                  455
                                   460
Ile Ile Lys Leu Ala Pro Glu Arg Val Val Tyr Val Ser Cys Asn Pro
               470
                               475
Ala Thr Leu Ala Arg Asp Ser Glu Ala Leu Leu Ser Gly Gly Tyr Gln
            485 490
                                            495
Ile Arg Arg Leu Ala Met Leu Asp Met Phe Pro His Thr Gly His Leu
         500 505
Glu Ser Met Val Leu Phe Glu His Ile
      515
                      520
<210> 8111
<211> 760
<212> PRT
<213> Enterobacter cloacae
<400> 8111
Val Trp Leu Val Asp Phe Asp Arg Pro Leu Ser Leu Lys Glu Arg Thr
                            10
Met Val Ala Val Arg Ser Ala His Leu Asn Lys Ala Gly Glu Phe Asp
         20
                          25
                                          30
Pro Gln Lys Trp Ile Ala Ser Leu Gly Ile Ser Ser Gln Gln Ser Cys
      35
                      40
Glu Arg Leu Thr Glu Thr Trp Ala Tyr Cys Leu Arg Thr Thr Gln Gly
 50
                   55
His Pro Asp Ala Glu Leu Leu Trp Arg Gly Val Glu Met Val Glu
65
               70
                               75
Ile Leu Ser Met Leu Asn Met Asp Ile Glu Thr Leu Gln Ala Ala Leu
```

9.0

Leu Phe Pro Leu Ala Asp Ala Asp Val Val Thr Glu Asp Val Leu Arg 100 105 Glu Ser Val Gly Gln Ser Val Val Ala Leu Ile His Gly Val Arg Asp 115 120 Met Ala Ala Ile Arg Gln Leu Lys Ala Ala Gln Thr Asp Ser Val Ser 135 140 Ser Glu Gln Val Asp Asn Val Arg Arg Met Leu Leu Ala Met Val Asp 155 150 Asp Phe Arg Cys Val Val Ile Lys Leu Ala Glu Arg Val Ala His Leu 165 170 175 Arg Glu Val Lys Asp Ala Pro Glu Asp Glu Arg Val Leu Ala Ala Lys 180 185 190 Glu Cys Thr Asn Ile Tyr Ala Pro Leu Ala Asn Arg Leu Gly Ile Gly 195 200 205 Gln Leu Lys Trp Glu Leu Glu Asp Tyr Cys Phe Arg Tyr Leu His Pro 210 215 220 Ala Glu Tyr Lys Arg Ile Ala Lys Leu Leu His Glu Arg Arg Ile Asp 230 235 Arg Glu His Tyr Ile Glu Glu Phe Val Ser Gly Leu Arg Gln Ser Met 245 250 255 Lys Glu Glu Asn Val Arg Ala Glu Val Tyr Gly Arg Pro Lys His Ile 260 265 270 Tyr Ser Ile Trp Arg Lys Met Gln Lys Lys His Leu Ala Phe Asp Glu 275 280 285 Leu Phe Asp Val Arg Ala Val Arg Ile Val Ala Glu Arg Leu Gln Asp 290 295 300 Cys Tyr Ala Ala Leu Gly Ile Val His Thr His Phe Arg His Leu Pro 305 310 315 320 Asp Glu Phe Asp Asp Tyr Val Ala Asn Pro Lys Pro Asn Gly Tyr Gln 325 330 335 Ser Ile His Thr Val Val Leu Gly Pro Gly Gly Lys Thr Val Glu Ile 340 345 Gln Ile Arg Thr Lys Gln Met His Glu Asp Ala Glu Leu Gly Val Ala 360 365 Ala His Trp Lys Tyr Lys Glu Gly Tnr Ser Gly Gly Gly Arg Ser Gly 375 380 His Glu Asp Arg Ile Ala Trp Leu Arg Lys Leu Ile Ala Trp Gln Glu 390 395 Glu Met Ala Asp Ser Gly Glu Met Leu Asp Glu Val Arg Ser Gln Val 405 410 415 Phe Asp Asp Arg Val Tyr Val Phe Thr Pro Lys Gly Asp Val Val Asp 420 425 Leu Pro Ala Gly Ser Thr Pro Leu Asp Phe Ala Tyr His Ile His Ser 440 445 Asp Val Gly His Arg Cys Ile Gly Ala Lys Ile Gly Gly Arg Ile Val 455 460 Pro Phe Thr Tyr Gln Leu Gln Met Gly Asp Gln Ile Glu Ile Ile Thr 470 475 Gln Lys Gln Pro Asn Pro Ser Arg Asp Trp Leu Asn Pro Asn Leu Gly 485 490 495 Tyr Val Thr Thr Ser Arg Gly Arg Ser Lys Ile His Ala Trp Phe Arg 500 505 510 Lys Gln Asp Arg Asp Lys Asn Ile Leu Ala Gly Arg Gln Ile Leu Asp 520 515 Asp Glu Leu Glu His Ile Gly Ile Ser Leu Lys Glu Ala Glu Lys Phe 535 540 Leu Leu Pro Arg Tyr Asn Phe Asn Glu Leu Asp Glu Leu Leu Ala Ala 550 555 Ile Gly Gly Gly Asp Ile Arg Leu Asn Gln Met Val Asn Phe Leu Gln 565 570 Ala Gln Phe Asn Lys Pro Ser Ala Ala Glu Gln Asp Ala Ala Ala Leu

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585
Lys Gln Leu Gln Gln Lys Thr Tyr Ala Pro Gln Gln Arg Ser Lys Asp
      595
                      600
                                605
Asn Gly Arg Val Val Glu Gly Val Gly Asn Leu Met His His Ile
 610
                615
Ala Arg Cys Cys Gln Pro Ile Pro Gly Asp Asp Ile Val Gly Phe Ile
           630
                        635
Thr Gln Gly Arg Gly Ile Ser Ile His Arg Ser Asp Cys Asp Gln Leu
            645
                            650 655
Ala Glu Leu Gln Ser His Ala Pro Glu Arg Ile Val Glu Ala Val Trp
         660
                       665
                              670
Gly Glu Ser Tyr Ser Ala Gly Tyr Ser Leu Val Val Arg Val Thr Ala
                     680 685
    675
Asn Asp Arg Ser Gly Leu Leu Arg Asp Ile Thr Thr Ile Leu Ala Asn
 690 695
                        700
Glu Lys Val Asn Val Leu Gly Val Ala Ser Arg Ser Asp Thr Arg Glu
705 710 715
Gln Leu Ala Thr Ile Asp Met Thr Ile Glu Ile Tyr Asn Leu Gln Val
       725 730 735
Leu Gly Arg Val Leu Gly Lys Leu Asn Gln Val Pro Asp Val Ile Asp
     740 745
Ala Arg Arg Leu His Gly Gly
     755
<210> 8112
<211> 457
<212> PRT
<213> Enterobacter cloacae
<400> 8112
Asn Gly Asn Ala Tyr Leu Trp Tyr Ala Leu Phe Val Trp Ser Phe Ser
                            10
Leu Thr Cys Thr Glu Glu Asn Leu Met Ser Lys Ile Val Lys Val Ile
                  25
Gly Arg Glu Ile Ile Asp Ser Arg Gly Asn Pro Thr Val Glu Ala Glu
35
                  40
Val His Leu Glu Gly Gly Phe Val Gly Met Ala Ala Pro Ser Gly
50 55
Ala Ser Thr Gly Ser Arg Glu Ala Leu Glu Leu Arg Asp Gly Asp Lys
               7.0
                               75
Ser Arg Phe Met Gly Lys Gly Val Leu Lys Ala Val Gly Ala Val Asn
           8.5
                            90
Gly Pro Ile Ala Gln Ala Ile Val Gly Lys Asp Ala Lys Asp Gln Ala
         100 105
                                         110
Gly Ile Asp Lys Ile Met Ile Asp Leu Asp Gly Thr Glu Asn Lys Ser
                     120
                                     125
Asn Phe Gly Ala Asn Ala Ile Leu Ala Val Ser Leu Ala Asn Ala Lys
                  135
                                   140
Ala Ala Ala Ala Lys Gly Met Pro Leu Phe Glu His Ile Ala Glu
               150
                               155 160
Leu Asn Gly Thr Pro Gly Lys Tyr Ser Met Pro Val Pro Met Met Asn
            165
                            170 175
Ile Ile Asn Gly Gly Glu His Ala Asp Asn Asn Val Asp Ile Gln Glu
        180
                         185
                                         190
Phe Met Ile Gln Pro Val Gly Ala Lys Thr Leu Lys Glu Ala Val Arg
      195
                      200
                                      205
Met Gly Ser Glu Val Phe His Asn Leu Ala Lys Val Leu Lys Ala Lys
                215 220
Gly Met Asn Thr Ala Val Gly Asp Glu Gly Gly Tyr Ala Pro Asn Leu
               230
                               235
Gly Ser Asn Ala Glu Ala Leu Ala Val Ile Ala Glu Ala Val Lys Ala
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245
                            250
Ala Gly Tyr Glu Leu Gly Lys Asp Ile Thr Leu Ala Met Asp Cys Ala
         260
                        265
                                   270
Ala Ser Glu Phe Tyr Lys Asp Gly Lys Tyr Val Leu Ala Gly Glu Gly
     275
                 280
                                   285
Asn Lys Ala Phe Thr Ser Glu Glu Phe Thr His Phe Leu Glu Asp Leu
                295
                         300
Thr Lys Gln Tyr Pro Ile Val Ser Ile Glu Asp Gly Leu Asp Glu Ser
305 310 315 320
Asp Trp Asp Gly Phe Ala Tyr Gln Thr Lys Val Leu Gly Asp Lys Ile
          325 330
Gln Leu Val Gly Asp Asp Leu Phe Val Thr Asn Thr Lys Ile Leu Lys
        340 345 350
Glu Gly Ile Glu Lys Gly Ile Val Asn Ser Ile Leu Ile Lys Phe Asn
     355 360 365
Gln Ile Gly Ser Leu Thr Glu Thr Leu Ala Ala Ile Lys Met Ala Lys
 370 375 380
Asp Ala Gly Tyr Thr Ala Val Ile Ser His Arg Ser Gly Glu Thr Glu
385 390 395
Asp Ala Thr Ile Ala Asp Leu Ala Val Gly Thr Ala Ala Gly Gln Ile 405 \  \  \, 410 \  \  \, 410
Lys Thr Gly Ser Met Ser Arg Ser Asp Arg Val Ala Lys Tyr Asn Gln
       420 425
Leu Ile Arg Ile Glu Glu Ala Leu Gly Glu Lys Ala Pro Tyr Asn Gly
435 440
Arg Lys Glu Ile Lys Gly Gln Ala
  450
```

<210> 8113 <211> 312 <212> PRT

<213> Enterobacter cloacae

<400> 8113 His Leu Ser Gln Ile Thr Met Ser Lys Arg Leu Pro Pro Leu Asn Ala 10 Leu Arg Val Phe Asp Ala Ala Ala Arg His Leu Ser Phe Thr Arg Ala 2.5 3.0 Ala Asp Glu Leu Phe Val Thr Gln Ala Ala Val Ser His Gln Ile Lys 40 45 Ser Leu Glu Asp Phe Leu Gly Leu Lys Leu Phe Arg Arg Arg Asn Arg 50 55 Ser Leu Leu Thr Glu Glu Gly Gln Ser Tyr Phe Gln Asp Ile Lys 75 70 80 Glu Ile Phe Ser Gln Leu Thr Glu Ala Thr Arg Lys Leu Gln Ala Arg 85 90 Ser Ala Lys Gly Ala Leu Thr Val Ser Leu Leu Pro Ser Phe Ala Ile 100 105 Gln Trp Leu Val Pro Arg Leu Ser Ser Phe Asn Ser Thr Tyr Pro Gly 115 120 Ile Asp Val Arg Ile Gln Ala Val Asp Arg Gln Glu Asp Lys Leu Ala 130 135 140 Asp Asp Val Asp Val Ala Ile Phe Tyr Gly Arg Gly Asn Trp Pro Gly 150 155 Leu Arg Val Glu Lys Leu Tyr Ala Glu Tyr Leu Leu Pro Val Cys Ser 165 170 175 Pro Leu Leu Thr Gly Asp Lys Ala Leu Lys Thr Pro Ala Asp Leu 180 185 190 Ala Gln His Thr Leu Leu His Asp Ala Ser Arg Arg Asp Trp Gln Thr 200 Tyr Thr Arg Gln Leu Gly Leu Asn His Ile Asn Val Gln Gln Gly Pro

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215
                                        220
Ile Phe Ser His Ser Ala Met Val Leu Gln Ala Ala Ile His Gly Gln
                 230
                           235
Gly Val Ala Leu Ala Asn Asn Val Met Ala Gln Ser Glu Ile Glu Ala
              245 250
Gly Arg Leu Val Cys Pro Phe Asn Asp Val Leu Val Ser Lys Asn Ala
          260
                265 270
Phe Tyr Leu Val Cys His Asp Ser Gln Ala Glu Leu Gly Lys Ile Ala
      275 280 285
Ala Phe Arg Gln Trp Ile Leu Ala Lys Ala Ala Ser Glu Gln Glu Lys
       295
Phe Arg Phe Arg Tyr Glu Gln
<210> 8114
<211> 145
<212> PRT
<213> Enterobacter cloacae
<400> 8114
Arg Leu Cys Ala Gly His Ala Ser Ile Gln Asp Leu Asn Met Thr Ser
                                1.0
Arg Phe Met Leu Ile Phe Ala Ala Val Ser Gly Phe Ile Phe Val Ala
 20
                             25
                                               30
Leu Gly Ala Phe Gly Ala His Val Leu Ser Lys Ser Leu Gly Val Val
                         40
Glu Met Gly Trp Ile Gln Thr Gly Leu Glu Tyr Gln Ala Phe His Thr
                      5.5
                                       60
Leu Ala Ile Phe Gly Leu Ala Val Ala Met Gln Pro Ala Ile Ser Ile
                            75
               70
Trp Phe Tyr Trp Ser Ser Val Tyr Leu Ala Val Gly Thr Val Leu Phe
              8.5
                                90
Ser Gly Ile Leu Tyr Cys Leu Ala Leu Ser His Leu Arg Leu Trp Ala
          100
                            105
Phe Val Thr Pro Val Gly Gly Val Ser Phe Leu Ala Gly Trp Val Leu
 115 120
                                           125
Met Phe Ile Gly Ala Ile Arg Leu Lys Arg Lys Gly Val Val His Glu
                     135
                                        140
145
<210> 8115
<211> 202
<212> PRT
<213> Enterobacter cloacae
<400> 8115
Pro Leu Tyr Arg Tyr Thr Tyr Gly Leu Ser Leu Ser Cys Leu Thr Arg
                                10
Arg Glu Lys Ser Val Asp Ile Glu Thr Ala Asn Ala Leu Thr Ser Phe
          20
Thr Thr Arg Tyr Cys Asp Ala Trp His Glu Lys Arg Gly Thr Trp Pro
       3.5
                         40
                                           45
Gln Ser Thr Asp Leu Cys Gly Val Pro Ser Pro Cys Ile Ile Ala Ser
 50
                     55
Gln Asp Asp Tyr Val Ile Trp Gln Pro Lys Pro Phe Met Gly Glu Gln
               70
                                  75
Asn Val Asn Ala Val Glu Arg Ala Met Asp Leu Val Ile Gln Pro Ala
              85
                                90
Leu His Ala Phe Tyr Thr Thr Gln Phe Ala Gly Asp Met Thr Ala Cys
```

```
Phe Ala Gly Gln Pro Leu Thr Leu Leu Gln Thr Trp Ser Glu Asp Asp
      115
                        120
Leu Gln Arg Val Gln Glu Asn Leu Ile Gly His Leu Val Thr Gln Lys
                    135
                                     140
Arg Leu Lys Leu Ser Pro Thr Leu Phe Ile Ala Thr Leu Asp Ser Glu
               150 155 160
145
Leu Asp Val Ile Ser Val Cys Asn Leu Ser Gly Glu Val Ile Lys Glu
             165 170 175
Thr Leu Gly Thr Arg Asn Arg Asp Val Leu Ala Pro Ser Leu Ala Asp
       180 185
Phe Leu Thr Arg Ile Glu Pro Leu Leu
     195
<210> 8116
<211> 264
<212> PRT
<213> Enterobacter cloacae
<400> 8116
Arg Cys Met Thr Leu Glu Ile Leu Tyr Gln Asp Glu Trp Leu Val Ala
                              10
Val Asn Lys Pro Ser Gly Trp Leu Val His Arg Ser Trp Leu Asp Arg
                        25
Asp Glu Lys Val Val Met Gln Thr Val Arg Asp Gln Ile Gly Gln
    35
                    40
His Val Phe Thr Ala His Arg Leu Asp Arg Pro Thr Ser Gly Val Leu
                    55
                                   60
Leu Met Gly Leu Ser Ser Glu Ala Gly Arg Leu Leu Ala Gln Gln Phe
                7.0
                                75
Glu Gln His Gln Ile Gln Lys Arg Tyr His Ala Ile Val Arg Gly Trp
            8.5
Leu Met Asp Ser Ala Thr Leu Asp Tyr Pro Leu Val Glu Glu Leu Asp
          100
                        105 110
Lys Ile Ala Asp Lys Phe Ala Arg Glu Asp Lys Gly Pro Gln Pro Ala
      115 120
                                        125
Val Thr Asp Tyr Arg Gly Met Ala Thr Thr Glu Leu Pro Val Ala Thr
 130 135
                                     140
Ser Lys Phe Pro Thr Thr Arg Tyr Ser Leu Val Glu Leu Leu Pro Lys
                                  155
                                                  160
Thr Gly Arg Lys His Gln Leu Arg Arg His Leu Ala His Leu Arg His
             165
                              170 175
Pro Ile Ile Gly Asp Ser Lys His Gly Asp Leu Arg Gln Asn Arg Ser
          180
                          185
                                           190
Ala Ala Glu His Phe Gly Cys Asn Arg Leu Met Leu His Ala Ser Glu
                        200
                                        205
Leu Arg Leu Thr His Pro Phe Thr Gly Glu Pro Leu Thr Ile Arg Ala
  210
                    215
                                     220
Gly Leu Asp Lys Val Trp Met Gln Ala Leu Ser Gln Phe Gly Trp Leu
225
                230
                                  235
Gly Gln Leu Pro Glu Asn Glu Arg Val Glu Phe Ala Ala Gly Asn Val
             245
                              250
Gln Asp Glu Gln Gln Ala Gln
          260
<210> 8117
<211> 155
<212> PRT
<213> Enterobacter cloacae
```

<400> 8117

Leu Arg Glu Gln Ser Met Ala Glu Val Gly Ile Phe Val Gly Thr Met

```
3964
                               1.0
Tyr Gly Asn Ser Leu Leu Val Ala Glu Glu Ala Glu Ala Ile Leu Val
                           25
                                             3.0
Asn Gln Gly His Lys Ala Thr Val Tyr Glu Asp Pro Glu Leu Ala Asp
                        40
Trp Glu Lys Tyr Lys Asp Lys Tyr Ile Leu Val Val Thr Ser Thr Thr
Gly Gln Gly Asp Leu Pro Asp Ser Ile Val Pro Leu Phe Gln Gly Ile
                70
                                  75
Lys Asp Gln Leu Gly Tyr Gln Pro Asp Val His Tyr Gly Ile Ile Ala
            8.5
                              90
Leu Gly Asp Ser Ser Tyr Ala Asn Phe Cys Gly Gly Gly Lys Gln Phe
               105
                                 110
Asp Ala Leu Leu Gln Glu Gln Ser Ala Gln Arg Val Gly Glu Met Leu
     115 120 125
Leu Ile Asp Ala Gly Glu His Pro Glu Pro Glu Ser Glu Ser Asn Pro
 130 135 140
Trp Val Glu His Trp Ala Thr Leu Leu Asn
<210> 8118
<211> 385
```

<211> 385 <212> PRT <213> Enterobacter cloacae

<400> 8118 Gly Trp Leu Met Lys Ile Val Ile Ala Pro Asp Ser Tyr Lys Glu Ser 10 Leu Ser Ala Leu Glu Val Ala Thr Ala Ile Glu Val Gly Phe Arg Glu 20 25 Ile Phe Pro Ser Ala His Tyr Val Lys Leu Pro Val Ala Asp Gly Gly 35 40 Glu Gly Thr Val Glu Ala Met Val Ala Ala Thr His Gly Arg Leu Val 50 55 His Val Pro Val Thr Gly Pro Leu Gly Glu Arg Val Glu Gly Phe Phe 70 7.5 Gly Leu Ser Gly Asp Gly Lys Ser Ala Phe Ile Glu Met Ala Ala Ala 85 90 Ser Gly Leu Glu Leu Val Ala Pro Ala Lys Arg Asn Pro Leu Ile Thr 100 105 110 Thr Ser Trp Gly Thr Gly Glu Leu Ile Arg His Ala Leu Asp Ala Gly 120 115 Val Lys His Ile Ile Ile Gly Ile Gly Gly Ser Ala Thr Asn Asp Gly 135 140 Gly Ala Gly Met Val Gln Ala Leu Gly Val Lys Leu Leu Asp Ala Lys 150 155 160 Ala Gln Pro Val Gly Pro Gly Gly Gly Glu Leu Ala Ser Leu Ala His 165 170 Ile Asp Leu Ser Gly Leu Asp Lys Arg Leu Ala Asp Cys Arg Ile Glu 180 185 Val Ala Cys Asp Val Thr Asn Pro Leu Ile Gly Glu Thr Gly Ala Ser 195 200 205 Ala Val Phe Gly Pro Gln Lys Gly Ala Thr Pro Glu Met Val Arg Thr 215 220 Leu Asp Asn Ala Leu Ala His Tyr Ala Lys Ile Ile Ala Arg Asp Leu 230 235 Asp Ile Asp Val Leu Asn Leu Ala Gly Gly Gly Ala Ala Gly Gly Met 245 250 255 Gly Ala Ala Leu Tyr Ala Phe Cys Gly Ala Gln Leu Arg Gln Gly Ile 265 Glu Ile Val Thr Asp Ala Leu His Leu Asp Glu Gln Val Ala Asp Ala

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280
                                        285
Asp Leu Val Ile Thr Gly Glu Gly Arg Ile Asp Ser Gln Thr Ile His
                    295
                            300
Gly Lys Val Pro Val Gly Val Ala Arg Val Ala Lys Arg Tyr Asn Lys
             310
                     315
Pro Val Ile Gly Ile Ala Gly Ser Leu Thr Ala Asp Val Gly Val Val
           325 330 335
His Glu His Gly Leu Asp Ala Val Phe Ser Val Ile Tyr Thr Ile Cys
     340 345 350
Ser Leu Glu Asp Ala Leu Glu Asn Ala Gln Gln Asn Val Gln Met Ala
   355 360 365
Ala Arg Asn Ile Ala Ala Val Ile Lys Met Gly Gln Gly Met Ser Arg
                    375
385
<210> 8119
<211> 278
<212> PRT
<213> Enterobacter cloacae
<400> 8119
Gly Asn Ala Ala Thr Arg Leu Arg His Leu Met Glu Ser Val Met Thr
                              10
Glm Ile Asp Arg Leu Leu Gly Ile Met Lys Arg Leu Arg Asp Pro Glu
20
                          25
                                            30
Asn Gly Cys Pro Trp Asp Lys Glu Gln Thr Phe Ala Thr Ile Ala Pro
      35
                    4.0
Tyr Thr Leu Glu Glu Thr Tyr Glu Val Leu Asp Ala Ile Ser Arg Glu
                 55
Asp Phe Asp Asp Leu Arg Gly Glu Leu Gly Asp Leu Leu Phe Gln Val
             70
                                 7.5
Val Phe Tyr Ala Gln Met Ala Gln Glu Glu Gly Arg Phe Asn Phe Asp
             8.5
                              90
Asp Ile Cys Ala Ala Ile Ser Asp Lys Leu Glu Arg Arg His Pro His
          100
                           105
Ile Phe Gly Asp Ala Ser Ala Gly Asn Ser Ala Glu Val Leu Ala Arg
      115
                       120
Trp Glu Gln Ile Lys Ser Ala Glu Arg Ala Glu Lys Ser Gln His Ser
   130
                    135
                                     140
Ala Leu Asp Asp Ile Pro Leu Asn Leu Pro Ala Leu Met Arg Ala His
                150
                                 155
Lys Ile Gln Lys Arg Cys Ser Ala Val Gly Phe Asp Trp Thr Ser Leu
             165
                               170
Gly Pro Val Leu Glu Lys Val His Glu Glu Ile Asp Glu Val Met His
                               190
          180
                        185
Glu Ala Gln Gln Ala Val Val Asp Glu Ala Lys Leu Glu Glu Glu Met
   195
Gly Asp Leu Leu Phe Ala Thr Val Asn Leu Ser Arg His Leu Gly Val
   210
                   215
                                     220
Lys Ala Glu Thr Ala Leu Gln Lys Ala Asn Ile Lys Phe Glu Arg Arg
                 230
                                 235
Phe Arg Glu Val Glu Arg Ile Val Ala Ser Arg Gly Leu Glu Met Ser
             245
                              250
Gly Ile Asp Leu Asp Ala Met Glu Glu Val Trp Gln Glu Val Lys Arq
         260
                          265
Gln Glu His Asp Leu
      275
```

<210> 8120 <211> 458 <212> PRT <213> Enterobacter cloacae

<400> 8120 Gly Ala His Leu Ile Thr His Ile Ser Pro Leu Gly Ser Met Asp Met 10 15 Leu Ser Gln Leu Glu Val Asp Met Leu Lys Arg Thr Ala Ser Ser Asp 25 Leu Tyr Gln Leu Phe Arg Asn Cys Ser Leu Ala Val Leu Asn Ser Gly 40 Ser Leu Thr Asp Asn Ser Lys Glu Leu Leu Ser Arg Phe Glu Ser Phe 50 55 Asp Ile Asn Val Leu Arg Arg Glu Arg Gly Val Lys Leu Glu Val Ile 70 75 Asn Pro Pro Glu Asp Ala Phe Val Asp Gly Arg Ile Ile Arg Ser Leu 85 90 Gln Ala Asn Leu Phe Ala Val Leu Arg Asp Ile Leu Phe Val Asn Gly 100 105 110 Gln Ile Ser Asn Ala Gly Arg Phe Gln His Leu Asp Leu Glu Ser Ser 115 120 125 Val His Ile Thr Asn Leu Val Phe Ser Ile Leu Arg Asn Ala Arg Ala 130 135 140 Leu His Val Gly Glu Ala Pro Asn Met Val Val Cys Trp Gly Gly His 145 150 155 Ser Ile Asn Glu Thr Glu Tyr Leu Tyr Ala Arg Arg Val Gly Thr Gln 165 170 175 Leu Gly Leu Arg Glu Leu Asn Ile Cys Thr Gly Cys Gly Pro Gly Ala 180 185 190 Met Glu Ala Pro Met Lys Gly Ala Ala Val Gly His Ala Gln Gln Arg 195 200 205 Tyr Lys Glu Gly Arg Phe Ile Gly Met Thr Glu Pro Ser Ile Ile Ala 210 215 220 Ala Glu Pro Pro Asn Pro Leu Val Asn Glu Leu Ile Ile Met Pro Asp 225 230 235 Ile Glu Lys Arg Leu Glu Ala Phe Val Arg Ile Ala His Gly Ile Ile 245 250 Ile Phe Pro Gly Gly Val Gly Thr Ala Glu Glu Leu Leu Tyr Leu Leu 260 265 270 Gly Ile Leu Met Asn Pro Ala Asr Lys Asp Gln Val Leu Pro Leu Ile 275 280 285 Leu Thr Gly Pro Lys Glu Ser Ala Asp Tyr Phe Arg Val Leu Asp Glu 295 300 Phe Ile Val His Thr Leu Gly Glu Asp Ala Arg Arg His Tyr Arg Ile 310 315 Ile Ile Asp Asp Ala Ala Glu Val Ala Arg Gln Met Lys Lys Ala Met 325 330 Pro Leu Val Lys Glu Asn Arg Arg Asp Thr Gly Asp Ala Tyr Ser Phe 340 345 350 Asn Trp Ser Ile Arg Ile Ala Pro Asp Leu Gln Ile Pro Phe Glu Pro 360 365 Ser His Glu Asn Met Ala Asn Leu Lys Leu Tyr Pro Asp Gln Pro Val 375 380 Glu Val Leu Ala Ala Asp Leu Arg Arg Ala Phe Ser Gly Ile Val Ala 390 395 Gly Asn Val Lys Glu Val Gly Ile Arg Ala Ile Glu Glu Phe Gly Pro 405 415 410 Tyr Lys Ile His Gly Asp Pro Glu Met Met Arg Arg Met Asp Asp Met 420 425 430 Leu Gln Gly Phe Val Ala Gln His Arg Met Lys Leu Pro Gly Ser Ala 440 Tyr Ile Pro Cys Tyr Glu Ile Ile Lys

<210> 8121 <211> 457 <212> PRT <213> Enterobacter cloacae <400> 8121 Thr Asn Phe Ile Leu Pro Ser Gly Thr Phe Ser Ser Asp Leu Thr Lys 10 Asn Leu Thr Ile Cys Phe Leu Gln Glu Ile Gln Met Glu Thr Thr Gln 20 25 3.0 Thr Ser Thr Val Ala Ser Ile Glu Ser Arg Ser Gly Trp Arg Lys Thr 3.5 4.0 4.5 Asp Thr Met Trp Met Leu Gly Leu Tyr Gly Thr Ala Ile Gly Ala Gly 50 55 60 Val Leu Phe Leu Pro Ile Asn Ala Gly Val Gly Gly Met Ile Pro Leu 65 70 7.5 Ile Ile Met Ala Leu Ile Ala Phe Pro Met Thr Phe Phe Ala His Arg 85 90 Gly Leu Thr Arg Phe Val Leu Ser Gly Lys Asn Pro Gly Glu Asp Ile 100 105 110 Thr Glu Val Val Glu Glu His Phe Gly Val Gly Ala Gly Lys Leu Ile 115 120 125 Thr Leu Leu Tyr Phe Phe Ala Ile Tyr Pro Ile Leu Leu Val Tyr Ser 130 135 140 Val Ala Ile Thr Asn Thr Val Glu Ser Phe Met Met His Gln Leu Gln 150 155 Met Thr Pro Pro Pro Arg Ala Ile Leu Ser Leu Ile Leu Ile Val Gly 165 170 175 Met Met Thr Ile Val Arg Phe Gly Glu Gln Met Ile Val Lys Ala Met 180 185 190 Ser Val Leu Val Phe Pro Phe Val Ala Ala Leu Met Val Leu Ala Leu 195 200 205 Tyr Leu Ile Pro Gln Trp Asn Gly Ala Ala Leu Glu Thr Leu Ser Leu 215 220 Ser Ser Ala Ser Thr Thr Gly Asn Gly Leu Leu Leu Thr Leu Trp Leu 230 235 Ala Ile Pro Val Met Val Phe Ser Phe Asn His Ser Pro Ile Ile Ser 245 250 Ser Phe Ala Val Ala Lys Arg Glu Glu Tyr Gly Asn Gly Ala Glu Lys 260 265 270 Lys Cys Ser Ser Ile Leu Ala Arg Ala His Ile Met Met Val Leu Thr 280 285 Val Met Phe Phe Val Phe Ser Cys Val Leu Ser Leu Ser Pro Ala Asp 295 300 Leu Ala Ala Ala Lys Glu Gln Asn Ile Ser Ile Leu Ser Tyr Leu Ala 310 315 Asn His Phe Asn Ala Pro Leu Ile Ala Trp Met Ala Pro Ile Ile Ala 325 330 335 Ile Ile Ala Ile Thr Lys Ser Phe Leu Gly His Tyr Leu Gly Ala Arg 340 345 350 Glu Gly Phe Asn Gly Met Val Ile Lys Ser Leu Arg Gly Lys Gly Lys 355 360 365 Thr Ile Glu Ile Asn Arg Leu Asn Lys Ile Thr Ala Leu Phe Met Leu 375 370 380 Val Thr Thr Trp Ala Val Ala Thr Leu Asn Pro Ser Ile Leu Gly Met 390 395 Ile Glu Thr Leu Gly Gly Pro Ile Ile Ala Met Ile Leu Phe Leu Met 405 410

Pro Met Tyr Ala Ile Gln Lys Val Pro Ala Met Arg Lys Tyr Ser Gly

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420
                           425
His Ile Ser Asn Val Phe Val Val Val Met Gly Leu Ile Ala Ile Ser
    435
              440
Ala Ile Phe Tyr Ser Leu Phe Ser
   450
<210> 8122
<211> 258
<212> PRT
<213> Enterobacter cloacae
<400> 8122
Thr Glu Gly Arg Leu Ser Val Ala Val His Leu Leu Ile Val Asp Ala
                              10
Leu Asn Leu Ile Arg Arg Ile His Ala Val Gln Gly Thr Pro Cys Lys
         20
                          2.5
Asp Thr Cys Leu His Ala Leu Glu Gln Leu Ile Arg His Ser Glu Pro
      35
                      4.0
                                       45
Thr His Ala Val Ala Val Phe Asp Asp Glu Ala Arg Asn Thr Gly Trp
                 5.5
 50
                                    60
Arg His Gln Arg Leu Pro Asp Tyr Lys Ala Gly Arg Ala Pro Met Pro
              70
                                7.5
Asp Asp Leu His Ala Glu Met Pro Ala Ile Arg Ala Ala Phe Glu Gln
            85
                             90
Arg Gly Val Pro Cys Trp Gly Ala His Gly Asn Glu Ala Asp Asp Leu
       100
                         105
Ala Ala Thr Leu Ala Val Lys Val Ala Ser Ala Gly His Gln Ala Thr
 115 120 125
Ile Val Ser Thr Asp Lys Gly Tyr Cys Gln Leu Leu Ser Pro Thr Ile
130 135
Arg Ile Arg Asp Tyr Phe Gln Lys Arg Trp Leu Asp Ala Pro Phe Ile
              150
                               155 160
Ala Ser Glu Phe Gly Val Ser Pro Glu Gln Leu Pro Asp Tyr Trp Gly
      165 170
                                              175
Leu Ala Gly Ile Ser Ser Lys Val Pro Gly Val Ala Gly Ile Gly
         180 185
Pro Lys Ser Ala Ala Gln Leu Leu Thr Glu Phe Gln Ser Leu Glu Gly
 195 200
Met Tyr Ala Arg Leu Asn Glu Val Pro Asp Lys Trp Arg Lys Lys Leu
 210 215 220
Glu Ala His Lys Glu Met Ala Phe Ile Cys Arg Glu Val Ala Thr Leu
225 230 235
Gln Thr Asp Leu Gln Leu Asp Gly Asn Leu Gln Gln Leu Arg Leu Glu
            245
Arg
<210> 8123
<211> 278
<212> PRT
<213> Enterobacter cloacae
<400> 8123
Gly Ser Ser Met Ser Asp His Glu Asn Leu Leu Lys Leu Arg Gln
                             10
Glu Ala Ser Gly Tyr Ser Pro Thr Gln Gln Lys Leu Gly Glu Phe Val
                          25
Leu Asn Asp Pro Ala Arg Val Leu Tyr Leu Thr Ile Thr Glu Leu Ala
                     40
Arg Glu Ser Gly Thr Ser Glu Ala Ser Val Thr Arg Leu Cys Arg Thr
```

60

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Leu Gly Cys Lys Gly Tyr Asn Glu Phe Lys Met Ala Leu Ala Leu Asp
           70
Ile Gln Gln Gly Leu Pro Glu Arg Gln Ala Gly Asp Ala Ile Asp Asn
                           90
Val Val Asp Glu Ser Val Gln Ala Leu Gln Asp Thr Ala Lys Leu Leu
        100 105
Asp Arg Ala Gln Leu Glu Gln Ala Thr Leu Ala Leu His Gln Ala Gln
      115
                         125
Ser Val Gln Ile Tyr Gly Val Ala Ala Ser Ala Ile Leu Gly Glu Tyr
                 135
                      140
Leu His Tyr Lys Leu Leu Arg Leu Gly Lys Pro Ala Gln Leu Phe Ser
          150 155 160
Asp Met His Arg Ala Ala Met Asn Ala Thr Thr Leu Ser Lys Glu Thr
         165 170 175
Leu Val Val Ala Ile Ser Ser Ser Gly Ser Thr Arg Asp Leu Leu His
        180 185 190
Val Val Lys Leu Ala Arg Lys Arg Gly Val Lys Val Leu Ala Leu Ser
   195 200 205
Asn Thr Pro Arg Ser Pro Leu Ala Ser Leu Ser Asp Leu Gln Leu Val
210 215 220
Ala Ala Lys Pro Glu Gly Pro Leu Ser Ala Gly Ala Leu Asn Ala Lys
225 230 235 240
Val Gly Val Met Leu Leu Val Glu Leu Leu Thr Thr Ser Leu Ile Ala
     245 250 255
Val Asp Ser His Tyr Gly Asp Val Ser Gln Gln Thr Ala Ser Ala Thr
 260 265
Leu Pro Leu Leu Leu
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<211> 282 <212> PRT <213> Enterobacter cloacae

275

<210> 8124

LIO BRECIODACIEI CIOACAE

<400> 8124 Asn Met Ser Tyr Glu Asn His Gln Ala Leu Thr Gly Leu Thr Leu Gly 10 Lys Ser Thr Asp Tyr Arg Asp Thr Tyr Asp Ala Ser Leu Leu Gln Gly 25 3.0 Val Pro Arg Ser Leu Asn Arg Asp Pro Leu Gly Leu His Ala Asp Ala Leu Pro Phe Val Gly Gly Asp Ile Trp Thr Leu Tyr Glu Leu Ser Trp 50 55 60 Leu Asn Ala Arg Gly Leu Pro Gln Val Ala Val Gly His Val Glu Leu Asp Tyr Ala Ser Val Asn Leu Val Glu Ser Lys Ser Phe Lys Leu Tyr 85 90 Leu Asn Ser Phe Asn Gln Thr Lys Phe Asn Ser Trp Asp Glu Val Gln 105 110 Gln Thr Leu Glu Arg Asp Leu Ser Ala Cys Ala Gln Gly Asn Val Thr 125 115 120 Val Ser Leu Tyr Arg Leu His Glu Leu Glu Gly Gln Pro Ile Ala His 130 135 140 Phe His Gly Thr Cys Ile Asp Asp Gln Asp Ile Glu Val Glu Ser Tyr 150 155 160 Glu Phe Ser Ser Asp Tyr Leu Glu Asn Ala Ala Gly Gly Lys Val Val 165 170 Asn Glu Thr Leu Val Ser His Leu Leu Lys Ser Asn Cys Leu Ile Thr 180 190 185 His Gln Pro Asp Trp Gly Ser Val Gln Ile Gln Tyr Arg Gly Pro Gln 200 205

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Ile Asp Arg Glu Lys Leu Leu Arg Tyr Leu Val Ser Phe Arg His His
   210
             215
Asn Glu Phe His Glu Gln Cys Val Glu Arg Ile Phe Asn Asp Ile Gln
        230
                            235
Arg Phe Cys Gln Pro Glu Lys Leu Ser Val Tyr Ala Arg Tyr Thr Arg
           245 250 255
Arg Gly Gly Leu Asp Ile Asn Pro Trp Arg Thr Asn Thr Asp Phe Val
       260 265 270
Pro Ala Thr Gly Arg Leu Val Arg Gln
<210> 8125
<211> 433
<212> PRT
<213> Enterobacter cloacae
<400> 8125
Thr Ala Ile Thr Val Thr Leu Ala Ser Lys Arg Gln Ala Pro Arg Cys
        5
               10 15
Arg Phe Cys Tyr Arg Lys Gln Lys Thr Arg Arg Ser Gly Phe Phe Arg
 20 25
Lys Asn Glu Gly Ser Gly Leu Cys Leu Ala Phe Asp Leu Phe Thr Thr
 35 40 45
Val Val Arg Cys Phe Phe Ala Gln Arg Phe Phe Asp Thr Asn Gln Leu
50 55 60
Val Val Phe Ser Asn Thr Val Arg Thr Ala His Arg Thr Gly Phe Asp
65 70
                            75
Leu Ala Ser Ser Gly Thr Asn Ser Gln Val Ser Asp Gly Ser Val Phe
         85 90
Ser Phe Ala Arg Thr Val Arg Asp Asn Arg Gly Val Ala Ser Val Phe
   100 105 110
Arg His Phe Asp Arg Ser Gln Arg Phe Gly Gln Arg Thr Asp Leu Val
115 120 125
Glu Phe Asp Gln Asp Gly Val Asn Asp Ala Phe Leu Asp Ala Phe Phe
130 135 140
Gln Asp Leu Gly Val Gly Tyr Glu Gln Ile Val Thr Asn Gln Leu Asp
145 150 155
Phe Val Ala Gln Tyr Phe Gly Leu Val Cys Glu Thr Ile Pro Val Arg
        165 170 175
Leu Val Gin Thr Val Phe Asp Arg Asn Asp Trp Val Leu Phe Gly Gin
       180 185 190
Val Phe Gln Glu Val Gly Glu Leu Phe Arg Gly Glu Arg Phe Val Ala
     195 200 205
Phe Ala Ser Gln Asn Val Phe Thr Val Phe Val Glu Phe Arg Cys Cys
 210 215
Ala Val His Arg Gln Gly Asp Val Phe Ala Gln Leu Val Ala Cys Cys
225 230
                            235 240
Phe Asn Arg Phe Ser Asp Asn Ser Gln Cys Phe Cys Val Arg Thr Gln
         245 250 255
Val Trp Arg Val Ala Ala Phe Val Thr Asn Ser Arg Val His Thr Phe
           265
Ser Phe Gln Asn Phe Ser Gln Val Val Glu His Phe Arg Thr His Thr
 275 280 285
Tyr Arg Phe Phe Gln Gly Phe Arg Ala Asn Trp Leu Asn His Glu Phe
                295 300
Leu Asn Ile Asn Val Val Cys Val Leu Thr Thr Val Asp Asp Val
             310
                            315
His His Trp Tyr Arg His Arg Val Phe Ala Trp Gly Ala Val Gln Phe
          325 330
Ser Asp Val Leu Glu Gln Trp His Ala Phe Ser Cys Cys Cys Arg Phe
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345

350

340

<210> 8126 <211> 466 <212> PRT <213> Enterobacter cloacae

<400> 8126 Glm Phe Val Glu Leu Val Glu Val Val Ala Arg Glm Glm Glu Leu Leu 5 10 Arg Leu Phe Gln Ala Tyr Pro Asp Met Phe Gln Leu Val Val Gln Asp 20 25 Leu Thr Thr Gly Lys Asp Val Leu Val Thr Ile Leu Leu Ala Glu Pro 35 40 4.5 Gly Val Asp Phe Arg Ala Pro Thr Ala Gly Gly Asn Val Thr Glu Val 50 55 60 Arg Ile Gln Pro Val Ala Ala Trp Val Trp Leu Leu Gly Asp Asp 70 7.5 Phe Asn Leu Ile Ala His Leu Glu Leu Val Gly Lys Arg Tyr Asp Thr 85 90 95 Ser Ala Asp Leu Arg Pro Asp Ala Thr Val Pro His Ile Ala Val Asp 100 105 110 Val Val Gly Glu Ile Glu Arg Arg Gly Ala Cys Arg Gln Ile Asn His 115 120 125 Val Pro Phe Arg Gly Lys Asp Val Asp Ala Ile Val Glu Asp Leu Thr 135 140 Ala His Phe Val Glu His Phe Ala Gly Val Gly His Leu Phe Leu Pro 145 150 155 160 Arg Asn Gln Leu Thr Gln Pro Gly Asp Thr Val Leu Val Thr Gly Ala 165 170 175 Thr Ala Thr Gly Gly Thr Leu Phe Val Phe Pro Val Arg Arg His Ala 185 180 190 Gln Leu Gly Val Phe Val His Leu Phe Gly Thr Asp Leu Asn Phe His 195 200 205 Arg Phe Ala Ala Arg Ala Glu His His Gly Met Asp Arg Leu Ile Ala 215 220 Ile Arg Phe Arg Val Arg Asp Val Val Ile Glu Leu Ile Arg Gln Met 225 230 235 Ala Glu Met Ser Met His Tyr Pro Gln Arg Gly Ile Ala Val Leu Lys 245 250 255 Thr Leu Arg His Asp Thr His Arg Ala His Val Lys Glm Leu Val Lys 265 Gly Glu Val Phe Leu Leu His Phe Ala Pro Asp Ala Val Asp Val Leu 280 Trp Thr Pro Val Asp Leu Gly Ala His Ile Leu Leu Phe His Arg Leu 290 295 Ala Gln Pro Ala Asp Lys Phe Leu Asp Ile Val Leu Ala Val Asn Ala 310 315 Ala Phe Val Gln Gln Phe Cys Asn Ala Phe Val Phe Arg Arg Met Gln 330

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Val Ala Glu Ala Val Ile Phe Gln Leu Pro Leu Gln Leu Pro Asp Thr
                345
Gln Thr Val Arg Gln Arg Arg Ile Asp Ile Arg Thr Leu Phe Gly Gly
      355
                      360
Gln Asp Ala Leu Val Phe Arg Arg Ile Leu Tyr Phe Thr Gln Met Gly
                   375
Asn Pro Phe Gly Gln Leu Asp His His Ala Ala Glu Ile Ile Tyr His
               390
                                395
Arg Gln Gln His Thr Thr Asn Val Ile His Leu Leu Gly Arg Asp Arg
            405
                            410
Val Ser Leu Arg Gly Phe Lys Leu Thr Asn Gly Cys His Ile Thr His
                         425 430
Ala Val Asp Glu Arg His Asp Gly Leu Ala Asp Ala Phe Thr Gln Asp
                          445
      435
          440
Val Phe Arg His His Val Gly Val Arg Gln Gly Glu Gln Gln Cys Gly
          455
Leu
465
<210> 8127
<211> 923
<212> PRT
<213> Enterobacter cloacae
<400> 8127
Arg Asn Ser Met Thr Asn Tyr Ser Leu Arg Ala Arg Met Met Ile Leu
                           10
                                             15
Ile Leu Ala Pro Thr Val Leu Ile Gly Leu Leu Leu Ser Ile Phe Phe
   20
                        25
                                         3.0
Val Val His Arg Tyr Asn Asp Leu Gln Arg Gln Leu Glu Asp Ala Gly
   35
                 40
Ala Ser Ile Ile Glu Pro Leu Ala Val Ser Ser Glu Tyr Gly Met Asn
 50 55
                                  60
Leu Gln Asn Arg Glu Ser Ile Gly Gln Leu Ile Ser Val Leu His Arg
             70
                               75
Arg His Ser Glu Ile Val Arg Ala Ile Ser Val Tyr Asp Glu His Asn
           85
                           90
Arg Leu Phe Val Thr Ser Asn Phe His Leu Asp Pro Thr Ser Leu Lys
      100 105 110
Ile Pro Asp Gly Thr Pro Phe Pro Arg His Leu Thr Val Leu Arg Arg
    115 120
                                    125
Gly Asp Ile Met Ile Leu Arg Thr Pro Ile Ile Ser Glu Ser Tyr Ser
  130 135
                                   140
Pro Asp Glu Ser Ala Gln Ser Asp Ala Lys Ser Ser Asn Asn Met Leu
145 150
                               155
                                                160
Gly Tyr Val Ala Leu Glu Leu Asp Leu Lys Ser Val Arg Leu Gln Gln
            165
                            170
                                           175
Tyr Lys Glu Ile Phe Ile Ser Gly Val Met Met Leu Phe Cys Ile Gly
      180 185
                                         190
Ile Ala Leu Ile Phe Gly Trp Arg Leu Met Arg Asp Val Thr Gly Pro
     195
                     200
Ile Arg Asn Met Val Asn Thr Val Asp Arg Ile Arg Arg Gly Gln Leu
  210 215
                                  220
Asp Ser Arg Val Glu Gly Phe Met Leu Gly Glu Leu Asp Met Leu Lys
225 230
                               235
Asn Gly Ile Asn Ser Met Ala Met Ser Leu Ala Ala Tyr His Glu Glu
           245
                            250 255
Met Gln His Asn Val Asp Gln Ala Thr Ser Asp Leu Arg Glu Thr Leu
        260
                         265
                                        270
Glu Gln Met Glu Ile Gln Asn Val Glu Leu Asp Leu Ala Lys Lys Arg
                     280
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Ala Gln Glu Ala Ala Arg Ile Lys Ser Glu Phe Leu Ala Asn Met Ser 295 His Glu Leu Arg Thr Pro Leu Asn Gly Val Ile Gly Phe Thr Arg Leu 310 315 Thr Leu Lys Ser Glu Leu Asn Pro Thr Gln Arg Asp His Leu His Thr 325 330 335 Ile Glu Arg Ser Ala Asn Asn Leu Leu Thr Ile Ile Asn Asp Val Leu 340 345 350 Asp Phe Ser Lys Leu Glu Ala Gly Lys Leu Ile Leu Glu Ser Ile Pro 360 365 355 Phe Pro Leu Arg Ser Thr Leu Asp Asp Val Val Thr Leu Leu Ala His 370 375 380 Ser Ser His Asp Lys Gly Leu Glu Leu Thr Leu Asn Ile Lys Asn Asp 385 390 395 400 Val Pro Asp Asn Val Ile Gly Asp Pro Leu Arg Leu Gln Gln Val Ile 405 410 Thr Asn Leu Val Gly Asn Ala Ile Lys Phe Thr Glu Ser Gly Asn Ile 420 425 430 Asp Ile Leu Val Glu Lys Arg Ala Leu Ser Asn Asn Lys Val Gln Ile 435 440 445 Glu Val Gln Ile Arg Asp Thr Gly Ile Gly Ile Pro Glu Arg Asp Gln 450 455 460 Thr Arg Leu Phe Gln Ala Phe Arg Gln Ala Asp Ala Ser Ile Ser Arg 470 475 Arg His Gly Gly Thr Gly Leu Gly Leu Val Ile Thr Gln Lys Leu Val 485 490 Lys Glu Met Gly Gly Asp Ile Ser Phe His Ser Gln Pro Asn Arg Gly 500 505 510 Ser Thr Phe Trp Phe His Ile Asn Leu Asp Leu Asn Pro Asn Val Gln 515 520 525 Thr Asp Gly Pro Val Thr Gly Cys Leu Lys Gly Met Arg Leu Ala Tyr 530 535 540 Val Glu Pro Asn Ala Ala Ala Gln Cys Thr Leu Asp Val Leu Ser 545 550 555 Ser Thr Pro Leu Glu Val Ile Tyr Ser Pro Thr Phe Ser Ala Leu Ala 565 570 Asn Asp His Tyr Asp Ile Leu Leu Leu Gly Ile Pro Val Thr Phe Thr 580 585 590 Gly Glu Leu Thr Met Gln Gln Glu Arg Leu Ala Lys Ala Ala Ser Met 600 605 Thr Asp Tyr Leu Leu Ala Leu Pro Cys His Ala Gln Ile Asn Ala 615 620 Glu Glu Leu Lys Asn Asp Gly Ala Ala Ala Cys Leu Leu Lys Pro Leu 625 630 635 Thr Ala Thr Arg Leu Leu Pro Ala Leu Thr Glu Tyr Cys Arg Leu Thr 645 650 His Gln Ser Leu Pro Leu Glu Asn Asp Glu His Lys Leu Pro Met Thr 660 665 670 Val Met Ala Val Asp Asp Asn Pro Ala Asn Leu Lys Leu Ile Gly Val 680 685 Leu Leu Glu Asp Gln Val Gln His Val Glu Leu Cys Thr Ser Gly Ala 695 700 Glu Ala Val Glu Gln Ala Lys Gln Met Gln Phe Asp Leu Ile Leu Met 710 715 Asp Ile Gln Met Pro Gly Met Asp Gly Ile Arg Ala Cys Glu Leu Ile 730 725 Arg Gln Leu Pro His Gln Gln Gln Thr Pro Val Ile Ala Val Thr Ala 740 745 His Ala Met Ala Gly Gln Lys Glu Lys Leu Leu Gly Ala Gly Met Asn 760 Asp Tyr Leu Ala Lys Pro Ile Asp Glu Glu Lys Leu His Ser Leu Leu

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775
                                 780
Leu Arg Tyr Lys Pro Gly His Ile Gly Gly Thr Tyr Thr Ile Thr Ala
        790
                    795 800
Glu Ser Pro Glu Ile Ser Val Asn Gln Asn Ala Thr Phe Asp Trp Gln
        805 810 815
Leu Ala Leu Arg Gln Ala Ala Gly Lys Pro Asp Leu Ala Arg Asp Met
      820 825 830
Leu Gln Met Leu Val Asp Phe Leu Pro Glu Ile Arg Asn Lys Val Glu
835 840 845
Glu Gln Leu Val Gly Glu As<br/>n Pro Glu Gly Leu Leu Glu Ala Ile His 850 \, 860
Lys Leu His Gly Ser Cys Gly Tyr Ser Gly Val Pro Arg Leu Lys Asn
865 870 875
Leu Cys Gln Leu Leu Glu Gln Gln Leu Arg Ala Gly Thr Pro Glu Ser
          885 890 895
Asp Leu Glu Pro Glu Phe Leu Glu Leu Leu Asp Glu Met Asp Asn Val
        900 905
Thr Arg Glu Ala Met Lys Val Leu Gly Ser
<210> 8128
<211> 461
<212> PRT
<213> Enterobacter cloacae
<400> 8128
Ser Asn Gly Arg Ile Met Ile Ser Val Phe Asp Ile Phe Lys Ile Gly
                          10
Ile Gly Pro Ser Ser Ser His Thr Val Gly Pro Met Lys Ala Gly Lys
                       25
20
Gln Phe Thr Asp Asp Leu Ile Ala Arg Gly Ile Leu His Asp Ile Thr
35
                  40
Arg Val Val Val Asp Val Tyr Gly Ser Leu Ser Leu Thr Gly Lys Gly
50 55
                                 60
His His Thr Asp Ile Ala Ile Ile Met Gly Leu Ala Gly Asn Leu Pro
     70
                             75
Asp Thr Val Asp Ile Asp Ala Ile Pro Gly Phe Ile Gln Asp Val Asn
           85
                          90
Thr His Gly Arg Leu Leu Ala Asn Gly Glu His Glu Val Glu Phe
        100 105
Pro Val Asp His Cys Met Asn Phe His Ala Asp Asn Leu Ser Leu His
 115 120 125
Glu Asn Gly Met Arg Ile Thr Ala Leu Ala Gly Asp Lys Ala Val Tyr
 130
                 135
                                 140
Ser Gln Thr Tyr Tyr Ser Ile Gly Gly Gly Phe Ile Val Asp Glu Asp
             150
                             155
His Phe Gly Gln Ser Thr Asn Ser Ala Val Asp Val Pro Tyr Pro Tyr
            165
                           170
                                          175
Lys Asn Ala Ala Asp Leu Gln Arg His Cys Gln Glu Thr Gly Leu Ser
        180
                        185
                                       190
Leu Ser Gly Leu Met Met Lys Asn Glu Leu Ala Leu His Ser Lys Glu
     195
                    200
Glu Leu Glu Gln His Phe Ala Asn Val Trp Glu Val Met Arg Ser Gly
  210 215
                                 220
Ile Glu Arg Gly Ile Thr Thr Glu Gly Val Leu Pro Gly Lys Leu Arg
225
               230
                              235
Val Pro Arg Arg Ala Ala Leu Arg Arg Met Leu Val Ser Ala Asp
            245
                           250
Lys Thr Thr Thr Asp Pro Met Ala Val Val Asp Trp Ile Asn Met Phe
              265
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Ala Leu Ala Val Asn Glu Glu Asn Ala Ala Gly Gly Arg Val Val Thr

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280
                                    285
Ala Pro Thr Asn Gly Ala Cys Gly Ile Val Pro Ala Val Leu Ala Tyr
                        300
            295
Tyr Asp Lys Phe Ile Arg Glu Val Asn Ala Asn Ser Leu Ala Arg Tyr
       310
                      315
Leu Leu Val Ala Ser Ala Ile Gly Ser Leu Tyr Lys Met Asn Ala Ser
          325 330 335
Ile Ser Gly Ala Glu Val Gly Cys Gln Gly Glu Val Gly Val Ala Cys
       340 345 350
Ser Met Ala Ala Ala Gly Leu Ala Glu Leu Leu Gly Ala Ser Pro Ala
   355 360 365
Gln Val Cys Ile Ala Ala Glu Ile Gly Met Glu His Asn Leu Gly Leu
 370 375 380
Thr Cys Asp Pro Val Gly Gly Gln Val Gln Val Pro Cys Ile Glu Arg
      390 395 400
Asn Ala Ile Ala Ser Val Lys Ala Val Asn Ala Ala Arg Met Ala Leu
           405 410
Arg Arg Thr Ser Glu Pro Arg Val Cys Leu Asp Lys Val Ile Glu Thr
       420 425
                             430
Met Tyr Glu Thr Gly Lys Asp Met Asn Ala Lys Tyr Arg Glu Thr Ser
     435 440 445
Arg Gly Gly Leu Ala Met Lys Ile Val Thr Cys Asp
 450
                 455
<210> 8129
<211> 167
<212> PRT
<213> Enterobacter cloacae
<400> 8129
Arg Ala Val Leu Arg Arg Ile Ala Arg Arg Arg Gly Asp Ala Ser Val
                           10
Ile Phe Asp Val Ala Arg His Val Asp Leu Leu Val Gly Val Val Pro
                        25
                                        3.0
Ile Val Asn Leu Glu Trp Ile Gln Lys Leu Thr Arg Asp Met Ser Glu
                    40
   35
                            45
Arg Gly His Ser Arg Glu Ala Val Met Asp Ser Val Val Arg Ser Met
 50 55
                                 60
Glu Asp Tyr Ile Asn Phe Leu Thr Pro Gln Phe Ser Arg Thr His Ile
                         75
         70
Asn Phe Gln Arg Val Pro Thr Val Asp Thr Ser Asn Pro Phe Ala Ala
                           90
           85
Lys Ser Ile Leu Ser Leu Asp Glu Ser Phe Val Val Ile His Phe Arq
         100 105
                                       110
Asn Leu Glu Gly Ile Asp Tyr Pro Trp Leu Leu Ala Met Leu Gln Gly
     115 120
Ser Phe Ile Ser His Met Asn Thr Leu Val Val Pro Gly Gly Lys Met
 130 135
                                 140
Gly Leu Ala Met Glu Leu Ile Met Thr Pro Leu Val Gln Arg Leu Met
            150
                              155
                                             160
Glu Gly Lys Gln Ile Ala
            165
<210> 8130
<211> 274
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<212> PRT
<213> Enterobacter cloacae
<220>
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<221>UNSURE <222>(242)

<220>

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<221>UNSURE
<222>(243)
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<221>UNSURE
<222>(265)
<400> 8130
Thr Arg Cys Gly Arg Pro Gln Phe Gln Arg Leu Asp Ile Gly Phe Ser
                             10
Gly Pro Leu Thr Phe Phe Lys Glu Ala Ala Gly Leu Lys Ile Asp Thr
        20
                          2.5
                                           30
Thr Leu Leu Pro Glu Thr Gly Phe Leu Leu Val Gly Glu Phe Phe
 35
                      40
His Tyr Ala Ser Leu Asn Ser Pro Phe Ala Thr Ser Ile Ser Ser Lys
50 55
                                   60
Thr Arg Phe Arg Arg Glu Gly Gly Lys Thr Arg Ala Gly Tyr Ala Arg
                70
Val Asp Glu Arg Leu Arg Gln His Phe Arg Gly Glu Asn Asp Asp Arg
             8.5
                             90
Leu Ser Arg His Ile Leu Val Trp Thr Asp Ile Val Ser Leu Asn Leu
         100
                          105
                                          110
Arg Asp Leu Ile Arg His Val His Ala Phe His His Phe Ala Lys His
                       120
                                        125
Arg Val Ala Lys Val Ala Leu Thr Val Val Gln Glu Gly Val Ile Ser
                   135
                                    140
His Val Glu Glu Glu Leu Ala Gly Gly Ala Val Phe Val Arg Arg Thr
                150
                                 155
                                                 160
Arg His Arg Asp Gly Ala Ala Leu Val Gln Gln Ala Val Val Ser Phe
             165
                              170
Ile Phe Asp Gly Arg Val Arg Leu Phe Leu Leu His Leu Leu Val Lys
         180
                          185
                                           190
Thr Ala Thr Leu Asn His Lys Ala Arg Asp His Ala Val Glu Cys Gly
      195
                       200
                                        205
Val Val Ile Lys Thr Thr Val His Val Val Glu Glu Val Phe His Arg
   210
                   215
                                    220
Asn Arg Gly Phe Leu Ala Ile Gln Leu Gln Leu Asn Ile Pro Arg Lys
                230
                                 235
                                                  240
Ser Xaa Xaa Gln Asp Xaa Arg Val Ser Phe Gly Cys Xaa Arg Xaa Arg
            245
                             250 255
Gly Asn Gly Lys Lys Ser Xaa Pro Xaa Cys Asn Asn Arg Pro Leu Leu
          260
                          265
                                           270
Ile
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<210> 8131
<211> 74
<212> PRT
<213> Enterobacter cloacae
<400> 8131
Met Met Lys Asp Thr Thr Ile Glu Ala Arg Leu Ala Glu Leu Glu Ser
                           10
Arg Leu Ala Phe Gln Asp Ile Thr Ile Glu Glu Leu Asn Gln Thr Val
       20
                             25
Thr Ala His Glu Leu Glu Met Ala Lys Leu Arg Asp His Met Arg Leu
 35 40
                                4.5
Leu Thr Glu Lys Leu Lys Ala Thr Gln Pro Ser Asn Ile Ala Ser Gln
              55
Ser Glu Glu Thr Pro Pro Pro His Tyr
<210> 8132
<211> 218
<212> PRT
<213> Enterobacter cloacae
<400> 8132
Gly Val Lys Lys Ala Gly Leu Ser Arg Phe Phe Ile Phe Arg Ser Thr
                                10
Glu Ser Val Ala Thr Ala Ala Ala Val Thr Ala Thr Thr Phe Thr Val
                            25
                                               30
Ala Val Val Met Thr Met Val Val Ala Val Thr Thr Ala Ala Ala Val
                       40
                                         4.5
Met Ala Val Ile Val Val Met Val Val Thr Val Arg Thr Val Asn Val
                     5.5
                                        60
Ala Met Ser Gln Leu Phe Phe Ser Arg Phe Thr Asp Arg Asn Asn Phe
                 70 75
Tyr Val Glu Leu Gln Val Leu Thr Arg Gln His Val Val Ala Val Asn
             85
                                 90
His Asn Val Val Val Phe Asn Phe Ser Asp Phe Asn Arg Asn Arg Thr
                           105
                                               110
Leu Val Ser Phe Arg Gln Glu Ala His Ala Asn Leu Gln Leu Val Asn
                      120 125
Ala His Glu Tyr Val Phe Arg Asn Ala Leu Asn Gln Val Val Ile
                     135
                                       140
Leu Thr Val Ser Val Val Arg Ala Tyr Ser Asn Val Glu Phe Val Ala
145
                  150
                                  .155
                                                       160
Asn Phe Met Ala Phe Gln Arg Arg Phe Gln Ala Gly Asn Gln Gly Thr
              165
                                170
Val Thr Met Gln Val Val Gln Arg Arg Thr His Arg Arg Leu Ile Asn
          180
                            185
Gln His Thr Val Phe Cys Thr Tyr Leu Ile Gly Gln Ala Asp His Gln
       195
                                           205
Val Phe Cys Tyr Phe His Asp Ile Ser
   210
<210> 8133
<211> 74
<212> PRT
<213> Enterobacter cloacae
<400> 8133
Lys Met Ile Ile Pro Trp Gln Asp Leu Ser Pro Asp Thr Leu Asp Asn
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Leu Ile Glu Ser Phe Val Leu Arg Glu Gly Thr Asp Tyr Gly Glu His 20 Glu Arg Ser Leu Glu Gln Lys Val Asn Asp Val Lys Arg Gln Leu Lys 40 Ser Gly Asp Val Val Leu Val Trp Ser Glu Leu His Glu Thr Val Asn 55 Ile Met Pro Arg Asn Ala Phe His Gly <210> 8134 <211> 177 <212> PRT <213> Enterobacter cloacae <400> 8134 Ser Leu His Phe Ser Ser Gln Gly Val Ala Met Ser Ala Arg His Pro 1.0 Val Ile Ala Val Thr Gly Ser Ser Gly Ala Gly Thr Thr Thr Ser 20 25 Leu Ala Phe Arg Lys Ile Phe Ala Gln Leu Asn Leu Arg Ala Ala Glu 35 4.0 Val Glu Gly Asp Ser Phe His Arg Tyr Thr Arg Pro Glu Met Asp Met 55 Ala Ile Arg Lys Ala Arg Asp Leu Gly Lys His Ile Ser Tyr Phe Gly 7.0 75 Pro Glu Ala Asn Asp Phe Gly Leu Leu Glu Gln Thr Phe Arg Glu Tyr 85 90 Gly Gln Ser Gly Thr Gly Gln Ser Arg Lys Tyr Leu His Thr Tyr Asp 100 105 110 Glu Ala Val Pro Trp Asn Gln Val Pro Gly Thr Phe Thr Pro Trp Gln 115 120 125 Pro Leu Pro Glu Pro Thr Asp Val Leu Phe Tyr Glu Gly Leu His Gly 130 135 140 Gly Val Val Thr Pro Gln Ser Tyr Ser Thr Trp Arg Ala Thr Trp Ile

<210> 8135 <211> 213 <212> PRT <213> Enterobacter cloacae

145 150 155

Cys Trp Trp Gly Trp Cys Arg Leu Leu Thr Leu Ser Gly Ser Arg Ser

160

Pro Asp Ile Leu Met Arg Leu Ser Ser Gln Met Ala Arg Arg Leu Gln 120 125 Val Thr Ser Glu Lys Val Gly Asn Leu Ala Phe Leu Asp Val Thr Gly 135 140 Arg Ile Ala Gln Thr Leu Leu Asn Leu Ala Lys Gln Pro Asp Ala Met 145 150 155 Thr His Pro Asp Gly Met Gln Ile Lys Ile Thr Arg Gln Glu Ile Gly 165 170 175 Gln Ile Val Gly Cys Ser Arg Glu Thr Val Gly Arg Ile Leu Lys Met 180 185 190 Leu Glu Asp Gln Asn Leu Ile Ser Ala His Gly Lys Thr Ile Val Val 195 200 205 Tyr Gly Thr Arg 210

<210> 8136 <211> 715 <212> PRT

<213> Enterobacter cloacae

<400> 8136 Phe Arg Ser Asn Gly Val Pro Pro Gln Gly Gly Thr Pro Phe Leu Ser 10 Leu Leu Met Trp Arg Arg Leu Ile Tyr His Pro Glu Val Asn Tyr 20 2.5 Ala Leu Arg Gln Thr Leu Val Leu Cys Leu Pro Val Ala Val Gly Leu 40 Ile Leu Gly His Leu Gln Gln Gly Leu Leu Phe Ser Leu Val Pro Ala 5.5 Cys Cys Asn Ile Ala Gly Leu Asp Thr Pro His Lys Arg Phe Phe Lys 70 Arg Leu Ile Ile Gly Gly Cys Leu Pne Ala Gly Cys Ser Leu Ala Val 8.5 90 Gln Leu Leu Ala Arg Asp Ile Pro Leu Pro Leu Ile Leu Thr Val 100 105 110 Leu Ala Met Thr Leu Gly Val Thr Ala Glu Ile Ser Ser Leu His Ala 115 120 125 Arg Leu Leu Pro Ala Ser Leu Ile Ala Ala Ile Phe Thr Leu Ser Leu 130 135 140 Ala Gly Asn Met Pro Val Trp Glu Pro Leu Leu Ile Tyr Ala Leu Gly 145 150 155 160 Thr Leu Trp Tyr Gly Leu Phe Asn Trp Phe Trp Phe Trp Leu Trp Arg 175 165 170 Glu Gln Pro Leu Arg Glu Ser Leu Ser Leu Leu Tyr Val Gln Leu Ala 180 185 190 Glu Tyr Cys Glu Ala Lys Tyr Thr Leu Leu Thr Gln His Thr Asp Pro 195 200 205 Glu Lys Ser Leu Pro Pro Leu Leu Ala Arg Gln Gln Lys Val Val Asp 210 215 220 Leu Ile Ser Gln Cys Tyr Gln Gln Leu His Met Leu Ala Ala Asn Lys 225 230 235 Asn His Glu Tyr Lys Arg Leu Leu Arg Ile Phe Gln Val Gly Leu Asp 245 250 255 Leu Gln Glu His Ile Ser Val Ser Leu His Asn Pro Glu Glu Val Gln 260 265 270 Lys Leu Val Glu Arg Ser His Ala Glu Ala Val Ile Arg Trp Asn Ala 275 280 285 Gln Thr Val Ala Ala Arg Leu Arg Val Leu Ala Asp Asp Ile Leu Tyr 295 300 His Arg Tyr Pro Thr Arg Phe Asn Met Asp Lys Gln Leu Gly Ala Leu 310 315

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Glu Lys Ile Ala Arg Gln His Ala Asp Asn Pro Val Gly Gln Phe Ala
           325
Ala Trp His Phe Ser Arg Ile Ala Arg Val Leu Arg Thr Gln Arg Pro
        340
                       345
                                     350
Leu Tyr Ala Arg Asp Leu Met Ala Asp Lys Gln Lys Arg Leu Pro Leu
                    360 365
      355
Leu Pro Ala Leu Lys Ser Tyr Leu Ser Leu Lys Ser Ser Ala Leu Arg
                     380
Asn Ala Ala Arg Ile Ser Val Met Leu Ser Ile Ala Ser Leu Met Gly
              390 395 400
Met Ala Leu His Leu Pro Lys Pro Tyr Trp Ile Leu Met Thr Val Leu
       405 410 415
Phe Val Thr Gln Asn Gly Tyr Gly Ala Thr Arg Val Arg Ile Leu His
      420 425
Arg Ala Gly Gly Thr Met Ala Gly Leu Ile Ile Ala Gly Val Thr Leu
                   440 445
 435
His Phe His Val Pro Glu Gly Tyr Thr Leu Ala Gly Met Leu Ala Ile
450 455
                               460
Thr Leu Val Ser Tyr Leu Ile Ile Arg Lys Asn Tyr Gly Trp Ala Met
465 470 475
Val Gly Phe Thr Val Thr Ala Val Tyr Thr Leu Gln Leu Leu Thr Leu
     485 490 495
Asn Gly Glu Gln Phe Ile Ile Ala Arg Leu Val Asp Thr Leu Ile Gly
       500 505 510
Cys Leu Ile Ala Phe Gly Gly Met Val Trp Leu Trp Pro Gln Trp Gln
515 520
Ser Gly Leu Leu Arg Gln Asn Ala His Asp Ala Leu Glu Ala Asp Gln
530 535 540
Gln Ala Ile Arg Leu Ile Leu Ser Asp Asp Pro Gln Pro Ser Pro Leu
545 550 555 560
Ala Tyr Glu Arg Met Lys Val Asn Gln Ala His Asn Ala Leu Phe Asn
    565 570 575
Ser Leu Asn Gln Ala Met Gln Glu Pro Gly Phe Asn Ala His Tyr Leu
 580
                      585
Ala Asp Met Lys Leu Trp Val Thr His Ser Gln Phe Ile Val Glu His
 595 600 605
Ile Asn Ala Met Thr Thr Leu Ala Arg Glu His Thr Met Leu Thr Pro
                615
                               620
Asp Leu Ala Gln Arg Tyr Leu Gln Ser Cys Glu Ile Ala Leu Gln Arg
625 630 635 640
Cys Gln Gln Arg Leu Glu Tyr Asp Ala Pro Gly Glu Ser Gly Asp Ser
          645 650 655
Asn Ile Leu Glu Ala Pro Glu Thr Leu Thr His Gly Pro Met Ser Thr
       660 665
Leu Glu Gln His Leu Gln Arg Val Leu Gly His Leu Asn Thr Met His
                   680 685
Thr Ile Ser Ser Val Ala Trp Arg Gln Arg Pro His His Gly Ile Trp
                695
Leu Thr Arg Arg Leu Lys Arg Thr Ala Tyr
              710
<210> 8137
<211> 646
<212> PRT
<213> Enterobacter cloacae
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<400> 8137

Gln Ile Asn Ile Val Gly Thr Tyr Gly Ala Ser Met Ile Val Phe Ser I 5 10 15 Ser Leu Gln Ile Arg Arg Gly Val Arg Val Leu Leu Asp Asn Ala Thr 20 25 30

Ala Thr Ile Asn Pro Gly Gln Lys Val Gly Leu Val Gly Lys Asn Gly Cys Gly Lys Ser Thr Leu Leu Ala Leu Leu Lys Asn Glu Ile Ser Ala 55 Asp Gly Gly Asn Phe Thr Phe Pro Gly Asn Trp Gln Leu Ala Trp Val 70 75 Asn Gln Glu Thr Pro Ala Leu Ser Glu Pro Ala Leu Asp Tyr Val Ile 90 8.5 Asp Gly Asp Arg Glu Tyr Arg Lys Leu Glu Ala Glu Leu Asn Ala Ala 100 105 110 Asn Glu Arg Asn Asp Gly His Ala Ile Ala Thr Val His Gly Lys Leu 115 120 125 Asp Ala Ile Asp Ala Trp Thr Ile Arg Ser Arg Ala Ser Ser Leu Leu 130 135 140 His Gly Leu Gly Phe Ser Asn Glu Gln Leu Glu Arg Pro Val Ser Asp 150 155 Phe Ser Gly Gly Trp Arg Met Arg Leu Asn Leu Ala Gln Ala Leu Ile 165 170 Cys Arg Ser Asp Leu Leu Leu Leu Asp Glu Pro Thr Asn His Leu Asp 180 185 190 Leu Asp Ala Val Ile Trp Leu Glu Lys Trp Leu Lys Ser Tyr Gln Gly 195 200 205 Thr Leu Ile Leu Ile Ser His Asp Arg Asp Phe Leu Asp Pro Val Val 215 220 Asp Lys Ile Ile His Ile Glu Gln Gln Ser Met Phe Glu Tyr Thr Gly 230 235 Asn Tyr Ser Ser Phe Glu Arg Gln Arg Ala Thr Arg Leu Ala Gln Gln 245 250 255 Gln Ala Met Tyr Glu Ser Gln Gln Gln Arg Val Ala His Leu Gln Ser 260 265 270 Phe Val Asp Arg Phe Lys Ala Lys Ala Ser Lys Ala Lys Gln Ala Gln 280 285 Ser Arg Ile Lys Met Leu Glu Arg Met Glu Met Ile Ala Pro Ala His 290 295 300 Val Asp Asn Pro Phe His Phe Ser Phe Arg Glu Pro Glu Ser Leu Pro 310 315 Asn Pro Leu Leu Lys Met Glu Lys Val Ser Ala Gly Tyr Gly Asp Arg 325 330 335 Ile Ile Leu Asp Ser Ile Lys Leu Asn Leu Val Pro Gly Ser Arg Ile 340 345 350 Gly Leu Leu Gly Arg Asn Gly Ala Gly Lys Ser Thr Leu Ile Lys Leu 360 365 Leu Ala Gly Glu Leu Asn Pro Val Ser Gly Glu Ile Gly Leu Ala Lys 375 380 Gly Ile Lys Leu Gly Tyr Phe Ala Gln His Gln Leu Glu Phe Leu Arg 390 395 Ala Asp Glu Ser Pro Ile Gln His Leu Ala Arg Leu Ala Pro Gln Glu 405 410 Met Glu Gln Lys Leu Arg Asp Tyr Leu Gly Gly Phe Gly Phe Gln Gly 420 425 Asp Lys Val Thr Glu Asn Thr Ala Arg Phe Ser Gly Gly Glu Lys Ala 435 440 445 Arg Leu Val Leu Ala Leu Ile Val Trp Gln Arg Pro Asn Leu Leu Leu 450 455 460 Leu Asp Glu Pro Thr Asn His Leu Asp Leu Asp Met Arg Gln Ala Leu 470 475 Thr Glu Ala Leu Ile Glu Phe Glu Gly Ala Leu Val Val Val Ser His 485 490 Asp Arg His Leu Ile Arg Ser Thr Thr Asp Asp Leu Tyr Leu Val His 500 505 Gly Gly Lys Val Glu Pro Phe Asp Gly Asp Leu Glu Asp Tyr Gln Gln

520 Trp Leu Thr Asp Val Gln Lys Gln Glu Asn Gln Pro Glu Glu Ser Ala 535 540 Lys Asp Asn Ala Asn Ser Ala Gln Ala Arg Lys Asp Gln Lys Arg Arg 550 555 Glu Ala Glu Leu Arg Thr Gln Thr Gln Pro Leu Arg Lys Glu Ile Ala 565 570 575 Arg Leu Glu Lys Glu Met Glu Lys Leu Asn Ala Thr Leu Ala Ala Val 580 585 590 Glu Glu Lys Leu Gly Asp Ser Glu Leu Tyr Asp Gln Ser Arg Lys Ala 595 600 605 Glu Leu Thr Asp Cys Leu Gln Thr Gln Ala Lys Thr Lys Ser Ser Leu 610 615 620 Glu Glu Cys Glu Met Ala Trp Leu Asp Ala Gln Glu Gln Leu Glu Ala Met Leu Gln Ala Asp 645

<210> 8138 <211> 316 <212> PRT

<213> Enterobacter cloacae

<400> 8138 His Ala Gly Arg Val Met Ser Phe Asp Thr Thr Ser Glu Ile Thr Phe 10 Arg Lys Leu Ser Ile Phe Met Thr Phe Met Glu Lys Gly Asn Ile Ala 25 3.0 Arg Thr Ala Glu Thr Leu Gly Leu Ser Gly Val Ser Val His Arg Ala 4.0 45 Leu His Thr Leu Glu Glu Asn Val Arg Cys Pro Leu Phe Ala His Lys 60 5.5 Gly Arg Asn Leu Ile Ala Leu Pro Ser Ala Trp Thr Leu Leu Glu Tyr 65 70 7.5 8.0 Cys Gln Glu Val Met Gln Val Met Glu Arg Gly Leu Glu Glu Ser Arg 8.5 90 Lys Ile Ala Gly Ile Gly Gln Gly Arg Leu Arg Val Gly Thr Leu Tyr 100 105 110 Ser Leu Thr Leu Glu Thr Val Pro Arg Leu Ile Met Gly Met Lys Leu 120 125 Arg Arg Pro Asp Leu Glu Met Asp Leu Thr Met Gly Ser Asn Glu Thr 135 140 Leu Leu His Met Leu Asp Glu Gly Ser Leu Asp Ala Ile Leu Ile Ser 155 150 Ile Ser Glu Ser Asp Ile Asp Arg Asn Ser Leu Glu Val Leu Pro Leu 165 170 175 Phe His Asp Asp Ile Phe Leu Ala Ala Pro Ala Ser Ala Thr Leu Asn 180 185 190 Thr Ser Gly Pro Ala Asp Leu Arg Asp Tyr Lys Asp Gln Lys Phe Val 195 200 205 Ala Leu Ala Glu Gly Phe Ala Thr Tyr Ala Gly Phe Gln Glu Ala Phe 210 215 220 His Ile Ala Gly Phe Glu Pro Glu Ile Val Thr Arg Val Asn Asp Ile 230 235 Phe Ser Met Leu Ser Leu Val Gln Ala Gly Val Gly Phe Thr Leu Met 245 250 Pro Gly Arg Met Lys Lys Val Tyr Glu Asn Ser Val Gln Leu Leu Lys 260 265 270 Leu Ala Gln Pro Tyr Gln Met Gln Gln Leu Ile Ala Ile Val Phe Ala 280 Arg Asn Arg Glu Gln Asp Pro Ser Leu Arg Ala Leu Ala Ala Glu Gly

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290
                  295
Arg Met Tyr Ala Arg Ser Leu Gln Asp Ser Ala
305
               310
<210> 8139
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 8139
Phe Leu Thr Arg Ile Ser Ile Ala Leu Met Thr Gln Ile Ile Pro Ser
                     10
Asp Phe Asp Ile Ala Ala Glu Glu Ser Ala Glu Phe Val Pro Met Arg
   20 25
Gly Val Ala Asn Pro His Leu Gln Thr Met Leu Pro Arg Leu Ile Arg
    35 40
Arg Lys Val Gln Phe Thr Pro His Trp Gln Arg Leu Asp Leu Pro Asp
 50 55
Gly Asp Phe Leu Asp Leu Ala Trp Ser Glu Asp Pro Asp Arg Ala Arg
65 70
His Lys Pro Arg Leu Val Val Phe His Gly Leu Glu Gly Ser Leu His
       85
                           90 95
Ser Pro Tyr Ala His Gly Leu Ile Glu Ala Ala Lys Ala Arg Gly Trp
                      105 110
         100
Leu Gly Val Val Met His Phe Arg Gly Cys Ser Gly Glu Pro Asn Arg
      115
                     120
Gln Lys Arg Ile Tyr His Ser Gly Glu Thr Glu Asp Gly Thr Trp Phe
  130 135
                                  140
Leu Arg Trp Leu Arg Asp Asn Phe Gly Glu Ala Pro Thr Ala Ala Val
               150 155
145
Gly Tyr Ser Leu Gly Gly Asn Met Leu Ala Cys Leu Leu Ala Lys Glu
                            170
         165
Ser Asp Ala Val Pro Leu Asp Ala Ala Val Ile Val Ser Ala Pro Phe
         180 185
Met Leu Glu Gln Cys Ser Tyr His Met Glu Lys Gly Phe Ser Arg Val
      195 200 205
Tyr Gln Arg Tyr Leu Leu Asn Leu Leu Lys Ala Asn Ala Ala Arg Lys
  210 215
                                  220
Leu Lys Ala Tyr Pro Asp Thr Leu Pro Val Thr Leu Gln Gln Leu Lys
               230
                   235
225
Arg Val Lys Arg Leu Arg Glu Phe Asp Asp Leu Ile Thr Ser Lys Ile
            245 250 255
His Gly Phe Ala Asp Ala Ile Asp Tyr Tyr Arg Gln Cys Ser Ala Met
                                        270
         260
                        265
Pro Leu Leu Asn Gln Ile Thr Lys Pro Thr Leu Ile Ile His Ala Lys
 275
                     280
                                      285
Asp Asp Pro Phe Met Asp His His Ser Ile Pro Ala Pro Asp His Leu
  290
                  295
                                  300
Pro Ala Asn Val Glu Tyr Gln Leu Thr Gln Phe Gly Gly His Val Gly
                310
                               315
Phe Val Gly Gly Thr Leu Arg Arg Pro Lys Met Trp Leu Glu Thr Arg
            325 330
Ile Pro Asp Trp Leu Thr Ala Tyr Leu Asp Gly Lys Lys
                         345
         340
<210> 8140
<211> 106
<212> PRT
<213> Enterobacter cloacae
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Leu Lys Ala Leu Ser Cys Ala Lys Ala Pro Ile Met Val Asn Met Asn
Val Arg Leu Asn Lys Arg Ser Thr Met Leu Ser Ala Ser Leu Lys Ala
           2.0
                               25
Ala Thr Trp Cys Trp Tyr Gly Pro Asn Cys Met Arg Arg Ser Ile Ser
       35
                           40
Cys Pro Ala Thr Arg Phe Met Ala Asp Leu Tyr Thr Phe Pro Val Arg
   50
                       55
                                           60
Glu Leu Leu Cys Leu Pro Asp Ile Arg Leu Leu Pro Leu Arg Val Arg
               70
                                      7.5
Val Gly Arg Glu Pro Leu Pro Pro Ala Ser Pro Ser Ala Arg Ser Ser
           85 90
Pro Ser Leu Thr Tyr Gly Arg Pro Arg
          100
<210> 8141
<211> 191
<212> PRT
<213> Enterobacter cloacae
<400> 8141
Cys Ser Asn Gln Gln Trp Pro Val Val Ala Glu Gly Tyr Ala Leu Phe
Ala Val Ser Pro Asp Ala Met Ala Ala Lys Gly Asp Pro Gln Val Leu
           2.0
                               2.5
Met Asn Thr Phe Ala Gly Asn Ile Glu Leu Glu Leu Asp Ser Gln Lys
    35
                           40
Ala Pro Val Ser Val Lys Asn Phe Leu Asp Tyr Val Asn Ser Gly Phe
 50
                       55
Tyr Asn Asn Thr Thr Phe His Arg Val Ile Pro Gly Phe Met Ile Gln
                   70
                                       75
Gly Gly Gly Phe Asn Glu Gln Met Gln Gln Lys Gln Pro Asn Pro Pro
               85
                                   90
Ile Lys Asn Glu Ala Asp Asn Gly Leu Leu Asn Lys Arg Gly Thr Ile
                               105
                                                   110
           100
Ser Met Ala Arg Thr Ala Asp Lys Asp Ser Ala Thr Ser Gln Phe Phe
       115
                           120
                                               125
Leu Asn Val Ala Asp Asn Ala Phe Leu Asp His Gly Gln Arg Asp Phe
                       135
                                           140
Gly Tyr Ala Val Phe Gly Lys Val Val Lys Gly Met Asp Val Ala Asp
                   150
                                       155
145
Lys Ile Ser Gln Val Gln Thr His Asp Val Gly Pro Tyr Gln Asn Val
                                   170
               165
Pro Thr Lys Pro Val Val Ile Leu Ser Ala Lys Val Leu Pro
           180
                               185
<210> 8142
<211> 230
<212> PRT
<213> Enterobacter cloacae
<400> 8142
Ser Phe Val His Thr Gly Ile Ser Cys Pro Cys Leu Ser Ala Leu Pro
Ala Lys Ala Arg Phe Ala Ala Tyr Thr Cys Gly Lys Arg Thr Ile Gln
            20
                                                   30
Gly Gly Val Val Lys Lys Leu Thr Asp Lys Gln Lys Ser Arg Leu Trp
       35
                           40
Glu Gln Gln Arg Ser Val Asn Phe Gln Ala Ser Cys Leu Leu Glu Lys
Gly Lys Gly Pro Ala Glu Pro Asp Ile Glu Thr Leu Glu Leu Gly Pro
```

```
Ser Ala Pro Gly Leu Pro His Leu Cys Leu Ile His Arg His Leu Phe
           85
Arg Asn Glu Met Lys Gly Ala Gly Glu Leu Arg Thr Ala Glu Ile Ser
      100
             105
Lys Gly Asp Ile Pro Phe Cys His Phe Glu Tyr Ile Glu Lys Val Gly
     115 120
                                     125
Asn Glu Leu Met Ala Ser Leu Glu Ser Asp Lys Tyr Leu Val Gly Leu
130 135 140
Gln Lys Glu Glu Phe Thr Asp Arg Ile Ser His Tyr Tyr Cys Glu Ile
   150 155 160
Asn Met Leu His Pro Phe Met Ser Gly Asn Gly Val Ala Gln Arg Ile
        165 170 175
Phe Phe Glu Gln Leu Ala Ile His Ala Gly Tyr Val Leu Asn Trp Gln
       180 185 190
Gly Ile Asp Pro Asp Asp Trp Ala Ala Ala Asn Gln Ser Gly Ala Met
   195 200 205
Gly Asp Leu Thr Ala Leu Asn Val Ile Phe Ala Lys Val Val Ser Glu
 210
                  215
Ala Arg Glu Ser Ala
<210> 8143
<211> 198
<212> PRT
<213> Enterobacter cloacae
<400> 8143
Asn Arg Ala Ala Ile Phe Ser Gly Ala Ala Met Ile Leu Leu Ile Asp
                           1.0
1
Asn Tyr Asp Ser Phe Thr Trp Asn Leu Tyr Gln Tyr Phe Cys Glu Leu
20
                        25
Gly Ala Glu Val Val Val Arg Arg Asn Asp Glu Ile Ala Leu Asp Asp
35
                     40
Ile Asp Ala Leu Ala Pro Gln Lys Ile Val Ile Ser Pro Gly Pro Cys
         55
Thr Pro Ser Glu Ser Gly Ile Ser Leu Ala Val Ile Gln His Tyr Ala
               70
                               7.5
Gly Lys Leu Pro Ile Leu Gly Val Cys Leu Gly His Glm Ala Ile Ala
            85
                            90
Gln Val Phe Gly Ala Thr Ile Val Arg Ala Ala Lys Val Met His Gly
                       105
        100
Lys Thr Ser Pro Ile Thr His Thr Gly Thr Gly Ala Phe Leu Gly Leu
                     120 125
 115
Asn Asn Pro Leu Thr Val Thr Arg Tyr His Ser Leu Ile Ile Asp Pro
                   135 140
Pro Thr Leu Pro Ala Cys Phe Glu Val Thr Ala Trp Ser Glu Thr Gln
               150
                               155
Glu Ile Met Gly Ile Arg His Arg Glu Tyr Asp Leu Glu Gly Val Gln
            165 170 175
Phe His Pro Glu Ser Ile Leu Ser Glu Gln Gly His Ala Leu Leu Ala
                        185
        180
Asn Phe Leu Asn Arg
   195
<210> 8144
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<211> 422

<212> PRT

<213> Enterobacter cloacae

<400> 8144

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Leu Tyr Phe His Asn Asn Cys Asp Ile Lys Met Asp Gly His Asp Met
Ala Thr Glu Gln Pro Ala Ile Thr Arg Ala Thr Phe Asp Glu Val Ile
       20
                       25
Leu Pro Ile Tyr Ala Pro Ala Glu Phe Ile Pro Val Lys Gly Arg Gly
 35
         40
Ser Arg Val Trp Asp Gln Gln Gly Asn Glu Tyr Val Asp Phe Ala Gly
        55
                     60
Gly Ile Ala Val Thr Ala Leu Gly His Cys His Pro Ala Leu Val Asp
65 70 75
Ala Leu Lys Thr Gln Gly Glu Thr Leu Trp His Thr Ser Asn Val Phe
        85 90 95
Thr Asn Glu Pro Ala Leu Arg Leu Gly Arg Lys Ile Ile Asp Ala Thr
 100 105 110
Phe Ala Glu Arg Val Leu Phe Met Asn Ser Gly Thr Glu Ala Asn Glu
115 120 125
Thr Ala Phe Lys Leu Ala Arg Tyr Tyr Ala Thr Thr Arg His Ser Pro
 130 135
                                140
Tyr Lys Thr Lys Ile Ile Ala Phe His Asn Ala Phe His Gly Arg Ser
   150 155
145
Phe Phe Thr Val Ser Val Gly Gly Gln Pro Lys Tyr Ser Asp Gly Phe
         165 170 175
Gly Pro Lys Pro Ala Asp Ile Ile His Val Pro Phe Asn Asp Leu His
        180 185 190
Ala Val Lys Ala Val Met Asp Asp His Thr Cys Ala Val Val Glu
195 200 205
Pro Ile Gln Gly Glu Gly Gly Val Thr Ala Ala Thr Pro Glu Phe Leu
210
                215
                                220
Gln Gly Leu Arg Glu Leu Cys Asp Glu His Gln Ala Leu Leu Val Phe
                  235
              230
Asp Glu Val Gln Cys Gly Met Gly Arg Thr Gly Asp Leu Phe Ala Tyr
           245
                          250
Met His Tyr Gly Val Thr Pro Asp Ile Leu Thr Ser Ala Lys Ala Leu
        260 265
                                      270
Gly Gly Gly Phe Pro Val Ser Ala Val Leu Thr Thr Gln Asp Ile Ala
     275 280
                                   285
Ser Ala Phe His Val Gly Ser His Gly Ser Thr Tyr Gly Gly Asn Pro
                 295 300
Leu Ala Cys Ala Val Ala Gly Ala Ala Phe Asp Ile Ile Asn Thr Pro
              310 315
Asp Val Leu Asn Gly Val Asn Ala Lys Arg Asp Leu Phe Val Lys His
           325 330
                                         335
Leu Gln Gln Ile Asp Glu Gln Phe Asp Val Phe Ser Glu Ile Arg Gly
        340
                       345
                                      350
Met Gly Leu Leu Ile Gly Ala Glu Leu Lys Pro Gln Tyr Lys Gly Arg
     355
                    360 365
Ala Arg Asp Phe Leu His Ala Ala Ala His Glu Gly Val Met Val Leu
  370
                 375
                                380
Asn Ala Gly Pro Asp Val Met Arg Phe Ala Pro Ser Leu Val Val Glu
              390 395
Asp Lys Asp Ile Glu Asp Gly Leu Thr Arg Phe Ala Ala Ala Val Ala
           405
                    410
Lys Ile Val Ser Gly
        420
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<210> 8145 <211> 137

<212> PRT <213> Enterobacter cloacae

<400> 8145

Val Asn Met Gln Ala Arg Val Lys Trp Val Glu Gly Leu Thr Phe Leu Gly Glu Ser Ala Ser Gly His Gln Val Leu Met Asp Gly Asn Ser Gly 20 Asp Lys Ala Pro Ser Pro Met Glu Met Val Leu Met Ala Ala Gly Gly 35 4.0 Cys Ser Ala Ile Asp Val Val Ser Ile Leu Gln Lys Gly Arg His Gly 55 Val Thr Asp Cys Glu Val Lys Leu Thr Ser Glu Arg Arg Glu Glu Ala 7.0 7.5 Pro Arg Leu Phe Thr His Ile Asn Leu His Phe Ile Val Thr Gly Lys 90 8.5 Glu Leu Lys Asp Ala Ala Val Ser Arg Ala Val Asp Leu Ser Ala Glu 100 105 110 Lys Tyr Cys Ser Val Ala Leu Met Leu Glu Lys Ala Val Asn Ile Thr 115 120 His Ser Tyr Glu Val Ile Glu Ala 130

<210> 8146 <211> 295 <212> PRT

<213> Enterobacter cloacae

<400> 8146 Pro Thr Cys Glu Ile Pro Glu Leu Val Met Lys Leu Leu Pro Gln Ile Gln Val Glu Gly Gly Ala Glu Trp Leu Ala Arg Thr Ala Thr Gln Cys 25 20 Leu Ile Asp Glu Ala Arg Leu Ser Pro Lys Pro Gly Leu Val Asp Ser 4.0 35 Arg Gly Asn Gly Ala His His Asp Leu Ser Leu Ala Leu Met Glu Arg 55 50 Ser Ala Arg Ser Leu Thr Pro Thr Phe Gln Ala Leu Ala Gln Gln Ser 70 75 Trp Gln Arg Pro Ala Asp Ile Ala Leu Arg Gln Thr Val Gly Arg Leu 90 85 Gly Arg Glu Gly Glu Arg Gln Met Met Ala Ala Thr Asp Gly Val Asn 105 100 Thr His Arg Gly Ala Ile Trp Ala Leu Gly Leu Leu Val Ser Ala Val 120 125 115 Ala Met Leu Gly Gly Asp Ala Arg Ala Gln Thr Val Ala Asn Thr Ala 140 135 130 Ala Gln Leu Ala Lys Leu Pro Asp Asp Val Ala Pro Lys Val Phe Ser 155 150 Lys Gly Leu Arg Val Thr His Arg Tyr Arg Val Pro Gly Ala Arg Glu 170 165 Glu Ala Gln Gln Ala Phe Pro His Ile Met Gln Arg Ala Leu Pro Gln 185 190 180 Leu Arg Leu Ser Arg Leu Asn Gly Ser Ser Glu Thr Gln Ala Arg Leu 200 205 195 Asp Ala Leu Met Ala Ile Met Thr Ser Leu Thr Asp Thr Cys Val Leu 215 220 Ser Arg Ala Gly Met Glu Gly Leu Asp Ala Met Gln Asn Gly Ala Arg 235 230 Ala Val Leu Asn Ala Gly Gly Cys Ala Thr Leu Ala Gly Gln Gln Ala 245 250 Leu Ala Arg Leu Asp Arg Gln Met Leu Ala Leu Asn Ala Ser Pro Gly 260 265 Gly Ala Ala Asp Leu Leu Ala Ala Thr Leu Phe Leu Asp Arg Val Glu 280 285

```
Thr Pro Tyr Ser Lys His
  290
<210> 8147
<211> 103
<212> PRT
<213> Enterobacter cloacae
<400> 8147
Glu Asp Val Met Glu Lys Ile Thr Leu Thr Val Pro Ala Ser Arg Glu
         5
                                1.0
Val Ser Gly Arg Ala Leu Ala Gly Val Val Gly Ser Gly Asp Met Glu
                           25
Val Leu Phe Thr Ala Glu Pro Gly Gln Thr Leu Thr Ile Asp Ile Thr
                              45
                  40
Thr Ser Val Asp Asn Ser Arg Gly Arg Trp Glu Ala Leu Phe Asn Arg
                  55
                         60
Leu Gln Thr Val Ser Ser Leu Pro Ala Gly Lys Leu Thr Ile His Asp
                                   75
                 70
Phe Gly Ala Thr Pro Gly Val Ala Arg Ile Arg Ile Glu Gln Val Phe
                                90
              85
Glu Gly Val Asn His Ala
          1.00
<210> 8148
<211> 276
<212> PRT
<213> Enterobacter cloacae
<400> 8148
Ser Ala Phe Cys Pro Gly Gly Glu Met Met Thr Asn Ser Ile Ser Arg
                               10
Gly Glu Leu Trp Leu Glu Thr Leu Ala Pro Asn Ala Lys Arg Leu Glu
                            2.5
                                              30
         20
Gly Leu Cys Pro Ser Val Gln Ala Ala Asp Gly Glu Leu Asn Gly Glu
                                 4.5
       35
                         4.0
Thr Val Arg Phe Val Ala Val Val Pro Asp Val Asn Asn His Phe Pro
                     55
                                       60
Arg Ala Ala Gln Gly Glu Val Gly Leu Leu Glu Gly Trp Thr Leu Ala
                  70
                                   7.5
Lys Val Val Ser Glu Thr Val Ala Ala Asp Ala Asp Lys Ala Val Lys
                                90
                                                  9.5
              85
Arg Pro Ile Val Ala Val Ile Asp Val Pro Ser Gln Ala Tyr Gly Arg
           100
                            105 110
Arq Glu Glu Ala Phe Gly Ile His Gln Ala Leu Ala Gly Ala Ala Ala
                         120
                                           1.25
       115
Ala Tyr Ala Asn Ala Arg Leu Ala Gly His Pro Val Ile Gly Leu Ile
                      135
                                       140
   130
Val Gly Lys Ala Met Ser Gly Ala Phe Leu Ala His Gly Tyr Gln Ala
                  150 155
Asn Arg Leu Ile Ala Phe Asn Asp Lys Gly Val Leu Ile His Ala Met
                                170
              165
Gly Lys Glu Ser Ala Ala Arg Ile Thr Leu Arg Thr Val Glu Ala Leu
                             185
           180
Glu Lys Leu Ala Ala Thr Ile Pro Pro Met Ala Tyr Asp Ile Ser Asn
                         200
                                           205
       195
Tyr Ala Thr Leu Gly Leu Leu Ser Asp Leu Leu Asp Ile Ser Asn Pro
                                220
  210
                      215
Asp Ala Pro Ser Glu Ser Asp Leu Thr Arg Val Lys Thr Thr Leu Gln
                                    235
         230
Gln Ala Ile Ser Asp Ala Arg Gln Asp Thr Thr Leu Lys Asn Arg Leu
```

```
250
Gly Ala Asp Asn Arg Arg Ser Ser Ala Leu Val Arg Glu Arg Met Arg
    260
                        265
Ala Ser Trp
     275
<210> 8149
<211> 321
<212> PRT
<213> Enterobacter cloacae
<400> 8149
Phe Met Thr Tyr Val Ile Val His Ala Leu Ala Pro Ile Phe Val Ile
                      10
Met Leu Leu Gly Phe Trp Ala Gly Lys Ala Lys Met Val Asp Asn Lys
                 25
     20
Asn Val Ser Leu Leu Asn Ile Phe Val Met Asp Phe Ala Leu Pro Ala
   35 40
                         4.5
Ala Leu Phe Ser Ala Thr Val Gln Thr Pro Trp Thr Gly Ile Val Ala
            55
                      60
50
Gln Ser Pro Leu Ile Leu Val Leu Thr Leu Ala Met Trp Ile Thr Tyr
               70 75
Ala Val Ile Tyr Phe Leu Ala Thr Asn Val Phe Lys Lys Ser Pro Gln
           85 90 95
Asp Ala Ala Val Leu Thr Leu Thr Val Ala Leu Pro Asn Tyr Ala Ala
        100 105 110
Leu Gly Leu Pro Ile Leu Gly Ser Val Leu Gly Glu Gly Ser Ser Thr
      115 120 125
Ser Leu Ser Val Ala Val Ser Ile Ala Cys Gly Ser Val Leu Met Thr
 130 135 140
Pro Phe Cys Leu Leu Ile Leu Glu Arg Glu Lys Ala Arg Ala Glu Gly 145 150 150 160
Asn Asn Ser Gly Ser Thr Leu Ser Met Leu Pro Val Leu Met Trp Arg
          165 170 175
Ser Ile Lys Lys Pro Ile Val Met Gly Pro Leu Leu Gly Val Ile Leu
         180 185 190
Ser Ala Ile Gly Ile Thr Met Pro Glu Leu Val Leu Ala Ala Ile Lys
      195 200 205
Pro Leu Gly Leu Ser Ala Thr Ala Ala Ala Leu Phe Leu Thr Gly Val
               215 220
 210
Ile Leu Ser Ala Arg Lys Leu Gln Ile Asn Thr Met Val Ile Thr Ser
              230 235
Thr Ile Ala Lys Leu Leu Ile Gln Pro Ala Ile Ala Trp Gly Ile Val
            245
                           250
Leu Ile Phe Gly Leu His Gly Ser Val Ala Ile Thr Ala Ile Leu Met
                        265
         260
Ile Ala Leu Ser Ala Gly Phe Phe Gly Val Val Phe Gly Asn Arg Phe
     275
Gly Val Gln Ser Pro Asp Ala Glu Ala Val Leu Leu Leu Ser Ser Ile
   290 295 300
Leu Cys Ile Leu Ser Leu Pro Leu Phe Ile Ser Leu Thr Ser Gly Met
                310
                               315
```

<210> 8150

<211> 650

<212> PRT

<213> Enterobacter cloacae

Ala Asp Gly Gly Asp Val Pro Tyr Ala Leu Asp Glu Pro Asp Tyr Tyr 10 Leu Leu Gly Thr Ala Ala Gly Ser Glu Ser Ala Gly Glu Pro Cys Gln 20 25 Gly Leu Trp Arg Met Ala Gly Val Thr Asp Ser Gly Gly Arg Thr Leu 40 Met Asp Gly Ser Asn Leu Leu Leu Ala Gly Val Leu Phe Leu Phe Ala 55 60 Ala Val Val Ala Val Pro Leu Ala Ala Arg Leu Gly Ile Gly Ala Val 70 75 Leu Gly Tyr Leu Leu Ala Gly Ile Ala Ile Gly Pro Trp Gly Leu Gly 85 90 Phe Ile Ser Asp Val Asp Glu Ile Leu His Phe Ser Glu Leu Gly Val 100 105 110 Val Phe Leu Met Phe Ile Ile Gly Leu Glu Leu Asn Pro Ser Lys Leu 115 120 125 Trp Gln Leu Arg Gln Ser Ile Phe Gly Val Gly Ala Ala Gln Val Leu 135 140 130 Leu Ser Ala Ala Ile Leu Ala Gly Leu Leu Met Leu Thr Gln Phe Ser 155 160 150 Trp Gln Ala Ala Val Ile Gly Gly Ile Gly Leu Ala Met Ser Ser Thr 165 170 175 Ala Met Ala Leu Gln Leu Met Arg Asp Lys Gly Met Asn Arg Asn Glu 190 180 185 Ala Gly Gln Leu Gly Phe Ser Val Leu Leu Phe Gln Asp Leu Ala Val 200 205 195 Ile Pro Ala Leu Ala Leu Val Pro Leu Leu Ala Gly Ser Gly Asp Asp 215 220 210 His Phe Asp Trp Met Lys Ile Ser Met Lys Val Leu Ala Phe Ala Gly 230 235 240 Met Leu Ile Gly Gly Arg Phe Leu Leu Arg Pro Val Phe Arg Phe Ile 245 250 255 Ala Ala Ser Gly Val Arg Glu Val Phe Thr Ala Ala Thr Leu Leu Leu 265 270 260 Val Leu Gly Ser Ala Leu Phe Met Asp Ala Leu Gly Leu Ser Met Ala 280 285 Leu Gly Thr Phe Ile Ala Gly Val Leu Leu Ala Glu Ser Glu Tyr Arg 295 300 290 His Glu Leu Glu Thr Ala Ile Asp Pro Phe Lys Gly Leu Leu Gly 310 315 Leu Phe Phe Ile Ser Val Gly Met Ala Leu Asn Leu Gly Val Leu Tyr 330 325 Thr His Leu Leu Trp Val Ile Ala Ser Val Ala Val Leu Val Ala Val 340 345 Lys Thr Leu Val Leu Tyr Leu Leu Ala Arg Ile Tyr Gly Leu Arg Ser 360 365 355 Ser Glu Arg Met Gln Phe Ser Ser Val Leu Ser Gln Gly Gly Glu Phe 375 380 Ala Phe Val Leu Phe Ser Thr Ala Ser Ser Gln Lys Leu Phe Lys Asp 395 390 Asp Gln Met Ala Leu Leu Leu Val Thr Val Thr Leu Ser Met Met Thr 405 410 Thr Pro Leu Leu Met Lys Leu Val Asp Lys Leu Leu Ser Arg Arg Leu 425 430 420 Asn Pro Ala Asp Asp Glu Asp Glu Ala Pro Trp Val Glu Asp Asp Lys 445 435 440 Pro Gln Val Ile Val Val Gly Phe Gly Arg Phe Gly Gln Val Ile Gly 4.55 460 450 Arg Leu Leu Met Ala Asn Lys Met Arg Ile Thr Val Leu Glu Arg Asp 475 470 Ile Ser Ala Val Asn Leu Met Arg Lys Tyr Gly Tyr Lys Val Tyr Tyr

```
485
                              490
Gly Asp Ala Thr Gln Leu Glu Leu Leu Arg Ser Ala Gly Ala Glu Ala
      500
                        505
                                           510
Ala Glu Ser Ile Val Ile Thr Cys Asn Asp Pro Glu Asp Thr Met Lys
                    520 525
Leu Val Glu Leu Cys Gln Gln His Phe Pro His Leu His Ile Leu Ala
 530 535 540
Arg Ala Arg Gly Arg Val Glu Ala His Glu Leu Leu Gln Ala Gly Val
545 550 555
Lys His Phe Ser Arg Glu Thr Phe Ser Ser Ala Leu Glu Leu Gly Arg
          565 570 575
Lys Ala Leu Val Ser Leu Gly Met His Pro His Gln Ala Gln Arg Ala
         580 585 590
Gln Met His Phe Arg Arg Leu Asp Met Arg Met Leu Arg Glu Leu Met
      595 600 605
Pro Val His Ser Asp Thr Ala Gln Ile Ser Arg Val Arg Glu Ala Arg
                 615 620
Arg Glu Leu Glu Glu Ile Phe Gln Arg Glu Met Gln Gln Glu Arg Arg
                               635
625 630
Gln Leu Asp Gly Trp Asp Glu Phe Glu
             645
<210> 8151
<211> 557
<212> PRT
<213> Enterobacter cloacae
<400> 8151
Ile Arg Arg Leu Ile Met Leu Ser Gly Gln Thr Pro Thr Arg Gln Trp
                             1.0
Asn Thr Arg Arg Ser Glu Lys Ala Arg Arg Leu Ala Ser Val Pro Val
 20
Gln Gly Lys Val Leu Pro Thr Gly Asp Leu Val Ala Met Leu Glu Lys
 35
                       4.0
Leu Ile Ala Pro Gly Asp Lys Val Val Leu Glu Gly Asn Asn Gln Lys
                   55
                                    60
Gln Ala Asp Phe Leu Ser Arg Ser Leu Ala Glu Val Asn Pro Gln Ile
                70
                                7.5
Val His Asp Leu His Met Ile Met Pro Ser Val Gly Arg Ser Glu His
                              90
            85
Leu Asp Ile Phe Glu Lys Gly Ile Ala Arg Lys Leu Asp Phe Ser Phe
                          105
          100
Ser Gly Thr Gln Ser Leu Arg Ile Ser Gln Leu Leu Glu Asp Gly Gln
                       120
                            125
Leu Glu Ile Gly Ala Ile His Thr Tyr Ile Glu Leu Tyr Ser Arg Leu
                                    140
                    135
Tyr Val Asp Leu Ser Pro Asn Val Ala Leu Ile Ala Gly Phe Lys Ala
                150 155
Asp Arg Lys Gly Asn Leu Tyr Thr Gly Ala Ser Thr Glu Asp Thr Pro
                              170
             165
Ala Leu Val Glu Ala Ala Ala Phe His Asp Gly Ile Val Ile Ala Gln
                           185
                                           190
          180
Val Asn Glu Leu Val Asp Asp Glu Cys Asp Leu Pro Arg Val Asp Ile
                               205
    1.95
Pro Gly Ser Trp Ile Asp Phe Val Val Val Ala Asp Lys Pro Phe Phe
                                     220
   210
                    215
Ile Glu Pro Leu Phe Thr Arg Asp Pro Arg Leu Ile Lys Gln Glu His
                                 235
                230
Ile Leu Met Ala Met Met Ala Ile Lys Gly Ile Tyr Ala Glu His Gln
             245
```

Val Gln Ser Leu Asn His Gly Ile Gly Phe Asn Thr Ala Ala Ile Glu

```
265
        260
Leu Leu Leu Pro Thr Tyr Gly Glu Gln Leu Gly Leu Lys Gly Lys Ile
                   280
                               285
     275
Cys Lys His Trp Thr Leu Asn Pro His Pro Thr Leu Ile Pro Ala Ile
                295
                               300
Glu Ser Gly Trp Val Glu Ser Val His Cys Phe Gly Gly Glu Leu Gly
           310
                  315
Met Glu Glu Tyr Ile Arg Ala Arg Pro Asp Val Phe Phe Thr Gly Ala
         325 330
Asp Gly Ser Met Arg Ser Asn Arg Ala Phe Cys Gln Leu Ala Gly Gln
      340 345 350
Tyr Ala Val Asp Met Phe Ile Gly Ser Thr Leu Gln Val Asp Gly Tyr
  355 360 365
Ala Asn Ser Ser Thr Val Thr Arg Gly Arg Leu Ser Gly Phe Gly Gly
 370 375 380
Ala Pro Asn Met Gly His Asp Pro His Gly Arg Arg His Ala Thr Pro
385 390 395 400
Ala Trp Leu Asn Met Ile Thr Glu Pro Asp Pro Met Gln Arg Gly Lys
       405 410 415
Lys Leu Val Val Gln Met Val Glu Thr Phe Gln Ala Gly Val Lys Pro
       420 425 430
Thr Phe Val Glu Lys Leu Asp Ala Val Asp Val Ala Lys Ala Ser Gly
   435 440 445
Met Pro Leu Ala Pro Val Met Ile Tyr Gly Asp Asp Val Thr His Val
450 455 460
Leu Thr Glu Glu Gly Ile Ala Tyr Leu Tyr Arg Ala Lys Asp Leu Glu
465 470
                          475 480
Glu Arg Arg Ala Met Val Ala Ala Val Ala Gly Ile Thr Asp Ile Gly
          485 490 495
Leu Gly Val Asp Ala Lys Arg Val Ala Glu Leu Arg Gln Ser Gly Lys
      500 505 510
Val Val Tyr Pro Glu Asp Met Gly Ile Arg Arg Thr Asp Ala Thr Arg
515 520 525
Ser Leu Leu Ala Ala Gly Ser Val Ala Asp Leu Val Glu Trp Ser Gly
530 535 540
Gly Leu Tyr Asn Pro Pro Ala Lys Phe Arg Ser Trp
```

<210> 8152 <211> 279

<212> PRT <213> Enterobacter cloacae

<400> 8152

Ile Met Arg Asp Asp Ser Ser Phe Ile Glu Leu Lys Ala Arg Gln Arg 1.0 Ala Gln Ala Leu Leu Asp Asp Gly Ser Tyr Arg Glu Leu Leu Asp Pro 20 25 Phe Glu Gly Ile Ile Ser Pro Trp Leu Gly Pro Gln Gly Ile Val Pro 35 40 45 Gin Ala Asp Asp Gly Met Val Val Ala Lys Gly Thr Ile Asn Gly Gln 50 55 60 Pro Ala Val Val Val Ala Ile Glu Gly Thr Phe Gln Gly Gly Ser Met 75 7.0 Gly Glu Val Ser Gly Ala Lys Met Ala Ala Ala Leu Glu Leu Ala Ala 85 90 Glu Asp Asn Arg Asn Gly Ile Pro Thr Gln Ala Val Leu Cys Leu Glu 105 110 100 Thr Gly Gly Val Arg Leu Gln Glu Ala Asn Leu Gly Leu Ala Ala Ile 120 125 115 Ala Asp Ile His Ala Ala Ile Val Asp Leu Arg Arg Tyr Thr Pro Val

```
130
                    135
Val Gly Ile Val Ala Gly Thr Val Gly Cys Phe Gly Gly Met Ser Ile
             150
                                 155
Ala Ala Ala Leu Cys Ser Tyr Leu Ile Val Thr Arg Glu Ala Arg Leu
            165
                        170
                                               175
Gly Leu Asn Gly Pro Gln Val Ile Glu Gln Glu Ala Gly Ile Glu Glu
       180 185
Tyr Asp Ser Arg Asp Arg Pro Phe Ile Trp Ser Met Thr Gly Gly Glu
   195 200
                                        205
Val Arg Tyr Glu Ser Gly Leu Val Asp Ala Leu Val Gly Asp Gly Val
 210 215 220
Asn Ala Val Lys Ala Ala Met Asn Glu Ala Ile Ala Lys Gly Val Pro
    230 235
Ala Lys His Arg Thr Asp Asn Tyr Asp Asp Tyr Leu Asn Arg Leu Thr
            245 250 255
Asn Phe Asp Thr Arg Lys Gln Ala Asp Ala Glu Gln Ile Lys Ala Leu
                  265
Phe Ala Arg Glu Val Lys
       275
<210> 8153
<211> 353
<212> PRT
<213> Enterobacter cloacae
<400> 8153
Leu Ala Gly Ser Ala Gln Ser Cys Val Val Pro Gly Gly Tyr Thr Gly
Gly Tyr Ala Arg Gly Arg Ile Arg Ala Gly Gly Met Val Thr Arg Arg
      20
Gln Asn Ala Ala Lys Asn Ala Ile Trp Ala Ala Pro Gly Ser Gly Ser
                       40
Met Ala Gln Gly Gly Val Met Lys Ile Leu Phe Thr Phe Pro Gly Gln
                    55
Gly Thr Gln His Glu Gly Met Leu Gln Asn Leu Pro Gly Thr Glu Leu
                70
                                 7.5
Glu Gln Ala Arg Ala Val Leu Gly Ala Glu Val Asp Thr Leu Asp Ser
             85
                              90
Ala Ser Ser Leu Thr His Thr Arg Ala Val Gln Leu Ser Leu Leu Ile
                           105
          100
Ala Gly Val Ala Trp Ala Arg Glu Leu Glu Arg Arg Gly Val Ser Pro
      115
                       120 125
Asp Ile Val Ser Gly Leu Ser Ile Gly Ala Tyr Pro Ala Ala Val Ile
                    135
                                     140
Ala Gly Ala Leu Asp Phe Thr Asp Ala Leu Lys Leu Val Ala Leu Arg
                 150
                                 155
Gly Asp Leu Met Glu Gln Ala Tyr Pro His Gly Tyr Gly Leu Thr Ala
             165
                              170
                                             175
Ile Met Gly Leu Thr Leu Pro Gln Val Glu Asn Leu Ile Gln Gly Thr
                           185
                                            190
          180
Gly Thr Tyr Ile Ala Asn Leu Asn Ala Glu Thr Gln Ile Val Ile Ala
                                        205
                        200
Gly Ala Asp Asp Gly Met Ala Gln Val Ala Glu Arg Ala Leu Ala Lys
                                     220
   210
Gly Ala Asn Lys Ala Lys Arg Leu Ala Val Ser Val Pro Ser His Cys
                                  235
                 230
Glu Leu Leu Ala Glu Pro Ala Gln Lys Leu Ala Ala Ala Phe Glu Ser
                              250
             245
Val Thr Leu Ser Arg Pro Arg Cys Ala Tyr Leu Ser Gly Ser Thr Gly
                                            270
          260
                           265
```

Arq Val Leu Trp Gln Pro Glu Lys Ile Ala Asp Asp Leu Ala Met Asn

| 275 | 280 | 285 | 280 | 285 | 280 | 285 | 280 | 285 | 280 | 285 | 280 | 285 | 280 | 285 | 280 | 285 | 280 | 285 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280

<210> 8154 <211> 264 <212> PRT <213> Enterobacter cloacae

<400> 8154 Arg Leu Gly Leu Glu Ala Ile His Lys Ala Leu Gln Val Arg His Ala Leu Leu Leu Ala Phe Ile His Arg Leu Leu Leu Gly Lys Ala Arg Arg 3.0 Ala Leu Ala Leu Glu Arg Ala Val Val Ala Gly Val Phe Glu His Ala 40 4.5 35 Leu Leu Phe Asp Met Asn Asp Phe Ile His His Arg Ile Glu Glu Val 5.5 60 50 Ala Val Val Gly Asp Gln Asn Gln Ser Ala Leu Ile Ala Leu Glu Pro 7.5 70 Leu Leu Gln Pro Asn Asn Arg Ile Glu Ile Glu Val Val Gly Gly Phe 85 Ile Glu Gln Glu Val Gly Ala Ala Asp Gln Arg Leu Arg Gln Val 105 110 100 Lys Ala His Thr Pro Ala Ala Gly Glu Ile Ala His Arg Ala Phe Lys 120 125 115 Leu Phe Val Ala Glu Thr Gln Ala Val Gln Gln Ala Gly Gly Ala Gly 135 140 130 Ala Asn Gly Pro Gly Ile Asp Gly Val Gln Leu Ala Val Asp Gly Gly 150 155 Asp Gly Val Ala Val Val Ala Phe Val Gly Gly Val Glu Leu Cys Phe 165 170 Glu Leu Ala Val Phe Thr Val Ala Val Asp Asn Ile Val Glu Arg Gly 185 180 Phe Ala Gln Arg Gly Arg Leu Leu Val His Pro Gly Glu Leu Pro Val 200 205 Ala Arg Glu Gly Lys Val Thr Ala Ile Arg Ala Tyr Leu Val Phe Gln 215 220 210 Gln Cys Gln Gln Gly Gly Phe Thr Ala Ala Val Phe Ala Asp Gln Pro 230 235 His Phe Leu Ala Arg Val Asp Gly Ser Ser Arg Val Ile Gln Gln Asp 250 245 Ala His Ala Ala Thr Asn Leu

260

<210> 8155 <211> 199 <212> PRT

<213> Enterobacter cloacae

<400> 8155 Pro Lys Thr Thr Thr Ile His Lys Asn Arg Thr Gly Arg Gly Met Met 1 5 10 15

```
Ser Gln Thr Ala Lys Val Leu Leu Leu Tyr Ala His Pro Glu Ser Gln
        20
Asp Ser Val Ala Asn Arg Val Leu Leu Lys Pro Ala Thr Gln Leu Ser
   35
Asn Val Thr Val His Asp Leu Tyr Ala His Tyr Pro Asp Phe Phe Ile
                  55
Asp Ile Pro Tyr Glu Gln Glu Leu Leu Arg Gln His Asp Val Ile Val
               70
                                75
Phe Gln His Pro Leu Tyr Thr Tyr Ser Cys Pro Ala Leu Leu Lys Glu
                             90
           85
Trp Leu Asp Arg Val Leu Ser Arg Gly Phe Ser Ser Gly Val Gly Gly
         100 105
                                        110
Asn Gln Leu Ala Gly Lys Tyr Trp Arg Ser Val Ile Thr Thr Gly Glu
     115 120
                                      125
Pro Glu Ser Ala Tyr Arg His Asp Gly Leu Asn Arg Tyr Pro Met Ser
 130 135 140
Asp Ile Leu Arg Pro Phe Glu Leu Thr Ala Ala Met Cys Arg Met His
               150 155 160
Trp Met Ser Pro Ile Ile Ile Tyr Trp Ala Arg Arg Gln Asp Pro Lys
            165 170 175
Ala Leu Ala Ser His Ala Arg Ala Tyr Gly Glu Trp Leu Ala Ser Pro
         180
                        185
Ile Pro Ala Gly Gly Arg
   195
```

<400> 8156 Pro Glu Leu Thr Gly Pro Val Asn His Asp Gly Phe Thr Val Gly Gly 10 Asp Gln Val Leu Ile Phe Gln His Leu Gln Asp Thr Ala His Cys Phe 20 25 30 Thr Gly Ala Ala Asp Asp Leu Thr Asp Phe Leu Ala Gly Asn Phe Asn 4.5 40 Leu His Thr Val Arg Val Ser His Gly Val Trp Leu Phe Arg Gln Val 50 Gln Gln Arg Leu Arg Asp Thr Thr Gly Tyr Val Gln Glu Gly Glu Val 75 7.0 Thr Tyr Leu Leu Arg Gly His Leu Gln Thr Ala Cys His Leu Gly Arg 95 90 85 Glu Thr His Gln Asp Val Arg Val Asp Leu Asn Gln Leu Thr Glu Phe 105 110 100 Leu Ile Arg Asn Phe Ser His Phe Thr Cys Cys Phe Cys Thr Asn Pro 120 125 115 Gly Ala Thr Phe Leu Ala Phe Phe Lys Gln Ala Gln Phe Thr Asp Lys 135 Ile Ala Leu Val Gln Ile Arg Lys Asp His Leu Phe Pro Phe Phe Ile 155 150 145 Phe Asp Gln His Gly His Arg Ala Phe Asn Asp Val Ile Gln Arg Phe

170

185

<210> 8157

<210> 8156 <211> 188 <212> PRT

<213> Enterobacter cloacae

180

165

Arg Phe Phe Thr Leu Val Asn Gln Arg Ala Leu

<211> 66 <212> PRT

<213> Enterobacter cloacae

```
Trp Val Leu Met Asn Val Ala Met Arg Gln Glu Pro Phe Glu Ser Arg
Val Cys Leu Arg Phe Ala Lys His His Ala Leu Leu Ser Ser Val Ile
                            25
Ser Cys His Gln Ser His Lys Met His Pro Asp Ser Gly Val Ala Ile
                        4.0
Glu Phe Leu Pro Ile Pro Gly Lys Ser Ala Val Val Thr Phe Arg Ser
Gln
65
<210> 8158
<211> 232
<212> PRT
<213> Enterobacter cloacae
<400> 8158
Ser Arg Ala Ala Val Glu Leu His Thr Val Tyr Pro Val Ala Ala Ala
                             10
Val Tyr Leu Ala Asp Phe Arg Asn Val Ile Met Thr Thr Thr Leu Arg
                                               30
                          25
Pro His Asp Leu Ile Trp Leu Tar Ala Arg Asp Ala Leu Glu Gly Ile
                        4.0
                                           4.5
Thr Glu Ser Trp Val Asp Ala Ala Trp His Thr Gly Leu Pro Val Val
                                        60
Val Arg Arg Asp Val Asp Asn Glu Gly Arg Ile Pro Val Gly Val Arg
                  70
                                    75
Gly Leu Arg Arg Asp Gln Arg Ala Ala Gly Trp Val Lys Pro Glu Asn
                                90
              8.5
Val Leu Arg Val Val Ser Pro Glu Asp Leu Ser Val Ala Ala Asp Leu
          100
                            105
                                              110
Leu Arg Ser Pro Phe Ile Thr Gln Pro Pro Val Gln Val Ala Leu Gln
                         120
                                           125
       115
Leu Ala Gln Gln Ser Trp Pro Trp Thr Trp Gly Ile Thr Gly Ser Thr
                     135
 130
Gly Tyr Ala Leu Ala Thr Gly Ile Pro Val Ile His Ala Asp Ser Asp
                  150 155
145
Leu Asp Leu Leu Ile Arg Ala Pro Cys Thr Val Ser Pro Glu Ala Phe
              165 170 175
Thr Asp Trp Gln Ala Gln Leu Ser Arg Ala Leu Cys Arg Ala Asp Thr
          180
                            185
                                               190
Gln Val Asp Thr Pro Glu Gly Gly Phe Ala Leu Ala Glu Trp Leu Arg
                                 205
       195
                         200
Asp Gly Lys Thr Leu Leu Lys Thr Gln Tyr Gly Pro Arg Leu Val Ala
 210 215
Asp Pro Trp His Arg Glu Glu
225
                  230
<210> 8159
<211> 224
<212> PRT
<213> Enterobacter cloacae
<400> 8159
Val Phe Leu Ser Leu Arg Val His Gly Cys Arg Phe Pro Leu Gln Ser
                                 1.0
Ala Pro Ala Ile Phe Pro Arg Ser Gly Asp Ile Met Lys Val Ala Lys
Asp Leu Val Val Ser Leu Ala Tyr Gln Val Arg Thr Glu Asp Gly Val
       35
                         40
```

```
Leu Val Asp Glu Ser Pro Val Ser Ala Pro Leu Asp Tyr Leu His Gly
                                       60
                     55
 5.0
His Gly Ser Leu Ile Ser Gly Leu Glu Thr Ala Leu Glu Gly His Glu
                  7.0
                                    75
Val Gly Asp Lys Phe Asp Val Ala Val Gly Ala Asn Asp Ala Tyr Gly
           8.5
                                90
                                                  9.5
Gln Tyr Asp Asp Asn Leu Val Gln Arg Val Pro Lys Asp Val Phe Met
         100
                            105
Gly Val Asp Glu Leu Gln Val Gly Met Arg Phe Leu Ala Glu Thr Asp
      115 120
                                            125
Gln Gly Pro Val Pro Val Glu Ile Thr Glu Val Glu Asp Asp His Val
                                       140
  130 135
Val Val Asp Gly Asn His Met Leu Ala Gly Gln Asn Leu Lys Phe Asn
        150 155
Val Glu Val Val Ala Ile Arg Glu Ala Thr Glu Glu Glu Leu Ala His
             165 170 175
Gly His Val His Gly Ala His Gly His Asp His Asp His Asp His Gly
                            185
                                   190
          180
His Asp Gly Cys Cys Gly Gly His Gly His Asp His Gly His Asp His
      195 200
                               205
Gly His Gly Lys Gly Gly Cys Gly Asn Gly Gly Cys Gly Cys His
                     215
                                        220
   210
<210> 8160
<211> 141
<212> PRT
<213> Enterobacter cloacae
<400> 8160
Arg Val Glu Gly Gly Cys Arg Tyr Ala Thr Thr Asp Ala Gly Arg Arg
Leu Met Ser Asn Ala Pro Gln Leu Tyr Ala Leu Tyr Gln Gln Leu Leu
           20
                            25
Glu Gln Ser Gln Leu Met Leu Arg Leu Ala Arg Gln Gly Leu Trp Asp
       35
                         40
                                            45
Asp Leu Ile Ile Cys Glu Thr Asp Tyr Val Asn Ala Val His Ser Leu
 50
                      55
Ala Arg Leu Thr Gln Glu Ser Glu Pro Ser Thr Gln Ile Gln Glu Gln
                  70
                                    75
65
Leu Arg Pro Thr Leu Arg Val Ile Leu Asp Asn Glu Gly Gln Val Lys
              85
                                90
                                                  9.5
Thr Leu Leu Gln Ala Arg Met Asp Glu Leu Ala Lys Leu Val Gly Gln
                             105
           100
Ser Ser Ile Gln Lys Thr Val Leu Ser Thr Tyr Gly Asn Gln Gly Gly
                         120
       115
His Val Leu Val Pro Gln Ser Asn Ser Asp Ile Asn
                      135
   130
<210> 8161
<211> 571
<212> PRT
<213> Enterobacter cloacae
<400> 8161
Arg Lys Pro Pro Gly Phe Lys Arg Cys Ala Met Ser Ala Thr Ala Ala
                                 10
Ser Thr Ala Pro Gln Asn Lys Ser Leu Glu Trp Met Asn Arg Leu Arg
                              25
           20
                                               30
Ala Asn Pro Lys Ile Pro Leu Ile Val Ala Gly Ala Ala Ala Ile Ala
```

35 40 45 Ile Val Val Ala Met Val Leu Trp Ala Lys Ser Pro Asp Tyr Arg Thr Leu Tyr Ser Asn Leu Ser Asp Gln Asp Gly Gly Ala Ile Val Thr Gln 75 70 Leu Thr Gln Met Asn Ile Pro Tyr Arg Phe Ala Asp Asn Gly Gly Ala 8.5 90 Leu Glu Val Pro Ala Asp Lys Val His Glu Leu Arg Leu Arg Leu Ala 100 105 110 Gln Gln Gly Leu Pro Lys Gly Gly Ala Val Gly Phe Glu Leu Asp 115 120 125 Gln Glu Lys Phe Gly Ile Ser Gln Phe Ser Glu Gln Val Asn Tyr Gln 130 135 140 Arg Ala Leu Glu Gly Glu Leu Ala Arg Thr Ile Glu Thr Leu Gly Pro 145 150 155 Val Lys Ser Ala Arg Val His Leu Ala Met Pro Lys Pro Ser Leu Phe 165 170 175 Val Arg Glu Gln Lys Ser Pro Ser Ala Ser Val Thr Val Asn Leu Glu 180 185 190 Pro Gly Arg Ala Leu Asp Glu Gly Gln Ile Ser Ala Val Thr His Leu 195 200 205 Val Ser Ser Ala Val Ala Gly Leu Pro Pro Gly Asn Val Thr Leu Val 215 220 210 Asp Gln Ser Gly His Leu Leu Thr Gln Ser Asn Thr Ala Gly Arg Asp 225 230 235 Leu Asn Asp Ala Gln Leu Lys Tyr Ala Ala Asp Val Glu Gly Arg Leu 245 250 255 Gln Arg Arg Ile Glu Ala Ile Leu Gly Pro Val Val Gly Ser Ser Asn 265 270 260 Val His Ala Gln Val Thr Ala Gln Ile Asp Phe Ser Asn Lys Glu Gln 280 285 275 Thr Glu Glu Gln Tyr Ala Pro Asn Gly Asp Ala Ser Arg Ala Val Leu 295 300 290 Arg Ser Arg Gln Ile Asn Glu Thr Glu Gln Val Gly Gly Gln Tyr Pro 310 315 Gly Gly Val Pro Gly Ala Leu Ser Asn Gln Pro Ala Pro Ala Asn Ala 325 330 335 Ala Pro Ile Ser Thr Pro Pro Ala Asn Pro Gln Asn Gly Gln Gln Thr 345 350 340 Asn Gln Gln Thr Thr Ser Thr Ala Asn Ser Thr Gly Pro Arg Asn Ser 360 365 355 Ser Arg Asn Glu Thr Thr Asn Tyr Glu Val Asp Arg Thr Ile Arg His 375 Thr Lys Leu Asn Thr Gly Asp Ile Glm Arg Leu Ser Val Ala Val Val 390 395 Val Asn Tyr Lys Thr Leu Pro Asp Gly Lys Pro Leu Pro Leu Thr Ala 405 410 415 Glu Gln Met Lys Gln Ile Glu Asp Leu Thr Arg Glu Ala Met Gly Phe 425 Ser Glu Lys Arg Gly Asp Thr Leu Asn Val Val Asn Ser Pro Phe Asn 440 Pro Val Asp Glu Thr Gly Gly Glu Leu Pro Phe Trp Gln Gln Gln Ala 455 Phe Phe Asp Gln Leu Met Ser Ala Gly Arg Trp Leu Leu Val Leu Ile 470 475 480 Val Ala Trp Leu Leu Trp Arg Lys Gly Val Arg Pro Gln Leu Gln Arg 490 Arg Ala Glu Ala Glu Lys Ala Ala Leu Glu Gln Lys Asn Ala Arg Pro 500 505 Asp Glu Glu Glu Ala Val Glu Val Arg Leu Ser Lys Asp Glu Gln Met 520 525 515 Gln Gln Arg Arg Ala Asn Gln Arg Met Gly Ala Glu Val Met Ser Gln Arg Ile Arg Glu Met Ser Asp Asn Asp Pro Arg Val Val Ala Leu Val 550 Ile Arg Gly Trp Met Gly Asn Glu His Glu 565

<210> 8162 <211> 405

<212> PRT <213> Enterobacter cloacae

355

370

385

<400> 8162 Met Ile Thr Leu Gln Gln Leu Leu Met Thr Asp Ser Asp Pro Ser Gly 1.0 Gly Thr Leu Ala Gly Lys Gly Ala Glu Gly Ala Gln Asp Phe Leu Ser 25 20 Leu Leu Ala Gly Ala Leu Thr Glu Thr Thr Gly Lys Gly Lys Asp Ala 40 Pro Leu Thr Leu Ala Asp Leu Lys Ala Ala Gly Ser Lys Leu Ser Thr 55 60 Ala Ala Gln Glu Lys Asn Gly Asp Thr Thr Leu Gln Ala Lys Ile Ala 75 7.0 Glu Leu Leu Ser Arg Gln Glu Thr Leu Thr Gly Glu Asp Thr Ala Val 85 90 Ser Leu Gln Ser Leu Val Ser Gly Leu Lys Pro Ala Ala Asn Thr Asp 105 110 100 Ala Leu Lys Ala Leu Thr Gln Pro Glu Ala Lys Thr Asn Ser Glu Thr 115 120 125 Thr Thr Glu Glu Glu Leu Ala Gly Leu Ser Ala Leu Met Ala Met 135 140 130 Leu Pro His Gln Gln Thr Thr Thr Pro Val Ala Thr Gln Pro Ala Ser 150 155 160 145 Thr Gly Glu Ile Ala Pro Arg Ala Ala Leu Pro Ser Ala Leu Ala Gln 165 170 175 Thr Asp Asn Gly Gln His Gln Pro Leu Ser His Ala Leu Thr Gly Gln 180 185 190 Glu Lys Met Pro Val Gln Asp Ser Asp Thr Ser Leu Pro Ala Thr Ala 195 200 205 Ala Val Thr Pro Ala Val Ala Ala Val Ala Glu Lys Gln Asp Val Ala 215 220 210 Ser Ala Ala Ser Pro Ala Ala Ser Pro Thr Ala Thr Leu Ala Pro Ile 230 235 225 Val Ser His Leu Ala Pro Ser Gln Pro Ala Ala Thr Val Ala Thr Ala 245 250 255 Pro Val Leu Ser Gln Pro Leu Gly Thr His Glu Trp Gln Gln Asn Leu 265 270 260 Ser Gln His Ile Thr Leu Phe Thr Arg Gln Gly Gln Gln Thr Ala Glu 280 285 275 Leu Arg Leu His Pro Glu Asp Leu Gly Gln Val Gln Ile Ser Leu Lys 295 300 290 Leu Asp Asp Asn Gln Ala Gln Leu Gln Met Val Ser Pro His Ser His 310 315 305 Val Arg Ala Ala Leu Glu Ala Ala Leu Pro Ile Leu Arg Thr Gln Leu 330 325 Ala Glu Asn Gly Ile Gln Leu Ser Gln Ser Ser Val Ser Ser Glu Gly 345 340 Phe Ala Gly Gln Gln Gln Ser Ser Ser Gly Gln Gln His Ala Ser 360

Arg Ser Gly Gln His Gly Gly Phe Asn Asp Glu Ser Glu Glu Leu Leu

375 Pro Ala Pro Ala Ala Leu Gln Ser Ala Ala Arg Gly Ser Arg Ala Val

390

380

```
4000
Asp Ile Phe Ala
<210> 8163
<211> 147
<212> PRT
<213> Enterobacter cloacae
<400> 8163
Ile Arg Arg Thr Tyr His Arg His His Tyr Pro Phe Arg Thr Tyr Ala
                                10
Ser Ser Glu Pro Leu Ser Met Lys Thr Gln Ala Thr Leu Ser Ala Pro
                            25
                                              30
          2.0
Ser Ala Val Pro Gly Ser Pro Leu Leu Gin Val Ser Gly Ala Leu Phe
      35
                     4.0
Gly Ile Ile Ala Phe Ile Leu Ile Ala Ala Trp Leu Ala Lys Arg Phe
                  55
Gly Leu Ala Gly Lys Thr Ala Gly Thr Arg Gly Leu Lys Val Ser Ala
                                   75
                70
Ser Thr Pro Leu Gly Pro Arg Glu Arg Val Val Ile Val Glu Val Glu
                  90
             85
Asp Ala Arg Leu Val Leu Gly Val Thr Ala Ser Ser Ile Asn Val Leu
          100 105
His Thr Leu Pro Pro Ala Pro Ala Thr Val Glu Ala Asn Ala Gln Ala
    115 120 125
Pro Ala Asp Phe Gln Ser Val Met Lys Ser Leu Leu Lys Arg Pro Gly
             135
Arg Ser
145
<210> 8164
<211> 129
<212> PRT
<213> Enterobacter cloacae
<400> 8164
Trp Phe Arg Pro Arg Pro Leu Pro Cys Pro Leu Arg Ser Cys Cys Ser
                              10
Cys Trp Ser Thr Ala Gly Ser Cys Trp Ser Ala Arg Trp Arg Arg Val
                                              3.0
                            25
Ser Thr Val Glu Glu Arg Ala Met Thr Pro Glu Ser Val Met Met
                      4.0
                                    4.5
    35
Gly Thr Glu Ala Met Lys Val Ala Ile Ala Val Ala Ala Pro Leu Leu
                   55
                                       60
Leu Val Ala Leu Val Thr Gly Leu Ile Ile Ser Ile Leu Gln Ala Ala
                                   75
                  7.0
Thr Gln Ile Asn Glu Met Thr Leu Ser Phe Ile Pro Lys Ile Ile Ala
              85
                                90
```

Val Phe Val Ala Ile Ile Val Ala Gly Pro Trp Met Leu Asn Leu Leu

Leu Asp Tyr Met Arg Asn Leu Phe Thr Asn Leu Pro Tyr Ile Ile Gly

105 110

<210> 8165 <211> 264 <212> PRT <213> Enterobacter cloacae

115



Arg Thr Met Leu His Phe Thr Ser Asp Gln Phe Val Gln Trp Leu Gly 10 1.5 Ile Tyr Phe Trp Pro Met Leu Arg Ile Met Ala Leu Ile Ser Thr Ala 25 Pro Ile Leu Ser Glu Lys Ser Val Pro Lys Arg Val Lys Ile Gly Leu 4.0 Gly Met Val Ile Thr Ile Ile Val Ala Pro Ser Leu Pro Ala Val Asp 55 60 Ile Pro Ile Phe Ser Pro Asn Ala Ile Trp Ile Ala Leu Gln Gln Val 7.0 7.5 Met Ile Gly Val Ala Val Gly Phe Thr Met Gln Leu Ala Phe Ala Ala 8.5 90 Val Arg Thr Ala Gly Glu Leu Ile Gly Leu Gln Met Gly Leu Ser Phe 100 105 110 Ala Thr Phe Val Asp Pro Gly Ser His Leu Asn Met Pro Val Leu Ala 115 120 125 Arg Ile Ile Asp Leu Leu Ala Met Leu Leu Phe Leu Ser Phe Asn Gly 130 135 140 His Leu Trp Leu Ile Ser Met Leu Val Asp Thr Phe His Thr Leu Pro 150 155 Ile Gly Asp Asn Pro Val Asn Ser Asn Ala Phe Leu Ala Leu Val Arg 165 170 175 Ala Ala Gly Leu Ile Phe Leu Asn Gly Leu Met Leu Ala Leu Pro Ile 180 185 190 Ile Thr Leu Leu Leu Thr Val Asn Leu Ala Leu Gly Leu Leu Asn Arg 195 200 205 Met Ala Pro Gln Leu Ser Val Phe Val Ile Gly Phe Pro Val Thr Leu 210 215 220 Thr Val Gly Leu Leu Met Ser Leu Leu Met Pro Leu Ile Ala Pro 225 230 235 Phe Cys Glu His Leu Phe Ser Gla Ile Phe Asn Leu Leu Ala Asp Ile 245 250 Val Ser Glu Leu Pro Arg Lys 260

<210> 8166 <211> 211 <212> PRT

<213> Enterobacter cloacae

<400> 8166

Gly Tyr Ala Met Ser Thr Ile Ile Met Asp Leu Cys Arg Tyr Thr Arg Leu Gly Leu Thr Gly Tyr Leu Ala Ser Arg Gly Val Arg Lys Arg Asp Ile Asn Asp Ala His Thr Val Glu Glu Leu Ala Ala Ala Cys Asp Ala 40 His Lys Pro Gly Val Val Phe Ile Asn Glu Asp Cys Phe Ile His Asp 55 Pro Ala Asn Ser Gln His Ile Lys Gln Ile Ile Asn Gln His Pro Lys 70 75 Thr Leu Phe Ile Val Phe Met Ala Ile Ala Asn Ile His Phe Asp Glu 8.5 90 Tyr Leu Leu Val Arg Lys Asn Leu Leu Ile Ser Ser Lys Ser Ile Lys 100 105 Pro Glu Ser Leu Asp Asp Ile Leu Gly Asp Tyr Leu Asn Lys Glu Val 115 120 Lys Asn Val Gly Ala Ile Asn Leu Pro Thr Leu Ser Leu Ser Arg Thr 135 Glu Ser Ser Met Leu Arg Met Trp Met Ala Gly Gln Gly Thr Ile Gln 150

```
Ile Ser Asp Gln Met Asn Ile Lys Ala Lys Thr Val Ser Ser His Lys
               170
         165
Gly Asn Ile Lys Arg Lys Ile Lys Thr His Asn Lys Gln Val Ile Tyr
        180
             185 190
His Val Val Arg Leu Thr Asp Asn Val Thr Asn Gly Ile Phe Val Asn
          200
Met Ara
  210
<210> 8167
<211> 309
<212> PRT
<213> Enterobacter cloacae
<400> 8167
Ile Leu Val Met Ser Ile Asn Leu Arg Arg Val Trp Val Cys Arg Asp
1 5
                    10
Arg Phe His Leu Asn Gly Ala Ser Met Pro Ile Phe Phe Lys Ile Phe
 20
                       25
Leu Arg Lys Asn His His Pro Gly Asp Ile Met Pro Ser Leu Glu Glu
35 40
                        45
Thr Leu Leu Val Phe Thr Asp Leu Asp Gly Thr Leu Leu Asp Phe His
50 55
Thr Leu Asp Trp Gln Pro Ala Ala Pro Trp Leu Glu Lys Leu Met Asp
65 70 75
                                           8.0
Glu Gln Ile Pro Val Ile Leu Cys Ser Ser Lys Thr Ala Ser Glu Met
         85 90
Asp Asp Ile Gln Glu Leu Gly Leu Gly Gly Leu Pro Tyr Ile Ala
      100 105 110
Glu Asn Gly Ala Val Ile Gln Pro Asp Val Arg Trp Glu Asn Ala Ala
115 120 125
Arg Phe Ile Ser Glu Lys Lys His Asp Glu Ile Arg Gln Cys Ile Ala
 130 135 140
Arg Val Arg Gln Glu Met His Leu Lys Phe Thr Thr Phe Asp Asp Val
145 150 155
                                           160
Asp Glu His Val Val Ala Glu Trp Thr Gly Leu Ser Arg Pro Arg Ser
           165 170
Val Leu Ala Arg Lys His Glu Ala Ser Val Thr Leu Ile Trp Arg Asp
      180
                           190
                      185
Ser Asp Glu Gln Met Lys Tyr Phe Ala Ala Glu Leu Ala Arg Gln Arg
   195 200
Leu Lys Ile Val Gln Gly Ala Arg Phe Trp His Ile Leu Asp Thr Cys
                215
 210
                                220
Cys Gly Lys Asp Val Ala Val His Trp Leu Val Asp Gln Tyr Arg Leu
225 230
                           235
His Glu Gly Tyr Glu Pro Thr Thr Leu Gly Leu Gly Asp Gly Pro Asn
           245
                         250
Asp Ala Pro Leu Leu Asp Ser Val Gly Phe Ala Val Val Lys Gly
   260
                      265
                           270
Phe Asn Arg Glu Gly Ile Ser Leu Ile Asn Asn Asp Pro Ala Arg Val
                    280 285
Tyr His Thr Gln His Thr Gly Pro Thr Gly Trp Cys Glu Gly Leu Asp
                 295
                               300
Tyr Phe Leu Arg
305
<210> 8168
<211> 474
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<212> PRT

<213> Enterobacter cloacae

<400> 8168 Gly Ile Asn Met Ala Ser Ile Ser Thr Leu Gly Val Gly Ser Gly Leu 10 Gln Leu Gly Asp Ile Leu Asp Ser Leu Thr Ala Ala Gln Lys Ala Gln 2.0 25 Leu Thr Pro Ile Ser Lys Gln Gln Thr Ser Tyr Thr Ala Lys Leu Ser 40 45 Ala Tyr Gly Thr Leu Lys Ser Ala Leu Glu Ser Phe Gln Thr Ala Asn 55 60 Thr Ala Leu Ser Lys Ala Asp Leu Phe Thr Ala Thr Thr Thr Ala Ser 70 75 Ser Ser Thr Ala Phe Ser Ala Thr Thr Ser Gly Ser Ala Ile Ala Gly 85 90 95 Lys Tyr Thr Ile Asn Val Ser Gln Leu Ala Gln Ala Gln Thr Leu Thr 100 105 110 Thr Ala Lys Thr Gln Ser Asp Asn Lys Thr Ala Ile Ala Thr Ala Asp 115 120 125 Ser Thr Ile Thr Ile Gln Gln Gly Gly Asp Lys Lys Pro Val Thr Ile 130 135 140 Asn Ile Ser Ala Glu Asn Ser Ser Leu Ser Gly Ile Arg Asp Ala Ile 145 150 155 160 Asn Lys Ala Asp Ala Gly Val Ser Ala Ser Ile Ile Asn Val Gly Asn 165 170 Gly Glu Tyr Arg Leu Ser Ile Thr Ser Lys Asp Thr Gly Lys Asp Asn 180 185 190 Ala Met Thr Ile Ser Val Ser Gly Asp Thr Ala Leu Gln Ser Phe Met 195 200 205 Gly Tyr Asn Gly Asn Ser Ala Asp Thr Ala Asn Gly Met Met Glu Ser 210 215 220 Val Thr Ala Gln Asn Ala Leu Leu Lys Val Asn Asn Val Asp Ile Glu 225 230 235 Asn Ser Ser Asn Thr Ile Ser Asp Ala Leu Glu Asp Ile Thr Leu Asn 245 250 255 Leu Asn Asp Val Thr Thr Gly Asn Gln Thr Leu Thr Ile Thr Thr Asp 260 265 270 Asn Thr Lys Ala Thr Lys Ala Ile Asn Asp Trp Val Thr Ala Tyr Asn 275 280 285 Ser Leu Gln Asp Thr Phe Ser Ser Leu Thr Lys Tyr Thr Ala Val Asp 290 295 300 Ala Gly Ser Asp Ala Gln Asn Thr Ser Asn Gly Ala Leu Leu Gly Asp 305 310 315 Ser Thr Leu Arg Thr Ile Gln Thr Gln Leu Arg Ser Val Leu Asn Asn 325 330 Pro His Thr Ser Ser Asn Ile Lys Thr Leu Ala Gln Ala Gly Ile Thr 350 345 Thr Asp Pro Ser Thr Gly Lys Leu Glu Val Asp Asp Asp Lys Leu Ser 360 365 Ala Ala Met Lys Asn Ser Ala Ala Gly Ile Lys Asp Leu Leu Ile Gly 370 375 380 Asp Gly Lys Thr Ser Gly Ile Thr Thr Thr Val Gly Thr Asn Leu Thr 390 395 Gly Trp Leu Ser Ser Thr Gly Ile Ile Gln Ala Ala Lys Asp Gly Val 405 410 Ser Lys Thr Leu Asn Asn Leu Thr Lys Gln Tyr Asn Ala Ala Ser Glu 420 425 Arg Ile Asp Thr Met Val Ala Arg Tyr Lys Glu Gln Phe Thr Gln Leu 435 440 445 Asp Val Met Met Asn Ser Leu Asn Ser Thr Ser Ser Tyr Leu Thr Gln 455 Gln Phe Glu Asn Thr Ser Ser Asn Lys 470

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<210> 8169
<211> 146
 <212> PRT
 <213> Enterobacter cloacae
<400> 8169
Thr Leu Ile Arg Pro Glu Gly Asp Asn Met Tyr Gly Ala Lys Gly Thr
                                1.0
Gln Ala Tyr Ala Lys Ile Glu Val Glu Ser Ala Val Met Ser Ala Ser
                             25
Gln Gln Gln Leu Val Ile Met Leu Phe Asp Gly Ala Leu Ser Ala Leu
                      40
                                         4.5
Val Arg Ala Arg Leu Phe Leu Ala Asp Gly Asn Ile Pro Ala Lys Gly
              55
Leu Ala Leu Ser Lys Ala Ile Asn Ile Ile Glu Asn Gly Leu Lys Val
               70
                       75
Gly Leu Val Glu Asn Asn Gly Asp Glu Leu Thr Gln Asn Leu Ile Ala
             85 90
Leu Tyr Ala Tyr Met Val Arg Arg Leu Leu His Ala Asn Val Asn Asn
          100 105 110
Asp Ala Ser Ala Ile Glu Glu Val Glu Asn Leu Leu Arg Asn Ile Ala
 115 120 125
Asp Gly Trp Lys Glu Val Ala Gly Thr Pro Gln Leu Met Gln Asp Ala
         135
Val
145
<210> 8170
<211> 359
<212> PRT
<213> Enterobacter cloacae
<400> 8170
Ala Ser Ala Phe Ala Lys Cys Gln Ile Thr Ile Arg Ala Ser Ser Arg
                                10
Trp Ser Ser Ala Val Gly Trp Val Thr Asn Met Ser Asn Thr Leu Thr
       20
                             2.5
                                               3.0
Gly Thr Asp Lys Ser Val Ile Leu Leu Met Thr Ile Gly Glu Asp Arg
       35
                         40
Ala Ala Glu Val Phe Lys His Leu Ser Gln Arg Glu Val Gln Ile Leu
                     55
                                       60
Ser Ala Ala Met Ala Asn Val Arg Gln Ile Ser Asn Lys Gln Leu Thr
                  70
                                    75
Glu Val Leu Ala Glu Phe Glu Gln Glu Ala Glu Gln Phe Ala Ala Leu
                                90
Asn Val Asn Ala Asn Glu Tyr Leu Arg Ser Val Leu Val Lys Ala Leu
          100
                            105
                                              110
Gly Glu Glu Arg Ala Ala Ser Leu Leu Glu Asp Ile Leu Glu Thr Arg
                         120
                                           125
Asp Thr Ala Ser Gly Ile Glu Thr Leu Asn Phe Met Glu Pro Gln Ser
                     135
                                       140
Ala Ala Asp Leu Ile Arg Asp Glu His Pro Gln Ile Ile Ala Thr Ile
                  150
                                    155
Leu Val His Leu Lys Arg Gly Gln Ala Ala Asp Ile Leu Ala Leu Phe
              165
                                170
                                                   175
Asp Glu Arg Leu Arg His Asp Val Met Leu Arg Ile Ala Thr Phe Gly
          180
                             185
                                               190
Gly Val Gln Pro Ala Ala Leu Ala Glu Leu Thr Glu Val Leu Asn Asn
                        200
Leu Leu Asp Gly Gln Asn Leu Lys Arg Ser Lys Met Gly Gly Val Arg
```

```
215
 Thr Ala Ala Glu Ile Ile Asn Leu Met Lys Thr Gln Glu Glu Ala
            230
                          235 240
 Val Ile Thr Ala Val Arg Glu Phe Asp Gly Glu Leu Ala Gln Lys Ile
             245
                     250
 Ile Asp Glu Met Phe Leu Phe Glu Asn Leu Val Glu Val Asp Asp Arg
          260
                  265 270
 Ser Ile Gln Arg Leu Leu Gln Glu Val Asp Ser Glu Ser Leu Leu Ile
      275
            280 285
 Ala Leu Lys Gly Ala Glu Gin Pro Leu Arg Glu Lys Phe Leu Arg Asn
        295 300
 Met Ser Gln Arg Ala Ala Asp Ile Leu Arg Asp Asp Leu Ala Asn Arg
        310 315
 Gly Pro Val Arg Leu Ser Gln Val Glu Asn Glu Gln Lys Ala Ile Leu
           325 330 335
 Leu Ile Val Arg Arg Leu Ala Glu Thr Gly Glu Met Val Ile Gly Ser
       340
                         345
 Gly Asp Asp Thr Tyr Val
      355
 <210> 8171
 <211> 481
 <212> PRT
 <213> Enterobacter cloacae
<400> 8171
 Gly Arg Ser Gly Cys Gln Arg Arg Asp Pro Leu Ala Gly Thr Val Pro
                          10
 Pro Gly Gly Thr Gly Ser Arg Leu Met Thr Ala Arg Leu Thr Arg Trp
  20
                         25
 Leu Asn Thr Leu Asp Asn Phe Glu Thr Lys Met Ala Gln Leu Pro Ser
 35
                 40
                                      45
 Val Arg Arg Tyr Gly Arg Leu Thr Arg Ala Thr Gly Leu Val Leu Glu
 50 55
                                   60
 Ala Thr Gly Leu Gln Leu Pro Leu Gly Ala Thr Cys Val Ile Glu Arg
 65 70
                              7.5
 Glm Asp Gly Glu Thr Arg Glu Val Glu Ser Glu Val Val Gly Phe
            85
                            9.0
 Asn Gly Gln Arg Leu Phe Leu Met Pro Leu Glu Glu Val Glu Gly Ile
         100 105
                                          110
 Leu Pro Gly Ala Arg Val Tyr Ala Lys Asn Ile Ser Gly Asp Gly Leu
 115
                      120
                                       125
 Gln Ser Gly Lys Gln Leu Pro Leu Gly Pro Ala Leu Leu Gly Arg Val
                   135
                                   140
 Leu Asp Gly Ser Gly Lys Pro Leu Asp Gly Leu Pro Ser Pro Asp Thr
              150 155
 Thr Glu Thr Gly Ala Leu Ile Thr Gln Pro Phe Asn Pro Leu Gln Arg
            165
                             170
 Thr Pro Ile Glu His Val Leu Asp Thr Gly Val Arg Pro Ile Asn Ala
                         185
 Leu Leu Thr Val Gly Arg Gly Gln Arg Met Gly Leu Phe Ala Gly Ser
                      200
 Gly Val Gly Lys Ser Val Leu Leu Gly Met Met Ala Arg Tyr Thr Gln
                   215
Ala Asp Val Ile Val Val Gly Leu Ile Gly Glu Arg Gly Arg Glu Val
                230
                                235
Lys Asp Phe Ile Glu Asn Ile Leu Gly Thr Glu Gly Arg Ala Arg Ser
             245
                             250 255
Val Val Ile Ala Ala Pro Ala Asp Val Ser Pro Leu Leu Arg Met Gln
                265
Gly Ala Ala Tyr Ala Thr Arg Ile Ala Glu Asp Phe Arg Asp Arg Gly
```

```
280
                                    285
Gln His Val Leu Leu Ile Met Asp Ser Leu Thr Arg Tyr Ala Met Ala
  290
            295 300
Gln Arg Glu Ile Ala Leu Ala Ile Gly Glu Pro Pro Ala Thr Lys Gly
          310 315
Tyr Pro Pro Ser Val Phe Ala Lys Leu Pro Ala Leu Val Glu Arg Ala
       325 330 335
Gly Asn Gly Ile Ser Gly Gly Gly Ser Ile Thr Ala Phe Tyr Thr Val
       340 345 350
Leu Thr Glu Gly Asp Asp Gln Gln Asp Pro Ile Ala Asp Ser Ala Arg
    355 360 365
Ala Ile Leu Asp Gly His Ile Val Leu Ser Arg Arg Leu Ala Glu Ala
 370 375 380
Gly His Tyr Pro Ala Ile Asp Ile Glu Ala Ser Ile Ser Arg Ala Met
385 390 395
Thr Ala Leu Ile Thr Glu Gln His Tyr Ala Arg Val Arg Asn Phe Lys
      405 410 415
Gln Leu Leu Ser Ser Phe Gln Arg Asn Arg Asp Leu Val Ser Val Gly
 420 425
                             430
Ala Tyr Ala Lys Gly Ser Asp Pro Met Leu Asp Lys Ala Ile Ala Leu
435 440 445
Trp Pro Gln Leu Glu Ala Phe Leu Gln Gln Gly Ile Phe Glu Arg Ala
 450 455 460
Asp Trp Glu Asp Ser Leu Gln Ala Leu Glu Leu Ile Phe Pro Gln Val
                             475
<210> 8172
<211> 155
<212> PRT
<213> Enterobacter cloacae
<400> 8172
His Arg Trp Arg Ala Lys Val Met Ala Gln Asn Ser Ala Leu Ser Thr
                          10
Leu Lys Asp Leu Ala Glu Lys Glu Val Asp Asp Ala Ala Leu Gln Leu
        20
                       25
Gly Ala Met Arg Arg Gly Cys Gln Gln Ala Glu Glu Gln Leu Lys Met
                    40
                            4.5
Leu Ile Asp Tyr Gln His Glu Tyr Arg Thr Asn Leu Asn Thr Asp Met
          55
                      60
Thr Gln Gly Ile Gly Ser Gln Arg Trp Ile Asn Tyr Gln Gln Phe Ile
                             75
Gln Thr Leu Glu Lys Ala Ile Glu Gln His Arg Gln Gln Leu Asn Gln
           85
                          90
Trp Thr Gln Lys Val Asp Thr Ala Leu Asn Phe Trp Arg Glu Lys Lys
        100
                       105
                                      110
Gln Arg Leu Gln Ala Trp Gln Thr Leu Gln Asp Arg Gln Ile Ala Ala
                                    125
Ser Thr Leu Ala Glu Asn Arg Leu Asp Gln Lys Lys Met Asp Glu Phe
 130 135
Ala Gln Arg Ala Ser Met Arg Lys Pro Glu
              150
                             155
<210> 8173
```

<211> 176 <212> PRT

<213> Enterobacter cloacae

<400> 8173

```
Ala Gly His Gly Ile Ile Thr Val Leu Ser Cys Thr Glu Thr Gly Ser
                                 10
Ser Tyr Gln Met Thr Asp Ser Ala Ile Thr Lys Lys Ser Lys Arg Ser
                             2.5
Ile Trp Ile Pro Leu Leu Val Leu Ile Thr Leu Ala Ala Cys Ala Thr
                         40
                                     4.5
Ala Gly Tyr Ser Tyr Trp Arg Met Gln Gln Glu Pro Ser Ser Ala Ala
                     55
                                       60
Ala Lys Ala Glu Ala Pro Pro Pro Pro Ala Pro Val Phe Tyr Pro Leu
                  70
                                    75
Asp Thr Phe Thr Val Asn Leu Gly Asp Ala Asp Arg Val Leu Tyr Val
            85
                                90
Gly Ile Thr Leu Arg Leu Lys Asp Glu Ala Thr Arg Ala Arg Leu Asn
          100
                            105
                                  110
Asp Tyr Leu Pro Glu Val Arg Ser Arg Leu Leu Leu Phe Ser Arg
      115
                        120
                                           125
Gln Asp Ala Ser Ala Leu Ala Thr Asp Val Gly Lys Gln Lys Leu Val
 130 135
                                        140
Asp Ala Ile Lys Gln Thr Leu Ala Thr Pro Leu Val Asn Gly Gln Pro
145 150 155
Lys Gln Glu Val Thr Asp Val Leu Tyr Thr Ala Phe Ile Leu Arg
      165
                                170
                                                  175
<210> 8174
<211> 142
<212> PRT
<213> Enterobacter cloacae
<400> 8174
Gly Thr Ala Gln Met Ser Asp Met Asn Asn Pro Ser Asp Glu Asn Ser
Gly Ala Leu Asp Asp Leu Trp Ala Asp Ala Leu Asn Glu Gln Lys Thr
    20
Thr Pro Thr Lys Ser Ala Ala Asp Ala Val Phe Gln Gln Leu Gly Gly
                         40
Gly Asp Val Ser Gly Thr Leu Gln Asp Ile Asp Leu Ile Met Asp Ile
  50
                     55
Pro Val Lys Leu Thr Val Glu Leu Gly Arg Thr Arg Met Thr Ile Lys
           70
                                    7.5
Glu Leu Leu Arg Leu Thr Gln Gly Ser Val Val Ala Leu Asp Gly Leu
              85
                                90
Ala Gly Glu Pro Leu Asp Ile Leu Ile Asn Gly Tyr Leu Ile Ala Gln
                            105
Gly Glu Val Val Val Ala Asp Lys Tyr Gly Val Arg Ile Thr Asp
Ile Ile Thr Pro Ser Glu Arg Met Arg Arg Leu Ser Arg
<210> 8175
<211> 520
<212> PRT
<213> Enterobacter cloacae
<400> 8175
Pro Phe Arg Ser Pro Gly Ile Ser Ala Lys Pro Ala Pro Tyr Leu Ser
Phe Ala Thr Ser Trp Arg Trp Cys Met Arg Asn Pro Thr Leu Leu Gln
                           2.5
Cys Phe His Trp Tyr Tyr Pro Thr Gly Gly Glu Leu Trp Arg Glu Val
                   40
Thr Ala Leu Ala Pro Asn Leu Asn Glu 11e Gly Ile Asn Met Val Trp
```

```
55
Leu Pro Pro Ala Tyr Lys Gly Ala Ser Gly Gly Tyr Ser Val Gly Tyr
65 70 75 80
Asp Ser Tyr Asp Leu Phe Asp Leu Gly Glu Phe Asp Gln Lys Gly Ser
           8.5
                         9.0
Val Ala Thr Lys Tyr Gly Asp Lys Ala Gln Leu Leu Glu Ala Ile Asn
        100
                   105
Ala Leu Lys Ser Asn Gln Ile Ala Val Leu Leu Asp Val Val Val Asn
   115 120
                        125
His Lys Met Gly Ala Asp Glu Lys Glu Pro Val Arg Val Gln Arg Val
 130 135 140
Asp Ala Gln Asp Arg Thr Gln Ile Ser Asp Glu Ile Ile Glu Cys Glu
    150 155 160
Ala Trp Thr Arg Tyr Thr Phe Pro Val Arg Ala Gly Gln Tyr Ser Gln
      165 170 175
Phe Ile Trp Asp Tyr Lys Cys Phe Ser Gly Ile Asp His Ile Glu Asn
            185 190
        180
Pro Asn Glu Asp Gly Ile Phe Lys Ile Val Asn Asp Tyr Thr Gly Glu
195 200 205
Gly Trp Asn Asp Gln Val Asp Asp Glu Met Gly Asn Phe Asp Tyr Leu
 210 215 220
Met Gly Glu Asn Ile Asp Phe Arg Asn His Ala Val Thr Glu Glu Ile
   230 235 240
Lys Tyr Trp Ala Arg Trp Val Met Glu Gln Thr His Cys Asp Gly Phe
    245 250 255
Arg Leu Asp Ala Val Lys His Ile Pro Ala Trp Phe Tyr Lys Glu Trp
 260 265 270
Ile Glu His Val Gln Glu Val Ala Pro Gln Pro Leu Phe Ile Val Ala
 275 280 285
Glu Tyr Trp Ser His Glu Val Asp Lys Leu Gln His Tyr Ile Asn Gln
 290 295 300
Val Asp Gly Lys Thr Met Leu Phe Asp Ala Pro Leu Gln Met Lys Phe
305 310 315 320
His Glu Ala Ser Arg Gln Gly Arg Asp Tyr Asp Met Ser Gln Ile Phe
    325 330 335
Thr Gly Thr Leu Val Glu Ala Asp Pro Phe His Ala Val Thr Leu Val
 340 345 350
Ala Asn His Asp Thr Gln Pro Leu Gln Ala Leu Glu Ala Pro Val Glu
355 360 365
Ala Trp Phe Lys Pro Leu Ala Tyr Ala Leu Ile Leu Leu Arg Glu Asn
 370 375 380
Gly Val Pro Ser Val Phe Tyr Pro Asp Leu Phe Gly Ala Ser Tyr Asp
   390 395 400
Asp Thr Gly Gly Asp Gly Glu Thr Tyr His Ile Asp Met Pro Val Ile
       405 410 415
Glu Gln Leu His Glu Leu Ile Leu Ala Arg Gln Arg Phe Ala His Gly
   420 425 430
Val Gln Thr Leu Phe Phe Asp His Pro Asn Cys Ile Ala Phe Ser Arg
435 440 445
Ser Gly Thr Glu Glu His Pro Gly Cys Val Val Val Leu Ser Asn Gly
450 455
                    460
Asp Asp Gly Glu Lys Thr Ile Cys Leu Gly Glu Asn Tyr Gly Asn Lys
465 470 475 480
                 475 480
Thr Trp Arg Asp Phe Leu Gly Asn Arg Glu Glu Thr Val Thr Thr Ala
       485 490
Ala Asp Gly Glu Gly Thr Phe Phe Cys Asn Gly Gly Ser Val Ser Val
     500 505
Trp Val Ile Glu Asp Ala Leu
```

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<211> 243
<212> PRT
<213> Enterobacter cloacae
<400> 8176
Leu Ala Ala Glu Thr Thr Pro Met Ser Asp Glu Leu Ser Trp Lys Arg
Trp Thr Pro Asp Asp Leu Ser Pro Pro Ser Ala Glu Phe Thr Pro Ala
        2.0
                         25
                                      3.0
Val Val Ser Ser Asp Glu Gly Asp Ala Gly Ala Gly Glu Pro Glu Leu
     35
                     40
                                     4.5
Ser Glu Glu Glu Gln Arg Ala Gln Leu Leu Ala Gln Met Gln Met Gln
                  55
                            60
Ala His Glu Gln Gly Phe Asn Ala Gly Met Asn Glu Gly Arg Gln Thr
               7.0
                            7.5
Gly His Ala Gln Gly Tyr Gln Glu Gly Leu Ala Lys Gly Leu Glu Gln
            8.5
                           90
Gly Ile Glu Gln Ala Arg Gln Gln Gln Ala Pro Leu His Ala Arg Met
         100
             105
Gln Gln Leu Val Ser Glu Phe Gln His Thr Leu Asp Ala Leu Asp Ser
     115
           120 125
Val Ile Ala Ser Arg Leu Met Gln Met Ala Leu Glu Ala Ala Arg Gln
 130
       135
Val Ile Gly Gln Thr Pro Ile Val Asp Asn Ala Ala Leu Ile Lys Gln
145
    150 155
Ile Gln Gly Leu Leu Gln Gln Glu Pro Leu Phe Ser Gly Lys Pro Gln
          165 170
                                            175
Leu Arg Val His Pro Asp Asp Leu Gln Arg Val Glu Glu Ser Leu Gly
    180 185 190
Ala Thr Leu Ser Leu His Gly Trp Arg Leu Arg Gly Asp Pro Ser Leu
 195
                     200
His His Gly Gly Cys Lys Val Ser Ala Asp Glu Gly Asp Leu Asp Ala
210 215 220
Ser Val Ala Thr Arg Trp Gln Glu Leu Cys Arg Leu Ala Ala Pro Gly
225
               230
                               235
Val Val
```

```
<210> 8177
<211> 356
<212> PRT
<213> Enterobacter cloacae
```

<400> 8177 Thr Ala Asn Leu Ser Arg Lys Ser Leu Thr Phe Cys Ile Gln Pro Ser 1.0 Phe Cys Gly Asn Asp Met Gly Asp Ser Ile Leu Ser Gln Ala Glu Ile 3.0 Asp Ala Leu Leu Asn Gly Asp Ser Asp Lys Ser Asp Glu Pro Lys Pro 35 40 45 Gly Leu Thr Gly Asp Asp Asn Ile Arg Pro Tyr Asp Pro Asn Thr Gln 5.5 60 Arg Arg Val Val Arg Glu Arg Leu Gln Ala Leu Glu Ile Ile Asn Glu 7.0 75 Arg Phe Ala Arg Gln Phe Arg Met Gly Leu Phe Asn Leu Leu Arg Arg 85 90 Ser Pro Asp Ile Thr Val Gly Ala Ile Arg Ile Gln Pro Tyr His Glu 105 Phe Ala Arg Asn Leu Pro Val Pro Thr Asn Leu Asn Leu Ile His Leu 120 Lys Pro Leu Arg Gly Thr Gly Leu Val Val Phe Ser Pro Ser Leu Val

```
135
Phe Ile Ala Val Asp Asn Leu Phe Gly Gly Asp Gly Arg Phe Pro Thr
          150
                         155
Lys Val Glu Gly Arg Glu Phe Thr His Thr Glu Gln Arg Val Ile Asn
            165
                         170
Arg Met Leu Lys Leu Ala Leu Glu Ser Tyr Ser Asp Ala Trp Lys Ala
        180
                 185 190
Ile Asn Pro Leu Glu Val Glu Tyr Val Arg Ser Glu Met Gln Val Lys
     195
          200 205
Phe Thr Asn Ile Thr Thr Ser Pro Asn Asp Ile Val Val Asn Thr Pro
  210
                215 220
Phe His Val Glu Ile Gly Asn Leu Thr Gly Glu Phe Asn Ile Cys Leu
225 230 235
Pro Phe Ser Met Ile Glu Pro Leu Arg Glu Leu Leu Val Asn Pro Pro
       245 250 255
Leu Glu Asn Ser Arg His Glu Asp Gln Asn Trp Arg Glu Asn Leu Val
      260 265 270
Arg Gln Val Gln His Ser Gln Leu Glu Leu Val Ala Asn Phe Ala Asp
   275 280 285
Ile Ser Met Arg Leu Ser Gln Ile Leu Lys Leu Gln Pro Gly Asp Val
 290 295 300
Leu Pro Ile Asp Lys Pro Asp Arg Ile Ile Ala His Val Asp Gly Val
305 310 315
Pro Val Leu Thr Ser Gln Tyr Gly Thr Ile Asn Gly Gln Tyr Ala Leu
       325 330 335
Arg Val Glu His Leu Ile Asn Pro Ile Leu Asn Ser Leu Asn Glu Glu
                         345
Gln Pro Lvs
      355
<210> 8178
<211> 268
<212> PRT
<213> Enterobacter cloacae
<400> 8178
Arg Pro Gly Pro Cys Gly Phe Pro Val Arg Tyr Glu Glu Phe Ala Gln
                           1.0
Ala Ser Arg Glu Ile Leu Met Arg Arg Leu Leu Phe Leu Thr Leu Ala
Gly Leu Gly Leu Phe Ala Pro Ser Val Tyr Ala Gln Leu Pro Gly Leu
          40
                                     4.5
Val Ser Thr Pro Leu Ala Asn Gly Gly Gln Ser Trp Ser Leu Ser Val
                  55 60
Gln Thr Leu Val Phe Ile Thr Ser Leu Thr Phe Ile Pro Ala Ile Leu
              7.0
                      75
Leu Met Met Thr Ser Phe Thr Arg Ile Ile Ile Val Phe Gly Leu Leu
            85
                            90
Arg Asn Ala Leu Gly Thr Pro Ser Ala Pro Pro Asn Gln Val Leu Leu
         100
                        105
                                         110
Gly Leu Ala Leu Phe Leu Thr Phe Phe Ile Met Ser Pro Val Ile Asp
    115 120
Lys Ile Tyr Thr Glu Ala Tyr Gln Pro Phe Ser Glu Asp Lys Ile Ser
                  135
                                  140
Met Gln Val Ala Leu Glu Lys Gly Ala Gln Pro Leu Arg Glu Phe Met
             150
                               155
Leu Arg Gln Thr Arg Glu Ala Asp Leu Ala Leu Phe Ala Arg Leu Ala
            165
                           170
Asn Thr Gly Glu Leu Gln Gly Pro Glu Ala Val Pro Met Arg Ile Leu
                       185
Leu Pro Ala Tyr Val Thr Ser Glu Leu Lys Thr Ala Phe Gln Ile Gly
```

```
195
                           200
                                             205
Phe Thr Ile Phe Ile Pro Phe Leu Ile Ile Asp Leu Val Ile Ala Ser
  210
                 215
                                   220
Val Leu Met Ala Leu Gly Met Met Wet Val Pro Pro Ala Thr Ile Ala
                 230
                               235
Leu Pro Phe Lys Ile Met Leu Phe Val Leu Val Asp Gly Trp Gln Leu
             245
                       250
Leu Val Ser Ser Leu Ala Gln Ser Phe Tyr Ser
           260
<210> 8179
<211> 86
<212> PRT
<213> Enterobacter cloacae
<400> 8179
Leu Leu Arg Arg Leu Asn Glu Glu Pro Ala Met Lys Thr Asp Lys Glu
                                 10
Tyr Ser Asp Thr Ile Lys Arg Glu Val Glu Val Asp Val Asp Ala Leu
                              2.5
Leu Ala Ala Ile Asn Glu Ile Ser Glu Ser Glu Val His Arg Ala Glu
35
                         4.0
Asp Asn Ser Asp Arg Val Val Val Asn Gly Arg Asp Tyr His Thr Tyr
                      55
                               60
Arg Glu Leu Ala Glu Ala Phe Glu Leu Asp Ile His Asp Phe Ser Val
Ser Glu Thr Asn Arg
<210> 8180
<211> 116
<212> PRT
<213> Enterobacter cloacae
<400> 8180
Trp Cys Arg Cys Thr Leu Cys Gln Ser Ser Trp Arg Ala Pro His Leu
                               10
Thr Val Ser Thr Ala Lys Tyr Arg Pro His Thr Lys Thr Pro Phe Ala
                              25
                                                 30
Pro Gly Gly Asp Ala Arg Gln Cys Asn Leu Phe Tyr Thr Gly Ser Lys
                       4.0
                                             45
Pro Gln Glu Glu Cys Met Lys Val Asn Asp Arg Val Thr Val Lys Thr
                      55
Asp Gly Gly Pro Arg Arg Pro Gly Val Val Leu Ala Ile Glu Glu Phe
                                                        8.0
Asn Glu Gly Thr Met Tyr Leu Val Ser Leu Glu Asp Tyr Pro Leu Gly
                                 90
Ile Trp Phe Phe Asn Glu Leu Gly His Pro Asp Gly Ile Phe Val Glu
                              105
Thr Ala Glu
       115
<210> 8181
<211> 103
<212> PRT
<213> Enterobacter cloacae
<400> 8181
Arg Ala Ile Met Pro Ser Arg Thr Asp Leu Pro Thr Pro Glu Pro Ala
Asn Ser Pro Ile Arg Trp Pro Arg Pro Thr Val Ser Arg Ala Leu Ile
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Gly Arg Thr Pro Val Ser Ser Thr Cys Ser Ile Gly Val Arg Cys Ser 4.0 Gly Leu Lys Gly Trp Val Ile Ser Ala Pro Val Ser Val Val Ser Gly 55 Glu Gly Arg Pro Ser Ser Gly Leu Pro Leu Pro Ser Arg Thr Arg Pro 70 Ser Ser Ala Gly Pro Ser Gly Ser Cys Leu Pro Leu Cys Arg Pro Ser 85 Pro Leu Met Phe Phe Ala 100 <210> 8182 <211> 112 <212> PRT <213> Enterobacter cloacae <400> 8182 Lys Thr Ile Gln Gly Arg Val Met Ala Ile Gln Gly Ile Glu Gly Val 10 Leu Ser Gln Leu Gln Ala Thr Ala Met Thr Ala Arg Asn Gln Ser Val 20 25 Ala Asp Gln Pro Pro Gly Val Ser Phe Ala Gly Gln Leu His Ala Ala 35 40 45 Leu Asp Arg Ile Ser Asp Lys Gln Asn Ala Ala Arg Thr Gln Ala Glu 55 Arg Phe Thr Leu Gly Glu Pro Gly Val Ala Leu Asn Asp Val Met Ala 7.0 7.5 8.0 Asp Leu Gln Lys Ala Ser Val Ser Leu Gln Met Gly Leu Gln Val Arg 85 Asn Lys Leu Val Ser Ala Tyr Gln Glu Val Met Gly Met Gln Val 100 <210> 8183 <211> 163 <212> PRT <213> Enterobacter cloacae <400> 8183 Ser Ile Pro Ile Leu Arg Trp Gln Pro Asp Gly Phe Asn Ala Thr Ile 1.0 Phe Phe Ser Ser His Ala Gly Lys Met Met Lys Lys Val Ala Ile Val Ala Ala Met Leu Thr Leu Ala Gly Cys Val Gln Val Glu Asn Tyr Gln 40 Glu Val Val Lys His Pro Ala Pro Ser Gln Leu Ala Gly Tyr Trp Gln 5.5 Ser Lys Gly Pro Gln Ser Ala Met Val Ser Pro Glu Ala Ile Ala Thr 75 7.0 Leu Val Val Thr Pro Glu Gly Asp Thr Leu Asp Cys Arg Gln Trp Gln 85 90 95 Arg Val Ile Ala Val Pro Gly Lys Ile Met Leu Arg Ser Asp Asp Tyr 100 105 110 Tyr Asn Val Thr Arg Lys Leu Asp Val Tyr Pro Leu Glu Arg Asp Gly 120 Ala Ala Leu Glu Tyr Asp Gly Met Glu Leu Tyr Lys Val Asp Arg Pro 135 Thr Val Glu Cys Ala Asp Tyr Leu Ser Lys Asn Pro Leu Glu Ser Lys 150 155 Leu Pro

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<210> 8184
 <211> 270
 <212> PRT
 <213> Enterobacter cloacae
<400> 8184
Pro Leu Ile Ser Pro Thr Ile His Pro Ile Lys Thr Pro Pro Glu Ser
                                1.0
Asp Asn His Ala Asp Asn Ser Thr Asn Ala Gly Leu Phe Ile Val Asn
                             25
Ser Leu Tyr Thr Ala Glu Gly Val Met Asp Lys His Ser Leu Trp Gln
                       40
Arg Tyr Val Pro Leu Val Arg His Glu Ala Leu Arg Leu Gln Val Arg
                     55
Leu Pro Ala Ser Val Glu Leu Asp Asp Leu Leu Gln Ala Gly Gly Ile
               7.0
                           75
                                                      8.0
Gly Leu Leu Asn Ala Val Asp Arg Tyr Asp Ala Leu Gln Gly Thr Ala
            8.5
                                90
Phe Thr Thr Tyr Ala Val Gln Arg Ile Arg Gly Ala Met Leu Asp Glu
          100
                            105
                                               110
Leu Arg Ser Arg Asp Trp Val Pro Arg Ser Val Arg Arg Asn Ala Arg
      115
                         1.20
                                           125
Glu Val Ala His Ala Met Gly Gln Leu Glu Gln Glu Leu Gly Arg Asn
        135 140
Ala Thr Glu Thr Glu Val Ala Glu Arg Leu Gly Ile Pro Val Glu Glu
145 150 155
Tyr Arg Gln Met Leu Leu Asp Thr Asn Asn Ser Gln Leu Phe Ser Tyr
             165 170
Asp Glu Trp Arg Glu Glu His Gly Asp Ser Ile Glu Leu Val Thr Asp
                                    190
         180
                             185
Glu His Gln Gln Glu Asn Pro Leu His His Leu Leu Glu Gly Asn Leu
 195 200
                              205
Arg Gln Arg Val Met Glu Ala Ile Glu Ala Leu Pro Glu Arg Glu Gln
                     215
                                        220
Leu Val Leu Thr Leu Tyr Tyr Gln Glu Glu Leu Asn Leu Lys Glu Ile
                 230
                                   235
Gly Ala Val Leu Glu Val Gly Glu Ser Arg Val Ser Gln Leu His Ser
              245
                                250
Gln Ala Ile Lys Arg Leu Arg Thr Lys Leu Gly Lys Leu
           260
                             265
<210> 8185
<211> 189
<212> PRT
<213> Enterobacter cloacae
<400> 8185
Gln Pro Gly Val Ile Met Thr Val Gln Gln Ser Lys Arg Arg Pro Leu
                                10
Ser Arg Tyr Leu Lys Asp Phe Lys His Ser Gln Thr His Cys Ala His
          20
Cys Lys Leu Leu Asp Arg Ile Thr Leu Val Arg Arg Gly Glu Ile
      35
                         4.0
Val Asn Lys Ile Ala Ile Ser Arg Leu Asp Thr Leu Met Asp Glu Ala
                     55
Ala Trp Leu Glu Glu Gln Lys Glu Trp Val Ala Leu Cys Arg Phe Cys
                 70
                                    75
Gly Asp Leu His Cys Lys Glu Gln Ser Asp Phe Phe Asp Ile Ile Gly
                                90
Phe Lys Gln Phe Leu Phe Glu Gln Thr Glu Met Ser His Gly Thr Val
```

Arg Glu Tyr Val Val Arg Leu Arg Arg Leu Gly Gln His Leu Thr Met
115 120 125
Gln Asn Ile Ser Arg Asp Leu Leu Tnr Thr Gly Tyr Leu Asp Glu Asn
130 135 140
Leu Glu Pro Trp Leu Pro Ala Thr Ser Thr Asn Asn Tyr Arg Ile Ala
145 150 155 160
Leu Arg Lys Tyr Ala Gln Tyr Lys Val Gln Met Pro Gly Val Ile Lys
165 170 180 185 Asp Ile Tyr
185

<210> 8186 <211> 353 <212> PRT <213> Enterobacter cloacae

275

325

310

<400> 8186 Lys Arg Leu Phe Tyr Phe Ser Arg Val Cys Val His Asn Glu Ile Thr 5 Ile Val Cys Val Thr Gly Gly Thr Met Ser Leu Gln Asn Leu Thr Arg 20 25 3.0 Phe Pro Arg Leu Glu Phe Ile Gly Ala Pro Thr Pro Leu Glu Phe Leu 35 40 45 Pro Arg Phe Ser Asp Tyr Leu Gly Arg Asp Ile Phe Ile Lys Arg Asp 55 Asp Val Thr Pro Met Ala Met Gly Gly Asn Lys Leu Arg Lys Leu Glu 75 65 70 Phe Leu Ala Ala Asp Ala Leu Arg Glu Gly Ala Asp Thr Leu Ile Thr 85 90 95 Ala Gly Ala Ile Gln Ser Asn His Val Arg Gln Thr Ala Ala Val Ala 100 105 Ala Lys Leu Gly Leu His Cys Val Ala Leu Leu Glu Asn Pro Ile Gly 115 120 125 Thr Gln Ala Glu Asn Tyr Leu Thr Asn Gly Asn Arg Leu Leu Leu Asp 135 140 Leu Phe Asn Val Gln Val Glu Met Val Asp Ala Leu Thr Asp Pro Ala 155 145 150 Ala Gln Leu Asp Glu Leu Ala Thr Arg Leu Glu Ala Gln Gly Phe Arg 165 170 Pro Tyr Val Ile Pro Val Gly Gly Ser Asn Ala Leu Gly Ala Leu Gly 185 190 Tyr Val Glu Ser Ala Leu Glu Ile Ala Gln Gln Cys Glu Gly Ala Val 200 Ser Leu Ser Ser Val Val Val Ala Ser Gly Ser Ala Gly Thr His Ala 215 220 Gly Leu Ala Val Gly Leu Glu Gln Leu Met Pro Glu Val Glu Leu Ile 230 235 Gly Val Thr Val Ser Arg Ser Val Ala Asp Gln Lys Pro Lys Val Val 245 250 Thr Leu Gln Gln Ala Val Ala Glu Gln Leu Ala Leu Gln Ala Lys Ala 260 265 Glu Ile Leu Leu Trp Asp Asp Tyr Phe Ala Pro Gly Tyr Gly Thr Pro

280

330

Asn Asp Glu Gly Met Glu Ala Val Lys Leu Leu Ala Arg Leu Glu Gly 290 295 Ile Leu Leu Asp Pro Val Tyr Thr Gly Lys Ala Met Ala Gly Leu Ile

Asp Gly Ile Ala Arg Lys Arg Phe Lys Asp Glu Gly Pro Ile Leu Phe

Val His Thr Gly Gly Ala Pro Ala Leu Phe Ala Tyr His Pro His Val

285

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A CAR TO THE WAY IN THE TAX AND THE WAY AND THE WAY IN THE TAX AND THE TAX AND
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<210> 8187
<211> 230
<212> PRT
<213> Enterobacter cloacae
<400> 8187
Lys Ser Gly Arg Lys Ile Ile Met Gln Glu Ser Ile Gln Leu Val Ile
                         10
Asp Ser Leu Pro Phe Leu Leu Lys Gly Ala Val Phe Thr Leu Gln Leu
       20
                          25
Ser Ile Gly Gly Met Phe Phe Gly Leu Val Leu Gly Phe Val Leu Ala
      35
                       40
Leu Met Arg Met Ser Asn Ile Trp Pro Val Arg Trp Leu Ala Arg Phe
                  55
Tyr Ile Ser Val Phe Arg Gly Thr Pro Leu Ile Ala Gln Leu Phe Met
             70 75
Ile Tyr Tyr Gly Leu Pro Gln Phe Gly Ile Glu Leu Asp Pro Ile Pro
            85 90
Ala Ala Met Ile Gly Leu Ser Leu Asn Thr Ala Ala Tyr Thr Ser Glu
 100
                          105 110
Thr Leu Arg Ala Ala Ile Ser Ser Ile Asp Lys Gly Gln Trp Glu Ala
115
                       120
Ala Ala Ser Ile Gly Met Thr Pro Trp Gln Thr Leu Arg Arg Ala Ile
                   135
Leu Pro Gln Ala Ala Arg Val Ala Leu Pro Pro Leu Ser Asn Ser Phe
                150 155
Ile Ser Leu Val Lys Asp Thr Ser Leu Ala Ala Thr Ile Gln Val Pro
  165 170 175
Glu Leu Phe Arg Gln Ala Gln Leu Ile Thr Ser Arg Thr Leu Glu Val
 180 185 190
Phe Thr Met Tyr Leu Ala Ala Ser Leu Ile Tyr Trp Val Met Ala Thr
                      200 205
Val Leu Ser Ala Leu Gln Asn Tyr Phe Glu Asn Gln Leu Asn Arg Gln
 210
                   215
                                    220
Glu Arg Asp Pro Lys
<210> 8188
<211> 169
<212> PRT
<213> Enterobacter cloacae
<400> 8188
Ile Thr Leu Ser Ala Asp Pro Ala Ser Cys Val Val Lys Thr Leu Phe
                          10
Asp Gln Ala Lys Ile Leu Ala Lys Gln Cys Glu Gln Gln Ser Leu Pro
         20
                          25
                                           3.0
Phe Ser Val Ile Gln Ile Asp Leu Asp Cys Phe Lys Ser Ile Asn Asp
                      4.0
Arg Phe Gly His Gln Ala Gly Asp Lys Val Leu Ser His Ala Ala Gly
                   55
Leu Ile Ala Ser Thr Leu Arg Asp Lys Asp Ile Ala Gly Arg Val Gly
             7.0
                                 75
Gly Glu Glu Phe Cys Val Val Leu Pro Gly Met Thr Leu Glu Glu Ala
          8.5
                        90
Ala Glu Val Ala Glu Gln Ile Arg Glu Arg Ile Asp Ser Lys Glu Ile
```

```
Leu Ile Lys Lys Ser Thr Thr Leu Arg Val Ser Ala Ser Phe Gly Val
                      120
     115
Ser Gly Ala Gln Glu Lys Gly Asn Tyr His Phe Glu Asn Leu Gln Ser
 130
                           140
                   135
Thr Ala Asp Ala Arg Leu Tyr Glu Ala Lys Gln Arg Gly Arg Asn Arg
               150
                             155
Val Ile Trp Gln Asp His Leu Lys Lys
            165
<210> 8189
<211> 576
<212> PRT
<213> Enterobacter cloacae
<400> 8189
Thr Thr Gly Asn Glu Ile Met Ala Gln Val Ile Asn Thr Asn Ser Leu
                          10
Ser Leu Ile Thr Gln Asn Asn Ile Asn Lys Asn Gln Ser Ser Met Ser
       20
                       25
Thr Ala Ile Glu Arg Leu Ser Ser Gly Leu Arg Ile Asn Ser Ala Lys
 35
         40
Asp Asp Ala Ala Gly Gln Ala Ile Ala Asn Arg Phe Thr Ser Asn Ile
      55 60
Lys Gly Leu Thr Gln Ala Ala Arg Asn Ala Asn Asp Gly Ile Ser Val
65 70 75
                                               80
Ala Gln Thr Thr Glu Gly Ala Leu Ser Glu Ile Asn Asn Asn Leu Gln
       85
                   90
Arg Ile Arg Glu Leu Thr Val Gln Ser Ser Thr Gly Thr Asn Ser Gln
        100 105
                             110
Ser Asp Leu Asp Ser Ile Gln Asp Glu Ile Lys Ser Arg Leu Asp Glu
115 120
                                     125
Ile Asp Arg Val Ser Gly Gln Thr Gln Phe Asn Gly Val Asn Val Leu
 130 135 140
Ala Lys Asp Gly Ser Met Lys Ile Gln Val Gly Ala Asn Asp Gly Gln
145 150 155
Thr Ile Thr Ile Asp Leu Lys Lys Ile Asp Ser Asp Thr Leu Gly Leu
            165 170
                                         175
Asn Gly Phe Asn Val Asn Gly Lys Gly Thr Ile Ala Asn Lys Ala Ala
       180 185
                             190
Thr Val Ser Asp Leu Thr Ser Ala Gly Ala Lys Leu Asn Ala Thr Thr
    195 200 205
Gly Asn Tyr Asp Leu Thr Thr Thr Asn Lys Asp Leu Thr Thr Asp Val
                215 220
Ala Phe Ser Lys Leu Lys Thr Gly Asp Thr Val Thr Thr Asn Gly Ala
225 230
                               235
Thr Tyr Thr Tyr Asp Ala Lys Ala Gly Asn Phe Thr Thr Thr Lys Ser
            245
                            250
Thr Ala Gly Ala Asp Glu Ala Ala Lys Thr Ala Asn Arg Asp Ala Leu
         260
                        265
                                        270
Ser Ala Thr Leu Lys Ala Asp Pro Gly Gln Thr Val Ser Gly Thr Tyr
                     280
Thr Thr Lys Asp Gly Thr Val Asn Phe Asp Thr Asp Ser Ala Gly Asn
                295
Ile Thr Ile Gly Gly Lys Ala Ala Tyr Val Asp Ala Ser Gly Asn Leu
              310 315
Thr Thr Asn Asn Ala Gly Gly Ala Ala Asp Ala Thr Met Lys Ala Leu
           325
                            330
Leu Lys Thr Ala Ser Glu Asn Thr Asp Gly Ala Thr Leu Asn Phe Lys
         340
                        345
Gly Thr Glu Tyr Thr Val Ala Pro Gly Val Asp Ala Thr Asp Thr Gly
```

```
Val Val Ser Tyr Lys Ala Thr Val Ser Ser Asp Val Val Leu Ala Glu
   370
                    375
                               380
Thr Lys Ala Asn Ala Thr Asn Ile Ser Met Asn Ser Gly Val Leu Thr
385
                390
                            395
Lys Asn Leu Ala Phe Asp Ala Thr Gly Ala Ser Thr Asp Asn Thr Phe
             405 410 415
Val Asp Asp Ala Gly Asn Ile Thr Ser Val Glu Asp Tyr Thr Val Ser
              425 430
         420
Tyr Ala Val Asn Lys Asp Asn Gly Asn Val Thr Val Ala Ala Tyr Ser
      435 440 445
Ser Ala Thr Asp Thr Asn Lys Thr Tyr Ser Pro Thr Ile Gly Ala Ala
 4.50
        455 460
Val Asn Val Thr Ser Thr Gly Lys Ile Thr Thr Glu Ala Thr Ser Val
     470 475 480
Gly Thr Ala Thr Thr Asp Pro Leu Ala Ser Leu Asp Asp Ala Ile Ser
            485 490
                                               495
Ser Ile Asp Lys Phe Arg Ser Ser Leu Gly Ala Val Gln Asn Arg Leu
         500
                          505
                               510
Ser Ser Ala Val Thr Asn Leu Asn Asn Thr Thr Thr Asn Leu Ser Glu
 515
                       520
                                        525
Ala Gln Ser Arg Ile Gln Asp Ala Asp Tyr Ala Thr Glu Val Ser Asn
                    535
                                    540
Met Ser Lys Ala Gln Ile Ile Gln Gln Ala Gly Asn Ser Val Leu Ala
               550 555
Lys Ala Asn Gln Val Pro Gln Gln Val Leu Ser Leu Leu Gln Gly
             565
                             570
                                               575
<210> 8190
<211> 285
<212> PRT
<213> Enterobacter cloacae
<400> 8190
Arg Cys Arg Arg Phe Leu Tyr Thr Thr Gln Lys Phe His Cys Ile Gly
                             10
Val Leu Met Lys Leu Ala Leu Leu Gly Arg Gln Ala Leu Met Gly Met
         20
                          25
                                           30
Met Ala Val Ala Leu Val Ala Gly Met Ser Val Lys Thr Phe Ala Ala
                      40
Glu Asn Leu Leu Asn Lys Vai Lys Glu Arg Gly Thr Leu Leu Val Gly
                   55
Leu Glu Gly Thr Tyr Pro Pro Phe Ser Phe Gln Gly Asp Asp Gly Lys
                70
Leu Thr Gly Phe Glu Val Glu Phe Ala Gln Glu Leu Ala Lys His Leu
            85
                             90
Gly Val Lys Ala Ser Leu Lys Pro Thr Lys Trp Asp Gly Met Leu Ala
         100
                          105
Ser Leu Asp Ser Lys Arg Ile Asp Val Val Ile Asn Gln Val Thr Ile
   115
                       120 125
Ser Asp Glu Arg Lys Lys Lys Tyr Asp Phe Ser Thr Pro Tyr Thr Val
                   135
Ser Gly Ile Gln Ala Leu Val Lys Lys Gly Asn Glu Gly Ser Ile Lys
                150
                                 155
                                                 160
Ser Ala Ala Asp Leu Lys Gly Lys Lys Val Gly Val Gly Leu Gly Thr
             165
                             170
Asn Tyr Glu Glu Trp Leu Arg Gln Asn Val Gln Gly Val Asp Ile Arg
```

Thr Tyr Asp Asp Pro Thr Lys Tyr Gln Asp Leu Arg Val Gly Arg

Ile Asp Ala Ile Leu Val Asp Arg Leu Ala Ala Leu Asp Leu Val Lys

200

215

190

205

180

210

```
Lys Thr Asn Asn Ser Leu Ala Val Ala Gly Asp Ala Phe Ser Arg Gln
 225
                  230
                          235 240
Glu Ser Gly Val Ala Val Arg Lys Gly Asn Glu Asp Leu Leu Lys Ala
              245
                         250 255
Ile Asp Gly Ala Ile Ala Glu Met Gln Lys Asp Gly Ser Leu Lys Ala
          260 265
 Leu Ser Glu Lys Trp Phe Gly Ala Asp Val Thr Lys
                         280
<210> 8191
<211> 253
<212> PRT
<213> Enterobacter cloacae
<400> 8191
Ser Lys Met Ser Ala Ile Asp Val Lys Asn Leu Val Lys Lys Phe His
                              10
Gly Gln Thr Val Leu His Gly Ile Asp Leu Glu Val Glu Gln Gly Glu
        20
                             25
                                               30
Val Val Ala Ile Ile Gly Pro Ser Gly Ser Gly Lys Thr Thr Leu Leu
 35
                         40
Arg Ser Ile Asn Leu Leu Glu Gln Pro Glu Gly Gly Thr Ile Arg Val
                   5.5
                                       60
Gly Asp Ile Thr Ile Asp Thr Gly Lys Pro Ile Ser Gln Gln Lys Gly
                 70
                                 75
Leu Ile Arg Arg Leu Arg Gln His Val Gly Phe Val Phe Gln Ser Phe
              85
                               90
Asn Leu Phe Pro His Arg Tnr Val Leu Glu Asn Ile Ile Glu Gly Pro
         100
                            105
                                              110
Val Ile Val Lys Gly Glu Pro Lys Glu Asp Ala Thr Val Arg Ala Arg
                         120
Glu Leu Leu Ala Lys Val Gly Leu Ala Gly Lys Glu Thr Ser Tyr Pro
                    135
                                       140
Arg Arg Leu Ser Gly Gly Gln Gln Gln Arg Val Ala Ile Ala Arg Ala
145 150 155
Leu Ala Met Arg Pro Asp Val Ile Leu Phe Asp Glu Pro Thr Ser Ala
              165
                   170
Leu Asp Pro Glu Leu Val Gly Glu Val Leu Asn Thr Ile Arg Gln Leu
                            185
                                              190
Ala Gln Glu Lys Arg Thr Met Val Ile Val Thr His Glu Met Ser Phe
      195 200
                                           205
Ala Arg Asp Val Ala Asp Arg Ala Ile Phe Met Asp Gln Gly Arg Ile
 210
              215
                                       220
Val Glu Gln Gly Pro Ala Lys Ala Leu Phe Ala Asn Pro Gln Gln Pro
                 230
                                   235
Arg Thr Arg Gln Phe Leu Glu Lys Phe Leu Met Gln
              245
                                250
<210> 8192
<211> 148
<212> PRT
<213> Enterobacter cloacae
<400> 8192
Arg Asn Thr Leu Ser Arg Cys Gly Lys Leu Thr Ile Gly Pro Lys Leu
                                10
Val Leu Ser Ser Asn Arg Ser Pro Ala Arg Met Arg Pro Thr Arg Ser
                            25
Thr Ile Phe Cys Ser Asn Ala Ala Leu Asn Phe Ala Gly Thr Asn Thr
                        40
Arg Val Pro Leu Val His Thr Trp Pro Glu Leu Lys Lys Leu Ala Ile
```

```
55
Met Ala Ile Ser Ala Ala Arg Ser Arg Ser Ala Ser Ser Asn Thr Ile
               70
                       75 80
Ser Gly Asp Leu Pro Pro Ser Ser Ile Val Thr Ser Phe Arg Asp Glu
           85
                   90 95
Ala Ala Glu Leu Ala Ile Thr Phe Leu Pro Leu Ala Thr Pro Pro Val
         100 105 110
Lys Glu Thr Leu Ala Met Pro Gly Cys Ser Val Arg Tyr Trp Pro Val
 115 120 125
Ser Ala Pro Thr Pro Gly Arg Thr Leu Asn Thr Pro Ser Gly Arg Pro
 130 135
Ala Ser Val
145
<210> 8193
<211> 311
<212> PRT
<213> Enterobacter cloacae
<400> 8193
Ser Pro Gln Glu Thr Ser Ala Met His Pro Arg Gln Gly Leu Lys Arg
                           1.0
Leu Leu Gly Ala Leu Leu Met Thr Ala Thr Thr Thr Gly Ala Leu
 20
                  25
Ala Ala Glu Lys Phe Gln Val Ile Thr Thr Phe Thr Val Ile Ala Asp
                      40
                                    4.5
Met Ala Lys Asn Val Ala Gly Asp Ala Ala Glu Val Thr Ser Ile Thr
                   5.5
                         60
Lys Pro Gly Ala Glu Ile His Glu Tyr Gln Pro Thr Pro Gly Asp Ile
                             75
             7.0
Lys Arg Ala Gln Lys Ala Gln Leu Ile Leu Ala Asn Gly Met Asn Leu
                          90
         85
Glu Leu Trp Phe Gln Arg Phe Tyr Gln His Leu Asn Gly Val Pro Glu
                         105
        100
                                         110
Val Ile Val Thr Lys Gly Ile Thr Pro Met Gly Ile Ser Glu Gly Pro
                     120
Tyr Asn Gly Lys Pro Asn Pro His Ala Trp Met Ser Pro Asp Asn Ala
 130 135
                                  140
Leu Ile Tyr Val Asp Asn Ile Arg Asp Ala Leu Val Lys Tyr Asp Pro
               150
                               155
Ala Asn Ala Gln Thr Tyr Gln Arg Asn Ala Asp Ala Tyr Lys Gln Lys
            165
                           170
Ile Thr Ala Thr Leu Glu Pro Leu Arg Lys Gln Val Ala Glu Ile Pro
         180 185
Glu Asp Lys Arg Trp Met Val Thr Ser Glu Gly Ala Phe Ser Tyr Leu
    195
                     200
                                     205
Ala Arg Asp Leu Gly Leu Lys Glu Leu Tyr Leu Trp Pro Ile Asn Ala
  210 215
                                  220
Asp Gln Gln Gly Thr Pro Gln Gln Val Arg Lvs Val Ile Asp Leu Val
               230
                               235
Lys Lys His His Ile Pro Ala Val Phe Ser Glu Ser Thr Val Ser Asp
            245
                            250
                                           255
Lys Pro Ala Arg Gln Val Ala Arg Glu Thr Gly Ala His Tyr Gly Gly
         260
                        265
                                        270
Val Leu Tyr Val Asp Ser Leu Ser Ala Glu Asn Gly Pro Val Pro Thr
      275 280
                             285
Tyr Ile Asp Leu Leu Asn Val Thr Thr Arg Thr Leu Val Gln Gly Ile
  290 295
Arg Asp Gly Met Lys Glu
305
               310
```

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<210> 8194
<211> 389
<212> PRT
<213> Enterobacter cloacae
<400> 8194
Thr Pro Glu Asn Ser Leu Leu His Ala Ala Gly Gly Leu Tyr Arg Gly
                       10
Gly Ala Ala Asn Arg Arg Arg Val Ser Gly Asp Leu Ser Gly Gly His
                                     3.0
Ala Trp Arg Asp Arg Val Ala Ala Asp Arg Ser Leu Pro Ala Pro Ala
     35
                        4.5
               4.0
Asp Asp Cys Arg Arg His Trp Gln His His Gln Leu Pro Arg Arg Val
               5.5
                     60
Gly Gln Leu Leu Pro Gly Arg Arg His Arg Arg His Tyr Arg Gly Arg
65 70
                            75
Pro Asp Ala Ala Val Pro Ala Gly Val Arg Leu Cys Ala Glu Ala Arg
        85
                         90 95
Thr Ala Cys Gln Pro Ser Ser Gly Ala Gly Gly Thr Pro Met Met Thr
   100 105 110
Leu Leu Glu Pro Phe Gln Phe Ala Phe Met Asn Asn Ala Leu Leu
 115 120 125
Ile Ser Leu Leu Val Ala Val Pro Cys Ala Leu Leu Ser Val Phe Leu
130 135
                               140
Val Leu Lys Gly Trp Ala Leu Met Gly Asp Ala Met Ser His Ala Val
145
              150 155 160
Phe Pro Gly Val Val Leu Ala Trp Met Met Gly Leu Pro Leu Ala Leu
   165 170 175
Gly Ala Phe Val Ala Gly Leu Phe Cys Ala Val Ala Thr Gly Tyr Leu
 180 185 190
Lys Asp Asn Ser Arg Ile Lys Gln Asp Thr Val Met Gly Ile Val Phe
 195
                   200 205
Ser Gly Met Phe Gly Ala Gly Leu Ile Leu Tyr Ile Ala Val Lys Pro
210 215 220
Glu Val His Leu Asp His Ile Leu Phe Gly Asp Met Leu Gly Ile Asn
225 230 235
Gly Met Asp Ile Leu Gln Ser Gly Leu Val Ala Gly Met Ile Ala Leu
           245 250
Val Ile Gly Leu Lys Trp Arg Asp Phe Leu Leu Phe Cys Phe Asp Tyr
        260
                      265
                                     270
Gln Gln Ala Gln Ala Ser Gly Leu Arg Thr Arg Trp Leu His His Gly
     275 280 285
Leu Leu Cys Met Val Ser Leu Thr Ile Val Ala Thr Leu Lys Ala Val
 290 295
                                300
Gly Ile Ile Leu Ser Ile Ser Leu Leu Ile Ala Pro Gly Ala Val Ala
             310
                             315
Val Leu Ile Thr Arg Arg Phe His Met Ala Leu Leu Val Ala Val Ala
           325
                          330
                                        335
Val Ser Ala Leu Val Ser Val Ser Gly Val Tyr Ala Ser Phe Tyr Leu
        340
                       345
                                      350
Asp Ser Ala Pro Ala Pro Thr Ile Val Val Leu Phe Ala Met Val Phe
   355
                   360
                       365
Ile Val Thr Phe Val Val Thr Ser Val Lys Ala Arg Arg Gln Glu Arg
 370
               375
                                380
Val Thr Ala Glu
<210> 8195
<211> 460
<212> PRT
<213> Enterobacter cloacae
```

```
<400> 8195
Pro Ala Arg Pro Glu Ser Glu Ser Ser Tyr Ser Leu Tyr Val Pro Leu
                 10
Leu Trp Leu Phe Asn Glu Arg Ala Ser His Ser Ala Gly Ile Thr Val
     20
                      25
Leu Gln Met Gln Ile Val Ile Asn Asn Ile Ile Asn Lys Ile Cys Ser
                 40 45
   35
Glu Thr Lys Lys Thr Val Lys His Gly Val Ile Arg Val Thr Val Leu
 50 55 60
Thr Thr Gly Ser Glu Ala Trp Trp Gln Ala Lys Asn Gly Pro Glu Arg
   70 75
Glu Arg His Gln Glu Asn Tyr Arg Val Thr Phe Trp Trp Arg Asp Pro
      85 90 95
Ala Gly Thr Gln Lys Ser Ser Thr Val Lys Arg Val Trp Leu Tyr Val
      100 105 110
Thr Gly Val Thr Asp His His Gln Asn Ala Arg Pro Gln Ser Leu Glu
    115 120 125
Arg Val Pro Asp Thr Asp Val Trp Gln Trp Gln Gly Glu Phe Ser Pro
 130 135 140
Glu Trp Arg Gly Ser Tyr Cys Phe Ile Pro Ser Asp Asn Glu Asn Asp
145 150 155
Phe Ala Asp Ala Val Phe Glu Gly Glu Gln Pro Asp Arg Met Ala Leu
          165 170 175
Arg Glu Gly Trp Arg Lys Leu Leu Pro His Ala Val Ser Asp Pro Leu
        180 185 190
Asn Pro Gln Ser Trp Arg Gly Gly Arg Gly His Ala Val Ser Ala Leu
 195 200
                         205
Glu Met Pro Glu Ala Pro Val Gln Pro Gly Trp Asn His Pro Asp Thr
 210 215
                               220
Pro Tyr Asn Lys Pro Val Cys Ile Asp Trp His Ser Ala Arg Leu Lys
225 230
                            235 240
Asn Arg Arg Arg Val Trp Ile Phe Thr Thr Gly Asp Glu Ser Pro Glu
    245
                          250 255
Arg Pro Leu Ala Val Leu Leu Asp Gly Gln Phe Trp Ala Glu Ser Met
  260 265
Pro Val Trp Pro Ala Leu Ala Ser Leu Thr His Glu Gly Lys Leu Pro
   275 280 285
Pro Ala Val Tyr Val Leu Ile Asp Val Ile Asp Thr Ala His Arg Ser
 290 295
                               300
Arg Glu Leu Pro Cys Asn Pro Asp Phe Trp Leu Ala Val Gln Glu Glu
              310 315
Leu Leu Pro Gln Val Lys Ser Met Ala Pro Phe Ser Asp Arg Ala Asp
           325
                         330
His Thr Val Val Ala Gly Gln Ser Phe Gly Gly Leu Ser Ser Leu Tyr
        340
                       345 350
Ala Gly Leu Asn Trp Pro Gln Arg Phe Gly Cys Ile Leu Ser Gln Ser
     355
                   360
                                   365
Gly Ser Tyr Trp Trp Pro His Arg Gly Ala Gln Gln Asp Gly Leu Leu
                375
                               380
Ile Glu Gln Leu Lys Ala Gly Glu Lys Thr Ala Arg Gly Leu Arg Ile
             390
                             395
Val Leu Glu Ala Gly Arg Asn Glu Pro Leu Ile Leu Arg Ala Asn Gln
          405
                         410
Ala Ile Leu Ala Glu Leu His Ther Gln Gln Pro Val Phe Trp Arg Gln
        420
                      425
                                   430
Val Asp Gly Gly His Asp Ala Leu Cys Trp Arg Gly Gly Leu Thr Gln
     435 440
Gly Leu Met Thr Leu Trp Gln Pro Leu Ile Gln
  450
                455
```

```
<210> 8196
<211> 1295
<212> PRT
<213> Enterobacter cloacae
<400> 8196
Ala Val Leu Phe Cys Gly Gly Ala Arg Met Asn Arg Leu Pro Leu Val
                      10
Ala Ala Gln Pro Gly Ile Trp Met Ala Glu Gln Leu Ser Ser Leu Pro
      20
                     25
                                       3.0
Asn Ala Trp Ser Val Ala His Tyr Thr Glu Leu Lys Gly Ala Ile Asp
 35
                   40
Ala Pro Leu Leu Ala Lys Ala Ile Ala Glu Gly Met Met Gln Ala Asp
                 55 60
Thr Leu Arg Met Arg Phe Ala Glu Asp His Gly Glu Leu Trp Gln Trp
               70
                   7.5
Ile Asp Glu Ala Met Leu Leu Pro Glu Pro Ser Ile Val Arg Val Asp
       85 90 95
Ser His Asp Ala Ala Val Ala Leu Met Glu Ala Asp Leu Asn Gln Asn
        100 105 110
Leu Arg Val Asp Ser Gly Gln Pro Leu Ala Phe His Gln Leu Ile Gln
115
                    120 125
Val Gly Glu Ser His Trp Tyr Trp Tyr Gln Arg Tyr His His Leu Val
130 135 140
Val Asp Gly Phe Ser Phe Pro Ala Ile Thr Arg Gln Ile Ala Ala Ile
145 150 155
Tyr Ala Ala Trp His Lys Gly Glu Pro Ala Pro Ala Ser Pro Phe Thr
          165 170 175
Pro Phe Ala Glu Val Val Glu Glu Tyr Gln Arg Tyr Arg Asp Ser Glu
 180 185 190
Ala Tyr Gln Arg Asp Gly Ala Phe Trp Ala Val Gln Arg Gln Gln Leu
195 200
                         205
Pro Ser Pro Val Ser Leu Ser Ser Ala Pro Leu Pro Gly His Ala Ala
210 215
                                 220
Thr Thr Asp Ile Leu Arg Leu Lys Met Ala Met Asp Gly Arg Ala Phe
               230
                              235
                                             240
Ser Gln Leu Ala Gln Met Ala Gly Gln Ala Gln Arg Thr Asp Leu Ala
           245
                          250
Leu Ala Leu Val Val Leu Trp Leu Gly Arg Leu Thr Gly Arg Leu Asp
        260 265
                                       270
Tyr Ala Ala Gly Phe Ile Phe Met Arg Arg Met Gly Ser Ala Ala Leu
     275 280
                         285
Thr Ala Thr Gly Pro Val Leu Asn Val Leu Pro Leu Ala Val Asn Ile
 290 295
                                 300
Arg Pro His Glu Ser Leu Pro Glu Leu Ala Leu Arg Leu Ala Asn Gln
              310
                              315
Leu Lys Lys Met Arg Arg His Gln Arg Tyr Asp Ala Glu Gln Ile Val
           325
                          330
                                          335
Arg Asp Ser Gly Arg Ala Ala Gly Asp Glu Ala Leu Phe Gly Pro Val
        340
                       345 350
Leu Asn Val Lys Val Phe Asp Tyr Gln Leu Asp Ile Asp Gly Val Glu
    355
                    360
                                    365
Ala Ile Thr His Thr Leu Ala Thr Gly Pro Val Asn Asp Leu Glu Leu
                 375
                                 380
Ala Leu Phe Pro Asp Glu Gln Gly Gly Leu Ser Ile Glu Ile Leu Ala
              390
                              395
Asn Gly Gln Arg Tyr Asp Glu Ala Thr Leu Lys Gly His Ala Val Arg
         405
                          410
Leu Asn Ala Met Leu Thr Gln Phe Ala Ala Asn Pro Asp Leu Arg Cys
```

Gly Asp Val Glu Thr Leu Ser Glu Gln Glu Tyr Ala Arg Leu Ala Arg

440 Ile Asn Asp Thr Gly Leu Ala Leu Pro Ser Thr Thr Leu Ala Asp Leu 455 460 Val Ala Glu Gln Ala Ser Lys Thr Pro Asp Ala Pro Ala Leu Ala Asp 470 475 Ala His Thr Glu Leu Asn Tyr Arg Gln Met Arg Glu Gln Val Val Ala 485 490 495 Leu Ala Asn Leu Leu Arg Ala Arg Gly Val Lys Pro Gly Asp Ser Val 500 505 510 Ala Val Ala Leu Pro Arg Ser Val Phe Leu Thr Leu Ala Leu His Gly 515 520 525 Ile Val Glu Ala Gly Ala Ala Trp Leu Pro Leu Asp Thr Gly Tyr Pro 530 535 540 Asp Asp Arq Leu Arq Met Met Leu Glu Asp Ala Lys Pro Ser Leu Leu 545 550 555 560 Ile Thr Thr Asp Glu Gln Leu Pro Arg Phe Ser Asp Leu Pro Ile Ala 565 570 5**7**5 Thr Phe Ser Tyr Asn Thr Leu Leu Pro Thr Ser Gly Ala Glu Pro Leu 580 585 590 Arg Leu Ala Lys Pro Glu Gln Thr Ala Tyr Ile Ile Phe Thr Ser Gly 595 600 605 Asn Arg Leu Lys Trp Met Gln Asp His Tyr Pro Leu Thr Ala His Asp 625 630 635 640 Val Val Ala Gln Lys Thr Pro Cys Ser Phe Asp Val Ser Val Trp Glu 645 650 Phe Trp Trp Pro Phe Ile Ala Gly Ala Lys Leu Val Met Ala Glu Pro 660 665 670 Asp Ala His Arg Asp Pro Gln Ala Met Gln Ser Phe Phe Ala Glu Tyr 675 680 685 Gly Val Thr Thr His Phe Val Pro Ser Met Leu Ala Ala Phe Val 690 695 700 Ala Ser Leu Thr Pro Glu Asn Ala His Cys Cys Arg Thr Leu Lys Leu 705 710 715 720 Val Phe Cys Ser Gly Glu Ala Leu Pro Thr Ala Leu Cys Arg Glu Trp 725 730 735 Glu Gln Leu Thr His Ala Pro Leu His Asn Leu Tyr Gly Pro Thr Glu 740 745 750 Ala Ala Val Asp Val Ser Trp Tyr Pro Ala Tyr Gly Pro Glu Leu Ala 755 760 765 Ala Val Glu Gly Asn Ser Val Pro Ile Gly Phe Pro Val Trp Asn Thr 770 775 780 Gly Leu Arg Ile Leu Asp Ala Met Met Arg Pro Val Pro Phe Gly Val 785 790 795 800 Ala Gly Asp Leu Tyr Leu Thr Gly Ile Gln Leu Ala Gln Gly Tyr Leu 805 810 815 Gly Arg Pro Asp Leu Thr Ala Ser Arg Phe Ile Ala Asp Pro Phe Ala 820 825 830 Pro Gly Glu Arg Met Tyr Arg Thr Gly Asp Val Ala Arg Trp Leu Asp 835 840 845 Asn Gly Ala Val Glu Tyr Leu Gly Arg Ser Asp Asp Gln Leu Lys Ile 850 855 860 Arg Gly Gln Arg Ile Glu Leu Gly Glu Ile Asp Arg Ala Met Leu Ala 865 870 875 Leu Pro Asp Val Ala Gln Ala Val Ala His Ala Cys Val Phe Asn Gln 885 890 Ala Ala Ala Thr Gly Gly Asp Ala Arg Gln Leu Val Gly Tyr Val Val 900 905 910 Ser Glu Ser Gly Leu Pro Leu Asp Arg Asp Ala Leu Leu Ala Ser Leu 920

5.0

```
Lys Ala Gln Leu Pro Pro His Met Val Pro Val Val Leu Leu Gln Ile
        935
 930
Ser Ala Leu Pro Leu Ser Ala Asn Gly Lys Leu Asp Arg Lys Ala Leu
945
      950
                            955
Pro Leu Pro Glu Leu Thr Ser Arg Thr Ser Gly Arg Ala Pro Glu Thr
          965 970
Gln Thr Glu Val Ala Val Ala Gln Ala Phe Ser Ser Leu Leu Gly Cys
      980 985
                                     990
Ala Val Asn Asp Ile Glu Ala Asp Phe Phe Ala Leu Gly Gly His Ser
 995 1000 1005
Leu Leu Ala Met Arg Leu Ala Ala Gln Leu Ser Arg Ala Phe Ser Arg
1010 1015 1020
Lys Val Thr Pro Gly Gln Ile Met Val Ala Ser Thr Val Ser Lys Leu
1025 1030 1035 1040
Ser Ala Leu Leu Asp Ser Gln Met Arg Asp Glu Gln Ala Gln Arg Leu
     1045 1050 1055
Gly Tyr Glu Thr Leu Leu Pro Leu Arg Glu Ser Asn Gly Pro Thr Leu
   1060 1065 1070
Phe Cys Phe His Pro Ala Ser Gly Phe Ala Trp Gln Phe Ser Val Leu
1075 1080 1085
Ala Arg Tyr Leu Ser Pro Arg Trp Ser Ile Val Gly Ile Gln Ser Pro
1090 1095 1100
Arg Pro Asn Gly Pro Met Gln Gln Cys Ala Asp Leu Asp Gly Val Ile
1105 1110 1115 1120
Glu His His Leu Asn Thr Leu Arg Lys Gln Gln Pro Gln Gly Pro Tyr
          1125 1130 1135
Tyr Leu Phe Gly Tyr Ser Leu Gly Gly Thr Leu Ala Gln Gly Ile Ala
       1140 1145 1150
Ala Arg Leu Arg Glu Gln Gly Glu Ala Val Ala Phe Leu Gly Leu Leu
1155 1160 1165
Asp Thr Trp Pro Pro Glu Thr Gln Asn Trp Ala Glu Lys Glu Ala Asn
1170 1175 1180
Gly Leu Asp Pro Ala Val Leu Ala Glu Ile Glu Arg Glu Arg Gln Ala
1185 1190 1195 1200
Phe Ile Ala Ala Gln Gln Gly Gln Gly Ser Ser Glu Leu Phe Asn Ala
          1205 1210 1215
Ile Glu Gly Asn Tyr Ala Asp Ala Val Arg Leu Leu Thr Thr Ala His
      1220 1225 1230
Ser Ala Arg Phe Asp Gly Lys Ala Thr Leu Phe Val Ala Glu Arg Thr
     1235 1240 1245
Arg Thr Gln Asp Pro Gln Ala Ala Trp Ala Pro Trp Val Gly Glu Leu
  1250 1255 1260
Glu Val Tyr Ser Gln Asp Cys Ala His Val Asp Ile Ile Ser Pro Gln
1265 1270 1275
Ala Phe Glu Lys Ile Gly Pro Val Leu Lys Glu Ile Leu Gly
           1285
                         1290
<210> 8197
<211> 318
<212> PRT
<213> Enterobacter cloacae
<400> 8197
Ala Arg Leu Gln Arg Arg Ala Ala Pro Arg Gly Ala Gln Arg Leu Gly
                10
1 5
Arg Ser His Tyr Tyr Arg Arg Arg Thr Pro Leu Arg Gly Ala Pro Thr
        20
                      25
Gly Gly Gln Met Asn Ala Leu Leu Glu Pro Phe Gly Tyr Glu Tyr Met
     35 40
Leu Asn Ala Met Trp Val Ser Ala Met Val Gly Gly Leu Cys Ala Phe
```

55

```
Leu Ser Cys Tyr Leu Met Leu Lys Gly Trp Ser Leu Ile Gly Asp Ala
Leu Ser His Ser Ile Val Pro Gly Val Ala Gly Ala Tyr Met Leu Gly
            8.5
                            90
Leu Pro Phe Ser Leu Gly Ala Phe Leu Ser Gly Gly Leu Ala Ala Gly
                     105
        100
Ser Met Leu Phe Leu Asn Gln Arg Ser Arg Leu Lys Glu Asp Ala Ile
     115 120 125
Ile Gly Leu Ile Phe Ser Ser Phe Phe Gly Leu Gly Leu Phe Met Val
 130 135 140
Ser Leu Asn Pro Thr Ser Val Asn Ile Gln Thr Ile Val Leu Gly Asn
145 150 155
Ile Leu Ala Ile Ala Pro Glu Asp Ile Val Gln Leu Ala Ile Ile Gly
           165 170 175
Val Val Ser Ile Val Ile Leu Leu Phe Lys Trp Lys Asp Leu Met Val
             185
Thr Phe Phe Asp Glu Asn His Ala Arg Ala Ile Gly Leu Arg Pro Glu
     195 200 205
Arg Leu Lys Ile Leu Phe Phe Thr Leu Leu Ala Val Ser Thr Val Ala
       215
                                  220
Ala Leu Gln Thr Val Gly Ala Phe Leu Val Ile Cys Leu Val Val Thr
             230
                               235
Pro Gly Ala Thr Ala Trp Leu Leu Thr Asp Arg Phe Pro Arg Leu Leu
            245
                            250
Met Ile Ala Val Ala Ile Gly Ser Ile Thr Ser Phe Leu Gly Ala Trp
         260
                         265
Ala Ser Tyr Tyr Leu Asp Gly Ala Thr Gly Gly Ile Ile Val Val Ala
 275
                     280
                                     285
Gln Thr Leu Leu Phe Leu Leu Ala Phe Val Phe Ala Pro Lys His Gly
290 295 300
Leu Leu Ala Ser Arg Arg Arg Ala Arg Glu Ala His Pro
               310
```

<210> 8198 <211> 83 <212> PRT

<213> Enterobacter cloacae

<400> 8198

 Pro
 Ser
 Gly
 Ser
 Arg
 Leu
 Phe
 Asn
 Gly
 Val
 Cys
 Met
 Glu
 Phe
 Ser

 Asn
 Pro
 Phe
 Asp
 Asn
 Pro
 Gln
 Gly
 Gln
 Phe
 Ala
 Ile
 Leu
 Cln
 Asn
 Asp

 Gln
 Gly
 Gln
 Trp
 Pro
 Gln
 Gln
 Cys
 Glu
 Leu
 Pro
 Ala
 Cys
 Gln
 Gln
 Trp
 Fo
 60
 Leu
 Ala
 Gly
 Glu
 Pro
 Fo
 Pro
 Phe
 Tyr
 Phe
 Ala
 Gly
 Glu
 Gly
 Gly
 Fro
 Ala
 Gly
 Fro
 Ala
 Gly
 Fro
 Ala
 Fry
 Phe
 Ala
 Gly
 Gly
 Ala
 Gly
 Fro
 Phe
 Ala
 Gly
 Gly
 Ala
 Gly
 Ala
 Gly
 Ala
 Gly
 Ala
 Gly
 Ala
 Gly
 Ala

<210> 8199 <211> 507 <212> PRT <213> Enterobacter cloacae

<400> 8199

Thr Ser Arg Leu Lys Tyr Gly Leu Glu Phe Thr His Leu Asn Leu Asp 1 15 Gly Leu His Leu Gly Val Thr Leu Lys Arg His Asp Ala Val Leu Thr

25 Ala Asn Ala Gly Val Phe Val Ala Ala His Arg His Leu Arg Gly Gly 35 4.0 4.5 Phe Ala Pro Gly Val Asp Pro Ala Asp Ala Arg Phe Glu Leu Met Asn 55 60 Ser Ala Val Gly Ala Val Gln Ile Gly Gly Asp Asn Ala Arg Arg Gln 75 70 Thr Val Val Gly Val Ile Gly Ala Ala Asn Gly Phe Phe Val Ser Val 90 95 85 Ile Gly Lys Asn Gly His His Arg Ala Glu Asp Leu Phe Ala His Asp 100 105 110 Gly His Phe Val Gly Ala Val Gly Glu His Gly Arg Gly His Pro Arg 115 120 125 Ala Val Val Lys Ala Val Thr Leu Gln His Val Thr Ala Ala Gln His 130 135 140 Ala Arg Ala Phe Leu Phe Ala Phe Gly Asp Val Ala Gln His Ala Val 150 155 160 Pro Val Arg Glu Ala Asn His Arg Ala Lys Val Gly Ala Phe Ile Glu 165 170 175 Gln Ile Ala Arg Ala Asp Ala Ala His Ala Leu Asn Asp Phe Leu Leu 180 185 190 Lys Arg Gly Phe Glu Leu Arg Gly His Glu His Ala Gly Ala Ile Gly 195 200 205 Ala His Leu Ala Gly Ala Glu Glu Ile Gly His His Gly Asp Ile Cys 210 215 220 Arg Glu Ile Gln Ile Arg Ile Val Lys His Tyr Gln Arg Gly Phe Thr 235 225 230 Ala Gln Leu His Arg His Leu Phe Gln Gly Arg Gly Arg Arg Val Gly 245 250 His His Phe Phe Ala Ala Gly Asp Ala Ala Gly Lys Gly Asp Phe Gly 260 265 270 Asp Ala Arg Met Leu Gly Gln Val Leu Ala Ser Leu Arg Ala Tyr Ala 275 280 285 Arg Gln Asp Val Lys His Ala Val Arg Gln Ala Arg Phe Gly Val Asp 295 300 Phe Ser Lys Leu Gln Gly Gly Lys Arg Cys His Phe Ala Arg Leu Glu 305 310 315 Asp His Cys Val Ala Arg Arg Gln Arg Arg Arg Gly Phe Pro Gln Gly 325 330 Asp Leu Asp Arg Val Val Pro Arg Ala Asp Ala Arg His His Ala Glm 340 345 350 Arg Leu Ala Ala Gly Val Asp Glu Arg Gly Val Ala Gln Arg Asp Leu 360 365 Ala Ala Leu Gln Arg Arg Asp Gln Pro Arg Val Val Leu Gln His Val 375 380 Arg Ala Gly Asp Asp Val Asp Gly Arg Gly Phe Gly Ile Arg Phe Thr 390 395 Gly Val Glu Gly Phe Gln Arg Cys Gln Leu Val Val Thr Leu Ala Gln 405 410 Asp Ile Asp Gly Ala Thr Gln Asp Ala Arg Ala Leu His Gly Gly His 430 425 420 Arg Arg Pro Asp Phe Leu Pro Ala Leu Cys Ala Phe Asp Gly Ala Val 435 440 His Val Phe Ala Pro Gly Gly Leu His Gly Arg Gln Asn Phe Thr Val 450 455 Arg Arg Val Asp Gly Leu Glu Gly Ala Thr Ala Gly Gly Gly Cys Ile 470 475 Thr Thr Ile Asp Ile Lys Leu Leu Phe Cys His Ser Gly His Lys Phe 490 485 Ser Ser Val Ser Arg Ser Val Asn Ala Gly 500

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<210> 8200
<211> 681
<212> PRT
<213> Enterobacter cloacae
<400> 8200
Gly Tyr Trp Met Thr Asp Leu Ser Gln Asp Arg Glu Lys Asp Lys Ile
                           10
Asn Pro Val Val Phe Tyr Thr Ser Ala Gly Leu Ile Leu Leu Phe Ser
   20 - 25
Leu Thr Thr Ile Phe Phe Arg Asp Phe Ser Ala Glu Trp Ile Gly Arg
35 40
                          4.5
Thr Leu Asp Trp Val Ser Lys Thr Phe Gly Trp Tyr Tyr Leu Leu Ala
               55 60
Ala Thr Leu Tyr Ile Val Phe Val Val Cys Ile Ala Cys Ser Arg Phe
65 70 75
Gly Ser Val Lys Leu Gly Pro Glu Gln Ser Lys Pro Glu Phe Ser Leu
          85 90
Leu Ser Trp Ala Ala Met Leu Phe Ala Ala Gly Ile Gly Ile Asp Leu
100 105 110
Met Phe Phe Ser Val Ala Glu Pro Val Thr Gln Tyr Met Gln Pro Pro
115 120
                                      125
Glu Gly Ala Gly Gln Thr Met Glu Ala Ala Arg Gln Ala Met Val Trp
                135 140
Thr Leu Phe His Tyr Gly Leu Thr Gly Trp Ser Met Tyr Ala Leu Met
             150
                            155
                                              160
Gly Met Ala Leu Gly Tyr Phe Ser Tyr Arg Tyr Asn Leu Pro Leu Thr
           165
                            170 175
Ile Arg Ser Ala Leu Tyr Pro Ile Phe Gly Lys Lys Ile Asn Gly Pro
       180
                      185
                                         190
Ile Gly His Ser Val Asp Ile Ala Ala Val Ile Gly Thr Ile Phe Gly
                     200
                                      205
Ile Ala Thr Thr Leu Gly Ile Gly Val Val Gln Leu Asn Tyr Gly Leu
210 215
                                  220
Ser Val Leu Phe Asp Ile Pro Asp Ser Met Ala Ala Lys Ala Ala Leu
225 230
                               235
                                               240
Ile Ala Leu Ser Val Ile Ile Ala Thr Ile Ser Val Thr Ser Gly Val
                            250
            245
                                           255
Asp Lys Gly Ile Arg Val Leu Ser Glu Leu Asn Val Ala Leu Ala Leu
         260
                        265 270
Gly Leu Ile Leu Phe Val Leu Phe Met Gly Asp Thr Ser Phe Leu Leu
     275
                     280
                                      285
Asn Ala Leu Val Leu Asn Val Gly Asp Tyr Val Asn Arg Phe Met Gly
                295
                                   300
Met Thr Leu Asn Ser Phe Ala Phe Asp Arg Pro Thr Glu Trp Met Asn
305 310
                               315
Asn Trp Thr Leu Phe Phe Trp Ala Trp Trp Val Ala Trp Ser Pro Phe
            325
Val Gly Leu Phe Leu Ala Arg Ile Ser Arg Gly Arg Thr Ile Arg Gln
        340
                         345
                                         350
Phe Val Met Gly Thr Leu Ile Ile Pro Phe Thr Phe Thr Leu Leu Trp
                     360
      355
                                      365
Leu Ser Ile Phe Gly Asn Ser Ala Leu His Glu Ile Ile His Gly Asn
                  375
Ala Thr Phe Ala Gln Glu Ala Met Ala His Pro Glu Arq Gly Phe Tyr
               390
                               395
Ser Leu Leu Ala Gln Tyr Pro Ala Phe Thr Phe Ser Ala Ser Val Ala
            405
                           410
Thr Ile Thr Gly Leu Leu Phe Tyr Val Thr Ser Ala Asp Ser Gly Ala
         420
                         425
```

```
Leu Val Leu Gly Asn Phe Thr Ser Lys Leu Lys Asp Ile Asn Ser Asp
      435
                     440
Ala Pro Asn Trp Leu Arg Ile Phe Trp Ser Val Ala Ile Gly Leu Leu
                  455
Thr Leu Gly Met Leu Met Thr Asn Gly Ile Ser Ala Leu Gln Asn Thr
               470
                               475
Thr Val Ile Met Gly Leu Pro Phe Ser Phe Val Ile Phe Phe Val Met
                            490
            485
Ala Gly Leu Tyr Lys Ser Leu Lys Val Glu Asp Tyr Arg Arg Val Ser 500 505 510
Ala Ser Arg Asp Thr Ala Pro Arg Pro Leu Gly Ala Gln Asp Arg Leu
  515 520 525
Ser Trp Lys Lys Arg Leu Ser Arg Leu Met Asn Tyr Pro Gly Thr Arg
 530 535 540
Tyr Thr Lys Gln Met Met Glu Thr Val Cys Phe Pro Ala Met Glu Glu
545 550 555 560
Val Ala Gln Glu Leu Lys Leu Arg Gly Ala Tyr Val Glu Leu Lys Asn
   565 570 575
Leu Pro Pro Glu Glu Gly Glu Asn Leu Gly His Leu Asp Leu Leu Val
 580 585 590
His Met Gly Asp Glu Gln Asn Phe Val Tyr Gln Ile Trp Pro Gln Gln
595 600 605
Tyr Ser Val Pro Gly Phe Thr Tyr Arg Ala Arg Ser Gly Lys Ser Thr
 610 615 620
Tyr Tyr Arg Leu Glu Thr Phe Leu Leu Glu Gly Ser Gln Gly Asn Asp
625 630 635 640
Leu Met Asp Tyr Ser Lys Glu Gln Val Ile Thr Asp Ile Leu Asp Gln
          645 650 655
Tyr Glu Arg His Leu Asn Phe Ile His Leu His Arg Glu Ala Pro Gly
660 665 670
Asn Ser Val Met Phe Pro Asp Ala
<210> 8201
<211> 116
<212> PRT
<213> Enterobacter cloacae
<400> 8201
Cys Leu Leu Tyr Leu Leu Glu Val Tyr Tyr Val Arg Leu Tyr Val
                       10
Val Pro Arg Tyr Lys Met Ser Ile Phe Asp Glu Leu Lys Thr Ser Leu
                         25
Glu Glu Ala Val Glu Ile His Ser Gly Arg Lys Ala Ala Ser Arg Val
                     40
Thr Arg Tyr Glu Val Ala Asp Val Arg Ala Ile Arg Glu Gln Leu Asn
```

<210> 8202 <211> 316

<212> PRT <213> Enterobacter cloacae

```
<400> 8202
Asn Arg Arg Pro Leu Trp Arg Arg Ala Val Arg Arg Leu Ser Glu Arg
                               10
Gly Lys Arg Pro Gly Ala Asn Leu Tyr Arg Ser Ala Glu Arg His His
                            25
Pro His Ala Gly Ala Gly His Pro Arg Arg Asp Glu Gly Val Ile Met
Gln Lys Gly Ile Val Val Thr Asp Val Thr Val Thr Tyr Arg Asn Gly
                    5.5
His Thr Ala Leu Arg Asp Ala Ser Phe Ser Val Pro Gly Gly Ser Ile
                 70
                                   75
Ala Ala Leu Val Gly Val Asn Gly Ser Gly Lys Ser Thr Leu Phe Lys
             8.5
                               90
Ala Val Met Gly Phe Val Arg Ala Ala Ser Gly Thr Ile Ser Ile Leu
                 105
          100
Gly Leu Pro Pro His Arg Ala Leu Arg Gln Asn Leu Val Ala Tyr Val
                    120
Pro Gln Ser Glu Glu Val Asp Trp Ser Phe Pro Val Leu Val Glu Asp
           135 140
   130
Val Val Met Met Gly Arg Tyr Gly His Met Gly Phe Leu Arg Arg Pro
                       155
                150
Lys Glu Cys Asp Lys Gln Ile Val Thr Asp Ala Leu Lys Arg Val Asp
                    170 175
             165
Met Leu Glu Leu Arg His Arg Gln Ile Gly Glu Leu Ser Gly Gly Gln
                 185 190
Lys Lys Arg Val Phe Leu Ala Arg Ala Ile Ala Gln Gln Gly Glu Val
                                205
      195
                     200
Ile Leu Leu Asp Glu Pro Phe Thr Gly Val Asp Val Lys Thr Glu Ala
 210
                    215
Arg Ile Ile Ser Leu Leu Arg Glu Leu Arg Asp Glu Gly Lys Thr Met
                 230
                                  235
Leu Val Ser Thr His Asn Leu Gly Ser Val Thr Glu Phe Cys Asp Tyr
              245 250
Thr Val Met Val Lys Gly Thr Val Leu Ala Ser Gly Pro Thr Asp Ile
          260
                           265
Thr Phe Thr Ala Glu Asn Leu Glu Arg Ala Phe Ser Gly Val Leu Arg
                        280
His Val Val Leu Ser Gly Ser Glu Asp Arg Ile Ile Thr Asp Asp Glu
                    295
Arg Pro Phe Val Ala His Arg Gln Glu Ala Lys
                 310
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<210> 8203 <211> 118 <212> PRT

<213> Enterobacter cloacae

<400> 8203

105 110 100 Asp Val Pro His Arg 115 <210> 8204 <211> 421 <212> PRT <213> Enterobacter cloacae <400> 8204 Thr Gln Gly Phe Val Met Asn Gln Lys Ser Trp Leu Leu Asn Leu Ser 10 Leu Leu Lys Thr His Pro Ala Tyr Arg Ala Val Phe Ile Ala Arg Phe 20 25 3.0 Ile Ser Ile Leu Ser Leu Gly Leu Leu Gly Val Ala Val Pro Val Gln 40 4.5 Ile Gln Thr Ile Thr His Ser Ser Trp Leu Val Gly Leu Ser Val Thr 55 60 Leu Thr Gly Gly Ala Met Phe Ile Gly Leu Met Val Gly Gly Val Leu 70 75 Ala Asp Arg Tyr Glu Arg Lys Lys Leu Ile Leu Leu Ala Arg Gly Thr 85 90 95 Cys Gly Val Gly Phe Val Gly Leu Cys Leu Asn Ala Met Leu Pro Glu 100 105 110 Pro Ser Leu Val Ala Ile Tyr Val Leu Gly Leu Trp Asp Gly Phe Phe 115 120 125 Ala Ser Leu Gly Val Thr Ala Leu Leu Ala Ala Thr Pro Ala Leu Val 130 135 140 Gly Arg Glu Asn Leu Met Gln Ala Gly Ala Ile Thr Met Leu Thr Val 145 150 155 160 Arg Leu Gly Ser Val Ile Ser Pro Met Val Gly Gly Leu Leu Ala 165 170 175 Thr Gly Asn Val Ala Trp Asn Tyr Gly Leu Ala Ala Ala Gly Thr Phe 180 Ile Thr Thr Leu Thr Leu Leu Arg Leu Pro Leu Leu Pro Pro Pro Pro 195 200 205 Gln Pro Arg Glu His Pro Leu Lys Ser Leu Met Ala Ala Ile Arg Phe 215 220 210 Leu Phe Ser Asn Pro Leu Ile Gly Gly Ile Ala Leu Leu Gly Gly Leu 230 235 Leu Thr Met Ala Ser Ala Val Arg Val Leu Tyr Pro Ala Leu Ala Gly 250 255 245 Glu Trp Gln Met Ser Ala Ser Glu Ile Gly Val Leu Tyr Ala Ala Ile 260 265 270 Pro Leu Gly Ala Ala Cys Gly Ala Leu Thr Ser Gly Asn Leu Ala Gln 280 285 275 Ser Ala Arg Pro Gly Leu Ile Met Leu Val Ala Thr Leu Ala Ser Phe 290 295 300 Ile Ala Ile Gly Phe Phe Ser Leu Met Pro Val Trp Ala Leu Gly Val 310 315 305 Met Cys Leu Val Ile Phe Gly Trp Leu Ser Ala Val Ser Ser Leu Leu 325 330 335 Gln Tyr Thr Leu Ile Gln Thr Gln Thr Pro Glu Gly Met Leu Gly Arg 345 350 340 Ile Asn Gly Leu Trp Thr Ala Gln Asn Val Thr Gly Asp Ala Ile Gly 355 360 365 Ala Ala Ile Leu Gly Gly Met Gly Ala Ile Met Thr Pro Val Ala Ser 375 380 Ala Ser Ser Ser Gly Phe Val Leu Ala Met Ile Gly Ala Ile Leu Leu 390 395

Val Thr Leu Val Glu Leu Arg Arg Phe Arg Gln Glu Val Ala Leu Asn

415 410 Asp Gly Ala Ala 420 <210> 8205 <211> 332 <212> PRT <213> Enterobacter cloacae <400> 8205 Glu Ala Leu Ser Ser Ile Lys Ser Gly Cys Arg Ser Val Lys Ile Ala 10 Ala Val Cys Arg Asn Ala Leu Leu Leu Thr Gly Leu Phe Val Leu Gly 25 20 3.0 Leu Thr Ser Ala Ala Ala Asp Asp Trp Pro Arg Gln Val Ser Asp Ser 35 4.0 4.5 Arg Gly Val His Thr Leu Glu Ser Lys Pro Thr Arg Ile Val Ser Thr 5.0 55 60 Ser Val Thr Leu Thr Gly Ser Leu Leu Ala Ile Asp Ala Pro Val Ile 70 75 Ala Ser Gly Ala Thr Thr Pro Asn Asn Arg Val Ala Asp Ala Gln Gly 85 90 95 Phe Leu Arg Gln Trp Gly Asp Ile Ala Lys Gln Arg Lys Val Ala Arg 100 105 110 Leu Tyr Ile Gly Glu Pro Ser Ala Glu Ala Val Ala Ala Gln Met Pro 115 120 125 Asp Leu Ile Leu Ile Ser Ala Thr Gly Gly Asp Ser Ala Leu Ala Leu 130 135 140 Tyr Asp Gln Leu Ser Ala Ile Ala Pro Thr Leu Ile Ile Asn Tyr Asp 145 150 155 Asp Lys Ser Trp Gln Glu Leu Leu Thr Gln Leu Gly Thr Ile Thr Gly 165 170 175 Gln Glu Thr Gln Ala Ala Glu Arg Ile Ala Ala Phe Asp Lys Gln Leu 180 185 190 Ala Gln Val Lys Gln Gln Met Lys Leu Pro Pro Gln Pro Val Asn Ala 195 200 205 Ile Val Tyr Thr Ala Ala Ala His Thr Ala Asn Leu Trp Thr Thr Asp 210 215 220 Ser Ala Gln Gly Lys Leu Leu His Gln Leu Gly Phe Thr Leu Ala Asp 230 235 Leu Pro Ala Gly Leu Gln Thr Ser Thr Ser Gln Gly Lys Arg His Asp 245 250 255 Ile Ile Gln Leu Gly Gly Glu Asn Leu Ala Thr Gly Leu Asn Gly Glu 260 265 270 Gly Leu Phe Val Phe Ala Gly Asp Gln Lys Asp Val Asn Ala Ile Tyr 275 280 285 Ala Asn Pro Leu Leu Ala His Leu Pro Ser Val Lys Asn Lys Arg Val 295 300 Trp Ala Leu Gly Thr Glu Thr Phe Arg Leu Asp Tyr Tyr Ser Ala Met 305 310 315 Leu Val Leu Asp Arg Leu Asn Ala Leu Phe Lys 325 <210> 8206 <211> 440 <212> PRT <213> Enterobacter cloacae <400> 8206 His Arg Asp Arg Pro Arg Gln Pro Arg Gly Ala Tyr Ala Ala Asp Gly 5 10

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Pro Ala Cys His His Arg Ala Val Arg Gln Arg Asp Arg Arg Gly Arg
                        25
Pro Asp Cys Leu Tyr Arg Pro Asp Asp Ala Ala His Gly Ala Leu Ala
      3.5
                     40
Gly Gly Gly Ser Pro Leu Val Pro Pro Gly Asn Ala Ala Gly Asp
                 55
Pro Cys Pro Ala Ala Val Cys Arg Arg Ala Gly Pro Pro Ala Gly Ala
               70
Gly Arg Thr Ala Cys Leu Gly Gly Gln Arg Leu Tyr Arg Arg Ala Gly
                           90
           8.5
Ala Asp Leu Pro Gly Thr Thr Gln Thr Arg Gly Trp Arg Met Met Ala
    100 105
                                       110
Pro Ser Arg Arg Leu Leu Thr Ser Val Ala Leu Leu Val Val Ala Cys
 115 120 125
Leu Leu Leu Ala Val Trp Ser Leu Gln Ser Gly Ala Val Thr Leu Asp
130 135 140
Phe Ala Gln Val Phe His Ala Leu Thr Gly Ser Ala Pro Arg Asn Ile
145 150 155 160
Thr Met Val Val Thr Glu Trp Arg Leu Pro Arg Val Ala Met Ala Ile
      165 170 175
Leu Val Gly Ala Ala Leu Gly Val Ser Gly Ala Ile Phe Gln Ser Leu
180 185 190
Met Arg Asn Pro Leu Gly Ser Pro Asp Val Met Gly Leu Asn Thr Gly 195 200 205
Ala Trp Ser Gly Val Leu Val Ala Met Val Leu Phe Gly Gln His Leu
210 215 220
Thr Ala Ile Thr Phe Thr Ala Met Ala Gly Gly Ile Leu Thr Ser Leu
225 230 235 240
Leu Ile Trp Ala Leu Ala Trp Arg Asn Gly Ile Asp Thr Phe Arg Leu
           245 250 255
Ile Ile Ile Gly Ile Gly Ile Arg Ala Met Leu Met Ala Phe Asn Thr
        260 265 270
Trp Leu Leu Gln Ala Ser Leu Glu Thr Ala Leu Ser Ala Gly Leu
275 280
Trp Tyr Ala Gly Ser Leu Asn Gly Leu Thr Trp Val Lys Thr Trp Pro
 290 295 300
Ala Ala Pro Leu Ile Ile Leu Met Phe Ile Gly Ala Leu Leu Leu Val
305 310 315 320
Arg Arg Met Arg Leu Leu Glu Met Gly Asp Asp Ser Ala Cys Ala Leu
         325 330 335
Gly Val Ser Val Glu Arg Ser Arg Leu Met Leu Met Leu Val Ala Val
                       345 350
Leu Leu Thr Ala Ala Ser Thr Ala Ile Ala Gly Pro Ile Ser Phe Ile
 355
                     360 365
Ala Leu Val Ala Pro His Ile Ala Arg Arg Leu Ser Gly Thr Ala Arg
 370
                  375 380
Trp Gly Leu Thr Gln Ala Ala Leu Cys Gly Ala Val Leu Leu Leu Ala
               390 395
Ala Asp Leu Cys Ala Gln Arg Leu Phe Thr Pro Tyr Gln Leu Pro Val
           405 410 415
Gly Val Val Thr Val Ser Leu Gly Gly Ile Tyr Leu Ile Val Leu Leu
        420
                      425
Val Gln Glu Ser Arg Lys Lys
     435
                     440
<210> 8207
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<211> 221

<212> PRT

<213> Enterobacter cloacae

<400> 8207

Asp Thr Phe Tyr Ile Glu Arg Pro Ile Lys Asn Arg Phe Asn Arg Leu Pro Thr Leu Met Asn Gly Val Ala Lys Met Pro Lys Val Gly Met Gln 20 25 Pro Ile Arg Arg Gln Leu Ile Asp Ala Thr Leu Glu Ala Ile Asn 35 4.0 Glu Val Gly Met His Asp Ala Thr Ile Ala Gln Ile Ala Arg Arg Ala 50 55 60 Gly Val Ser Thr Gly Ile Ile Ser His Tyr Phe Lys Asp Lys Asn Gly 7.0 75 80 Leu Leu Glu Ala Thr Met Arg Asp Ile Thr Gly Gln Leu Arg Asp Ala 85 90 Val Leu Ser Arg Leu Arg Ala Leu Pro Asp Gly Ser Ala Glu Gln Arg 100 105 110 Leu Gln Ala Ile Val Gly Gly Asn Phe Asp Glu Thr Gln Val Ser Gly 115 120 Ala Ala Met Lys Ala Trp Leu Ala Phe Trp Ala Ser Ser Met His Gln 135 140 Pro Met Leu Tyr Arg Leu Gln Gln Val Ser Ser Arg Arg Leu Leu Ser 150 155 Asn Leu Val Tyr Glu Phe Arg Arg Glu Leu Pro Arg Glu Gln Ala Glu 165 170 175 Glu Ala Gly Tyr Gly Leu Ala Ala Leu Ile Asp Gly Leu Trp Leu Arg 180 185 190 Ala Ala Leu Ser Gly Lys Pro Leu Asp Lys Thr Leu Ala Gln Ser Leu 195 200 205 Thr Ser His Phe Ile Ser Gln His Leu Pro Thr Asp 210 215

<212> PRT <213> Enterobacter cloacae

<210> 8208

<211> 353

<400> 8208 Pro Asn Lys Ile Asp Asn Asp Asn His Tyr His Tyr Gln Ile Met Asp Val Ala Met Ser Phe Ser Ser Ser Ala Val Arg Ala Leu Ala Val Pro 20 25 30 Val Leu Leu Leu Leu Ile Leu Ala Ile Ala Leu Ser Leu Leu Val 3.5 40 4.5 Gly Ala Lys Pro Leu Pro Ala Ser Val Ile Val Asp Ala Leu Ser Gly 55 Thr Cys Gln Ser Ala Asp Cys Thr Ile Val Leu Asp Ala Arg Leu Pro 70 Arg Thr Leu Ala Gly Leu Leu Ala Gly Gly Ala Leu Gly Leu Ala Gly 90 8.5 Ala Leu Met Gln Thr Leu Thr Arg Asn Pro Leu Ala Asp Pro Gly Ile 105 Leu Gly Val Asn Ser Gly Ala Ser Phe Ala Ile Val Leu Gly Ala Ala Leu Phe Gly Phe Thr Ser Pro Ser Glu Gln Leu Val Met Ala Phe Cys 130 140 Gly Ala Leu Ala Ala Ser Leu Val Val Ala Phe Thr Gly Ser Gln Gly 150 155 Gly Gly Gln Leu Ser Pro Val Arg Leu Thr Leu Ala Gly Val Ala Leu 165 170 Ala Ala Val Leu Glu Gly Leu Ser Asn Gly Ile Ala Leu Leu Asn Pro 180 185 190 Asp Val Tyr Asp Gln Leu Arg Phe Trp Gln Ala Gly Ser Leu Asp Ile 195 200 205

Arg Thr Leu Glu Thr Leu Lys Val Val Val Ile Pro Ala Ser Val Ala 215 220 210 Ala Ala Val Ala Leu Cys Leu Ser Arg Ala Leu Asn Ser Leu Ser Leu 230 235 225 Gly Ser Asp Thr Ala Thr Ala Leu Gly Asn Arg Val Ala Arg Thr Gln 245 250 255 Leu Thr Gly Leu Leu Ala Ile Thr Val Leu Cys Gly Ser Ala Thr Ala 260 265 270 Val Val Gly Pro Ile Ala Phe Ile Gly Leu Met Met Pro His Met Ala 275 280 285 Arg Trp Leu Val Gly Ala Asp His Arg Trp Ser Leu Pro Val Thr Leu 295 300 Leu Ala Thr Pro Ala Leu Leu Leu Phe Ala Asp Val Leu Gly Arg Leu 310 315 Leu Val Pro Gly Glu Leu Arg Val Ser Val Val Ser Ala Phe Ile Gly 325 330 335 Ala Pro Val Leu Ile Phe Leu Val Arg Arg Arg Gly Gly Gly Ala

345

<210> 8209 <211> 531 <212> PRT

<213> Enterobacter cloacae

340

<400> 8209 Leu Thr Gly Cys Gly Cys Ala Leu Arg Ser Ala Ala Asn Arg Trp Ile 1.0 Lys Pro Trp Pro Ser Arg Leu Pro Ala Thr Leu Ser Ala Ser Ile Tyr 20 25 Arg Pro Thr Asn Arg Gly Glu Phe Met Ser Arg Met Ala Glu Gln Gln 35 4.0 4.5 Leu Tyr Ile Asn Gly Gly Tyr Thr Ser Ala Thr Ser Gly Arg Thr Phe 55 60 Glu Thr Ile Asn Pro Ala Asn Gly Glu Val Leu Ala Thr Val Gln Ala 7.0 7.5 65 Ala Gly Arg Glu Asp Val Asp Arg Ala Val Glu Ser Ala Lys Arg Gly 85 90 Gln Lys Ile Trp Ala Ala Met Thr Ala Met Glu Arg Ser Arg Ile Leu 105 110 100 Arg Arg Ala Val Asp Ile Leu Arg Glu Arg Asn Asp Glu Leu Ala Thr 125 120 115 Leu Glu Thr Leu Asp Thr Gly Lys Ala Tyr Ser Glu Thr Ser Thr Val 135 130 140 Asp Ile Val Thr Gly Ala Asp Val Leu Glu Tyr Tyr Ala Gly Leu Ile 155 150 Pro Ala Leu Glu Gly Ser Gln Ile Pro Leu Arg Asp Thr Ser Phe Val 170 175 165 Tyr Thr Arg Arg Glu Pro Leu Gly Val Val Ala Gly Ile Gly Ala Trp 185 180 190 Asn Tyr Pro Ile Gln Ile Ala Leu Trp Lys Ser Ala Pro Ala Leu Ala 200 195 205 Ala Gly Asn Ala Met Ile Phe Lys Pro Ser Glu Val Thr Pro Leu Thr 215 220 Ala Leu Lys Leu Ala Glu Ile Tyr Thr Glu Ala Gly Leu Pro Asp Gly 230 235 Val Phe Asn Val Leu Pro Gly Val Gly Ala Glu Thr Gly Gln Tyr Leu 245 250 Thr Glu His Pro Gly Ile Ala Lys Val Ser Phe Thr Gly Gly Val Ala 270 260 265

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Ser Gly Lys Lys Val Met Ala Asn Ser Ala Ala Ser Ser Leu Lys Glu
                     280
 275
Val Thr Met Glu Leu Gly Gly Lys Ser Pro Leu Ile Val Phe Asp Asp
290
                 295
                                  300
Ala Asp Leu Asp Leu Ala Ala Asp Ile Ala Met Met Ala Asn Phe Phe
305 310 315 320
Ser Ser Gly Gln Val Cys Thr Asn Gly Thr Arg Val Phe Val Pro Ala
        325 330 335
Lys Phe Lys Ala Ala Phe Glu Gln Lys Ile Val Glu Arg Val Gly Arg
        340 345
                                        350
Ile Arg Ala Gly Asp Leu Phe Asp Glu Ser Thr Asn Phe Gly Pro Met
     355 360 365
Val Ser Phe Pro His Arg Asp Ser Val Leu Arg Tyr Ile Thr Lys Gly
  370 375 380
Lys Glu Glu Gly Ala Arg Val Leu Cys Gly Gly Asp Val Leu Lys Gly
               390 395
Asp Gly Phe Asp Asn Gly Ala Trp Val Ala Pro Thr Val Phe Thr Asp
                410 415
            405
Cys Thr Asp Glu Met Thr Ile Val Arg Glu Glu Ile Phe Gly Pro Val
         420 425
                                        430
Met Ser Ile Leu Thr Tyr Asp Thr Asp Glu Glu Ala Ile Arg Arg Ala
                           445
435 440
Asn Asp Thr Asp Tyr Gly Leu Ala Ala Gly Ile Val Thr Ala Asn Leu
         455 460
450
Asn Arg Ala His Gly Ala Ile His Gln Leu Glu Ala Gly Ile Cys Trp
465
               470
                              475
Ile Asn Thr Trp Gly Glu Ser Ala Ala Glu Met Pro Val Gly Gly Tyr
            485
                            490 495
Lys His Ser Gly Ile Gly Arg Glu Asn Gly Val Met Thr Leu Gln Ser
        500 505 510
Tyr Thr Gln Val Lys Ser Ile Gln Val Glu Met Gly Lys Phe Gln Ser
                      520
Ile Phe
  530
<210> 8210
<211> 240
<212> PRT
<213> Enterobacter cloacae
<400> 8210
Gly His Gln Ala Ala Pro Ser Pne Asn Ala Thr Ser Cys Leu Asn Arg
                          10
Arg Asn Ser Thr Ser Val Thr Ser Lys Ile Ala Pro Ile Ile Ala Asn
                         25
         20
Thr Asn Pro Leu Leu Ala Asp Ala Thr Gly Val Ile Ile Ala Pro
      35
                      40
                                      4.5
Ile Pro Pro Arg Ile Ala Ala Pro Ile Ala Ser Pro Val Thr Phe Cys
                   55
Ala Val His Arg Pro Leu Met Arg Pro Ser Ile Pro Ser Gly Val Trp
                   75
                70
Val Trp Ile Arg Val Tyr Cys Lys Ser Glu Leu Thr Ala Leu Ser Gln
                      90
            85
Pro Lys Ile Thr Arg His Ile Thr Pro Ser Ala His Thr Gly Ile Arg
         100
                         105
Leu Lys Lys Pro Ile Ala Ile Asn Glu Ala Ser Val Ala Thr Ser Met
      115
                      120
Ile Ser Pro Gly Leu Ala Leu Cys Ala Arg Leu Pro Leu Val Ser Ala
                  135
                                140
Pro His Ala Ala Pro Ser Gly Met Ala Ala Tyr Ser Thr Pro Ile Ser
                                155
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Glu Ala Leu Ile Cys His Ser Pro Ala Ser Ala Gly Tyr Ser Thr Arg 165

Thr Ala Leu Ala Ile Val Ser Arg Pro Pro Ser Ser Ala Met Pro Pro Pro Ile Ala Gly Leu Leu Asn Arg Lys Arg Ile Ala Ala Ile Arg Asp Pro Pro Ser Gly Cys Ser Arg Gly Cys Gly Gly Gly Gly Arg Ser Gly Arg Arg 210

Ser Ser Val Arg Val Val Ile Lys Val Pro Ala Ala Ala La Arg Pro Pro Ser Ser Val Arg 230

240

240

240

240

240

240

<211> 326 <212> PRT <213> Enterobacter cloacae

<210> 8211

<400> 8211 Arg His Arg Ala Leu Gly Ile Asn Pro Gly Gly Ala Val Arg Cys Ser 10 Ile Thr Ala Gly Arg Arg Ser Leu Arg Pro Ala Ala Val Tyr Ala Leu 25 Ser Thr Ala Gly Gly Arg Gly Asp Arg Gln Pro Arg Arg Asp Leu Pro 40 His Arg Leu Ala Arg Ser Gly Val Thr Gln Glu Met Thr Asp Leu Thr 5.5 Thr Arg Leu Arg Gly Glu Asn Leu Thr Leu Gly Tyr Gly Lys Lys Ile 70 75 Ile Ala Arg Asp Leu Ser Val Ala Ile Pro Asp Gly His Phe Thr Ala 85 90 Ile Ile Gly Pro Asn Gly Cys Gly Lys Ser Thr Leu Leu Arg Thr Leu 100 105 Ser Arg Leu Met Ser Pro Vai Glu Gly Ser Val Phe Leu Asp Gly Glu 120 125 Gln Ile Gln Arg Phe Ala Ser Lys Glu Val Ala Arg Arg Ile Gly Leu 135 140 130 Leu Ala Gln Asn Ala Thr Thr Pro Gly Asp Ile Thr Val Gln Glu Leu 145 150 155 Val Ser Arg Gly Arg Tyr Pro His Gln Pro Leu Phe Thr Arg Trp Arg 165 170 Lys Glu Asp Asp Glu Ala Val Lys Arg Ala Met Gln Ala Thr Gly Ile 185 190 180 Thr Glu Leu Ala Gln Gln Ser Val Asp Thr Leu Ser Gly Gly Gln Arg 200 205 195 Gln Arg Ala Trp Ile Ala Met Val Leu Ala Gln Glu Thr Ser Ile Met 220 215 Leu Leu Asp Glu Pro Thr Thr Trp Leu Asp Ile Ser His Gln Ile Asp 235 230 Leu Leu Glu Leu Leu Ser Glu Leu Asn Arg Thr Gln Gly Tyr Thr Leu 250 245 Ala Ala Val Leu His Asp Leu Asn Gln Ala Cys Arg Tyr Ala Thr His 270 265 260 Leu Ile Ala Leu Arg Asp Gly Glu Ile Val Ala Gln Gly Ala Pro Lys 280 285 Glu Ile Val Thr Pro Glu Leu Ile Ala Arg Ile Tyr Gly Met Arg Cys 295 300 Met Ile Ile Asp Asp Pro Val Ala Gly Thr Pro Leu Val Val Pro Leu 315 Gly Lys Arg Ala Val

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<211> 109
<212> PRT
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<213> Enterobacter cloacae

<400> 8212

Thr Pro Asp Ala Arg Ala Arg Ser Leu Pro Ala Pro Pro Gly Arg Gly Arg Trp Pro Leu Ser Pro Pro Ser Ser Gly Phe Pro Ala Ala Arg Tyr 25 20 3.0 Pro Ala Gly Arg Gly Thr Pro Pro Leu His Pro Ala Arg Ala Gly Gly 4.5 35 4.0 Pro Gln Cys Pro Ala Pro Ala Cys Arg Arg Gly Asn Ser Arg Thr Gly 55 60 Asn Thr Ala Pro Ala Ala Ala Ala Tyr Ala Thr Cys Ser Asp Asp Val 7.5 7.0 Arg Ser Pro His Arg Asp Pro Arg Thr Ala Ala Ser Gly Arg Leu Ala

85 90 Ala Ala Thr Glu Cys Arg Arg Trp Tnr Ser Ala Gly 100 105

<210> 8213 <211> 755

<212> PRT <213> Enterobacter cloacae

<400> 8213

Ile Thr Ile Lys Ala Gly Arg Thr Met Asn Lys Lys Ile His Ser Leu 10 Ala Leu Leu Val Asn Leu Gly Ile Tyr Gly Val Ala Leu Pro Ala Met 20 25 30 Ala Asp Asp Asn Thr Ala Ser Ala Gln His Glu Asp Thr Met Val Ile 35 4.0 Thr Ala Ala Glu Gln Asn Leu Gln Ala Pro Gly Val Ser Thr Ile Thr 5.5 60 50 Ala Asp Glu Ile Arg Lys Asn Pro Pro Ala Arg Asp Val Ala Glu Ile 70 7.5 Ile Arg Thr Met Pro Gly Val Asn Leu Thr Gly Asn Ser Thr Ser Gly 8.5 90 Gln Arg Gly Asn Asn Arg Gln Ile Asp Ile Arg Gly Met Gly Pro Glu 105 110 100 Asn Thr Leu Ile Leu Ile Asp Gly Lys Pro Val Thr Ser Arg Asn Ser 115 125 Ile Arg Leu Gly Trp Arg Gly Glu Arg Asp Thr Arg Gly Asp Thr Gly 130 135 140 Trp Val Pro Pro Glu Met Ile Glu Arg Ile Glu Val Ile Arg Gly Pro 150 155 145 Ala Ala Ala Arg Tyr Gly Asn Gly Ala Ala Gly Gly Val Val Asn Ile 165 170 175 Ile Thr Lys Lys Phe Asp Asp Gln Trp His Gly Ser Trp Asn Thr Tyr 185 180 190 Leu Asn Ala Pro Glu His Lys Asp Glu Gly Ser Thr Lys Arg Thr Asn 205 200 Phe Ser Leu Ser Gly Pro Leu Gly Gly Asp Phe Ser Phe Arg Met Tyr 215 220 210 Gly Asn Leu Asp Lys Thr Gln Ala Asp Ala Trp Asp Ile Asn Gln Gly 230 235 His Gln Ser Asp Arg Thr Gly Ala Tyr Ala Asn Thr Leu Pro Ala Gly 250 255 245 Arg Glu Gly Val Glu Asn Lys Asp Ile Asn Gly Val Val Arg Trp Asp 265 270 Phe Ala Pro Met Gln Ser Leu Glu Phe Glu Ala Gly Tyr Ser Arg Gln

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280
Asn Asn Leu Tyr Ala Gly Asp Thr Gln Asn Thr Asn Asn Asp Asn Ala
         295
                             300
Leu Val Lys Lys Asn Tyr Gly Lys Glu Thr Asn Arg Ile Tyr Arg Gln
      310
                    315
Asn Phe Ala Val Thr Trp Asn Gly Gly Trp Asp Asn Gly Ile Thr Thr
      325 330 335
Ser Asn Trp Ala Gln Tyr Glu His Thr Arg Asn Ser Arg Leu Gly Glu
   340 345 350
Gly Leu Ala Gly Gly Leu Glu Gly Leu Phe Asn Ser Asn Lys Phe Thr
 355 360 365
Asp Thr Asp Leu Ala Asp Val Met Leu His Ser Glu Ile Asn Leu Pro
370 375 380
Ile Asp Phe Ile Val Asn Gin Asn Leu Thr Leu Gly Thr Glu Trp Asn
385 390 395 400
Gln Gln Arg Met Lys Asp Ser Thr Ser Phe Thr Gln Thr Gln Gln Gly
      405 410 415
Gly Thr Ile Pro Gly Met Ser Glu Asp Arg Ser Pro Tyr Thr Ser Ala
      420 425 430
Glu Ile Phe Ser Leu Phe Ala Glu Asn Asn Met Glu Leu Thr Asp Ser
435 440 445
Thr Met Leu Thr Pro Ala Leu Arg Phe Asp His His Thr Ile Val Gly
 450 455 460
Asn Asn Trp Ser Pro Ser Leu Asn Leu Ser Gln Gly Leu Gly Asp Asp
465 470 475 480
Phe Thr Leu Lys Met Gly Ile Ala Arg Ala Tyr Lys Ala Pro Ser Leu
     485 490 495
Tyr Gln Thr Asn Pro Asn Tyr Leu Leu Tyr Ser Lys Gly Gln Gly Cys
 500 505 510
Tyr Ala Ser Ser Asp Gly Val Gly Cys Tyr Met Met Gly Asn Asp Asp 515 520 525
Leu Lys Ala Glu Thr Ser Ile Asn Lys Glu Ile Gly Leu Glu Trp Lys
530 535 540
Arg Asp Gly Trp Leu Ala Gly Val Thr Trp Phe Arg Asn Asp Tyr Arg
545 550 555 560
Asn Lys Ile Glu Ala Gly Tyr Ala Pro Ile Gly Gln Thr Ser Thr Gly 565 570 575
Lys Val Thr Thr Asp Ile Tyr Gln Trp Glu Asn Val Pro Lys Ala Val
           585 590
        580
Val Glu Gly Leu Glu Gly Ser Leu Asn Val Pro Val Ser Asp Thr Ile
 595 600 605
Asn Trp Thr Asn Asn Ile Thr Tyr Met Leu Gln Ser Lys Asn Lys Glu
610 615 620
Thr Gly Asp Arg Leu Ser Ile Ile Pro Glu Tyr Thr Leu Asn Ser Thr 625 630 635 640
Leu Ser Trp Gln Val Arg Gln Asp Val Ser Leu Gln Ser Thr Phe Thr
           645 650
Trp Tyr Gly Lys Gln Gln Pro Lys Lys Tyr Asn Tyr Lys Gly Gln Pro
     660 665 670
Val Thr Gly Ser Glu Lys Asp Glu Val Ser Pro Tyr Ser Ile Val Gly
    675 680 685
Leu Ser Ala Thr Trp Asp Val Thr Lys Asn Val Ser Leu Thr Gly Gly
 690 695 700
Val Asp Asn Val Phe Asp Lys Arg Gln Trp Arg Ala Gly Asn Ala Gln
705 710 715 720
Thr Thr Gly Asn Thr Thr Gly Ala Tyr Met Tyr Gly Ala Gly Ala
          725 730 735
Tyr Thr Tyr Asn Glu Pro Gly Arg Thr Trp Tyr Met Ser Val Asn Thr
                      745
Arg Phe
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<210> 8214 <211> 254 <212> PRT <213> Enterobacter cloacae

<400> 8214 Cys Leu Leu Pro Leu Pro Leu Gly Glu Gly Trp Gly Glu Gly Ile Arg 1.0 Pro His Asn Thr Glu Gly Lys Thr Met His Thr Thr His Ser Thr Phe 25 20 30 Ser Leu Ala Gly His Thr Leu His Arg Ile Thr Phe Asp Pro Thr Thr 35 40 4.5 Phe Thr Asp Ala Asp Leu Leu Trp Leu Pro His His Ala Gln Leu Ala 60 5.5 Asn Ala Gly Arg Lys Arg Lys Ala Asp His Leu Ala Gly Arg Ile Ala 70 7.5 Ala Ala His Ala Leu Pro Asp Tyr Thr Met Pro Ala Ile Gly Pro Ser 85 90 9.5 Gly Glu Pro Leu Trp Pro Gln Gly Ile Ser Gly Ser Ile Thr His Ser 105 110 100 Gly Thr Gln Ala Ile Ala Val Val Thr Gln Tyr Pro Ala Leu Ile Gly 115 120 125 Ile Asp Cys Glu Thr Ile Leu Ser Glu Asn Glu Ala Arg Glu Ile Lys 135 140 Asp Gly Ile Ile Asp Thr Gln Glu Glu Pro Val Leu Ser Arg Leu Gly 145 150 155 Tyr Pro Phe Ala Leu Ala Leu Thr Leu Val Phe Ser Ala Lys Glu Ser 165 170 175 Leu Phe Lys Ala Leu Phe Pro Gln Val Gln Ala Trp Met Gly Phe Asp 180 185 190 Cys Ala Arg Val Thr Met Leu Asp Asp Lys Thr Leu Thr Leu Ala Leu 195 200 205 Thr Cys Gln Leu Ala Asp Phe Gln Glu Gly Thr Ala Phe Pro Leu His 210 215 220 Trp Gln Gln His Gly Glu Gln Val Ile Thr Leu Leu Ser His Ala Pro 230 235 Gly Asp Glu Pro Ser Arg Trp Ser Pro Gln Thr Ser Arg

<210> 8215 <211> 574 <212> PRT <213> Enterobacter cloacae

245

<400> 8215 Ser Pro Ser Arg Leu Arg Trp Val Asn Ser Ser Pro Tyr Phe Asn Arg 10 Glu Val Tyr Leu Gln Phe Asp Tyr Ile Ile Ile Gly Ala Gly Ser Ala 2.0 25 Gly Asn Val Leu Ala Thr Arg Leu Thr Glu Asp Pro Asn Thr Thr Val 35 40 Leu Leu Leu Glu Ala Gly Gly Pro Asp Tyr Arg Phe Asp Phe Arg Thr 55 60 5.0 Gln Met Pro Ala Ala Leu Ala Phe Pro Leu Gln Gly Lys Arg Tyr Asn 70 7.5 Trp Ala Tyr Glu Thr Glu Pro Glu Pro Phe Met Asn Asn Arg Arg Met 90 85 Glu Cys Gly Arg Gly Lys Gly Leu Gly Gly Ser Ser Leu Ile Asn Gly 105 110 1.00 Met Cys Tyr Val Arg Gly Asn Ala Met Asp Leu Asp Asn Trp Ala Lys

120 Glu Pro Gly Leu Glu His Trp Ser Tyr Leu Asn Cys Leu Pro Tyr Tyr 135 140 Arg Lys Ala Glu Thr Arg Asp Val Gly Pro Asn Asp Tyr His Gly Gly 155 150 Asp Gly Pro Val Ser Val Thr Thr Ser Lys Pro Gly Val Asn Pro Leu 170 175 165 Phe Glu Ala Met Val Glu Ala Gly Val Gln Ala Gly Tyr Pro Arg Thr 180 185 190 Asp Asp Leu Asn Gly Tyr Gln Gln Glu Gly Phe Gly Pro Met Asp Arg 195 200 Thr Val Thr Pro Gln Gly Arg Arg Ala Ser Thr Ala Arg Gly Tyr Leu 210 215 220 Asp Gln Ala Lys Pro Arg Pro Asn Leu Thr Ile Arg Thr His Ala Met 225 230 235 Thr Asp His Ile Ile Phe Asp Gly Lys Arg Ala Val Gly Val Glu Trp 245 250 255 Leu Glu Gly Glu Ser Thr Ile Pro Ser Lys Ala Thr Ala Lys Lys Glu 260 265 270 Val Leu Leu Cys Ala Gly Ala Ile Ala Ser Pro Gln Ile Leu Gln Arg 275 280 285 Ser Gly Val Gly Asn Ala Glu Leu Leu Lys Gln Phe Asp Ile Pro Leu 290 295 300 Val His Asp Leu Pro Gly Val Gly Glu Asn Leu Gln Asp His Leu Glu 305 310 315 320 Met Tyr Leu Gln Tyr Glu Cys Lys Glu Pro Val Ser Leu Tyr Pro Ala 325 330 335 Leu Gln Trp Trp Asn Gln Pro Lys Ile Gly Ala Glu Trp Leu Phe Gly 340 345 350 Gly Thr Gly Val Gly Ala Ser Asn His Phe Glu Ala Gly Gly Phe Ile 355 360 365 Ard Ser Ard Glu Glu Phe Glu Trp Pro Asn Ile Gln Tyr His Phe Leu 370 375 380 Pro Val Ala Ile Asn Tyr Asn Gly Ser Asn Ala Val Lys Glu His Gly 385 390 395 400 Phe Gln Cys His Val Gly Ser Met Arg Ser Pro Ser Arg Gly His Val 405 410 415 Arg Ile Lys Ser Arg Asp Pro His Gln His Pro Ala Ile Leu Phe Asn 420 425 430 Tyr Met Ser His Glu Gln Asp Trp Gln Glu Phe Arg Asp Ala Ile Arg 435 440 445 The Thr Arg Glu Ile Met His Gln Pro Ala Leu Asp Lys Tyr Arg Gly 455 460 Arg Glu Ile Ser Pro Gly Val Glu Cys Gln Thr Asp Glu Gln Leu Asp 470 475 480 Glu Phe Val Arg Asn His Ala Glu Thr Ala Phe His Pro Cys Gly Thr 485 490 495 Cys Lys Met Gly Tyr Asp Glu Met Ala Val Val Asp Gly Glu Gly Arg 500 505 510 Val His Gly Leu Glu Gly Leu Arg Val Val Asp Ala Ser Ile Met Pro 515 520 525 Gln Ile Ile Thr Gly Asn Leu Asn Ala Thr Thr Ile Met Ile Gly Glu 530 535 540 Lys Ile Ala Asp Ala Ile Arg Gly Arg Glu Pro Leu Ala Lys Ser Thr 550 555 560 Ala Ala Tyr Tyr Val Ala Asn Gly Ala Pro Val Arg Arg 570 565

<210> 8216 <211> 145 <212> PRT <213> Enterobacter cloacae

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<400> 8216
Ser Thr Phe Glu Val Val Met Lys Lys Ile Ala Cys Leu Ser Ala Leu
                               10
Ala Ala Val Leu Ala Val Ser Ala Gly Thr Ala Val Ala Ala Thr Ser
                            25
                                             3.0
Thr Val Thr Gly Gly Tyr Ala Gln Ser Asp Met Gln Gly Val Met Asn
                       4.0
                                       4.5
Lys Thr Asn Gly Phe Asn Leu Lys Tyr Arg Tyr Glu Gln Asp Asn Asn
                   5.5
                                   60
Pro Leu Gly Val Ile Gly Ser Phe Thr Tyr Thr Glu Lys Asp Arg Thr
                7.0
                               75
Glu Asn Gly Ser Tyr Asn Lys Gly Gln Tyr Tyr Gly Ile Thr Ala Gly
            85
                  90
Pro Ala Tyr Arg Leu Asn Asp Trp Ala Ser Ile Tyr Gly Val Val Gly
         100 105
Val Gly Tyr Gly Lys Phe Gln Gln Thr Glu Asn Gln Gly Leu Asn Arg
   115 120 125
Thr Ala Ser Asn Ser Asp Tyr Gly Phe Ser Tyr Gly Ala Gly Met Gln
Phe
145
<210> 8217
<211> 177
<212> PRT
<213> Enterobacter cloacae
<400> 8217
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Ala Asp Pro Ile Leu Asn Leu Met Glu Ser Thr Met Leu Asn Gln Leu 10 Glu Ser Leu Thr Glu Arg Val Gly Gly Ser Asn Thr Leu Val Asp Arg Trp Leu His Val Arg Lys His Leu Leu Val Ala Tyr Tyr Asn Leu Val 40 4.5 Gly Leu Lys Pro Gly Lys Glu Ser Phe Met Arg Leu Asn Glu Lys Ala 55 60 Leu Asp Asp Phe Cys Gln Ser Leu Val Asp Tyr Leu Ser Asp Gly His 70 Phe Asn Leu Tyr Glu Arg Ile Ile Arg Glu Met Glu Gly Thr Thr Pro 90 Tyr Leu Ala Ala Ser Lys Leu Cys Pro Leu Leu Glu Ala Asn Thr Gln 100 105 110 Arg Ile Met Asp Tyr Tyr Asp Ser Ala Leu Glu Asn Ala Ile Asp His 125 115 120 Asp Asn Tyr Leu Glu Phe Gln Gln Ala Leu Ser Asp Leu Gly Glu Ala 135 140 Leu Glu Glu Arg Phe Thr Leu Glu Asp Lys Leu Ile Ala Leu Val Leu 145 150 155 Asp Asn Asn Leu Asn Ile Ser Thr Ser Asp Asn Val Ala Arg Pro Ala 165 170

<210> 8218 <211> 633

<211> 633 <212> PRT

<213> Enterobacter cloacae

Ala Met Ser Thr Ala Lys Leu Thr Arg Arg Glu Gln Arg Glu His Ala 1.0 Gln Arg Phe Ile Asp Thr Leu Glu Gly Thr Ala Phe Pro Asn Ser Lys 25 Arg Ile Tyr Ile Ser Gly Ser Gln Ala Asp Ile Arg Val Pro Met Arg 35 4.0 45 Glu Ile Gln Leu Ser Pro Thr Leu Ile Gly Gly Ser Lys Asp Asn Pro 55 60 Gln Phe Glu Asp Asn Glu Ala Val Pro Val Tyr Asp Thr Ser Gly Pro 70 75 Tyr Gly Asp Pro Asp Val Ala Ile Asn Val Gln Gln Gly Leu Ala Lys 85 90 Leu Arg Gln Pro Trp Ile Glu Ala Arg Asn Asp Cys Glu Glu Leu Ser 100 105 110 Val Arg Ser Ser Ala Tyr Thr Lys Glu Arg Leu Ala Asp Asp Gly Leu 115 120 125 Asp Ala Leu Arg Phe Thr Gly Leu Leu Thr Pro Lys Arg Ala Lys Ala 130 135 140 Gly Lys Cys Val Thr Gln Leu His Tyr Ala Arg Gln Gly Ile Val Thr 150 155 Pro Glu Met Glu Phe Ile Ala Ile Arg Glu Asn Met Gly Arg Glu Arg 165 170 175 Ile Arg Ser Glu Val Leu Arg His Gln His Pro Gly Glu Gly Phe Gly 180 185 190 Ala Arg Leu Pro Glu Asn Ile Thr Pro Glu Phe Val Arg Asp Glu Val 200 205 Ala Ala Gly Arg Ala Ile Ile Pro Ala Asn Ile Asn His Pro Glu Ser 210 215 220 Glu Pro Met Ile Ile Gly Arg Asn Phe Leu Val Lys Val Asn Ala Asn 230 235 Ile Gly Asn Ser Ala Val Thr Ser Ser Ile Glu Glu Glu Val Glu Lys 245 250 255 Leu Val Trp Ser Thr Arg Trp Gly Ala Asp Thr Val Met Asp Leu Ser 260 265 270 Thr Gly Arg Tyr Ile His Glu Tnr Arg Glu Trp Ile Leu Arg Asn Ser 275 280 285 Pro Val Pro Ile Gly Thr Val Pro Ile Tyr Gln Ala Leu Glu Lys Val 290 295 300 Asn Gly Ile Ala Glu Asn Leu Thr Trp Glu Ala Phe Arg Asp Thr Leu 310 315 Leu Glu Gln Ala Glu Gln Gly Val Asp Tyr Phe Thr Ile His Ala Gly 325 330 Val Leu Leu Arg Tyr Val Pro Met Thr Ala Lys Arg Leu Thr Gly Ile 340 345 350 Val Ser Arg Gly Gly Ser Ile Met Ala Lys Trp Cys Leu Ser His His 355 360 365 Gln Glu Asn Phe Leu Tyr Glu His Phe Arg Glu Ile Cys Glu Ile Cys 375 380 Ala Ala Tyr Asp Val Ser Leu Ser Leu Gly Asp Gly Leu Arg Pro Gly 390 395 Ser Ile Arg Asp Ala Asn Asp Glu Ala Gln Phe Ala Glu Leu His Thr 405 410 Leu Gly Glu Leu Thr Lys Ile Ala Trp Glu Tyr Asp Val Gln Val Met 420 425 Ile Glu Gly Pro Gly His Val Pro Met Gln Met Ile Arg Arg Asn Met 435 440 445 Thr Glu Glu Leu Glu His Cys His Glu Ala Pro Phe Tyr Thr Leu Gly 455 4.60 Pro Leu Thr Thr Asp Ile Ala Pro Gly Tyr Asp His Phe Thr Ser Gly 470 475 Ile Gly Ala Ala Met Ile Gly Trp Phe Gly Cys Ala Met Leu Cys Tyr

```
490
Val Thr Pro Lys Glu His Leu Gly Leu Pro Asn Lys Glu Asp Val Lys
                   505 510
        500
Gln Gly Leu Ile Thr Tyr Lys Ile Ala Ala His Ala Ala Asp Leu Ala
             520 525
Lys Gly His Pro Gly Ala Gln Ile Arg Asp Asn Ala Met Ser Lys Ala
  530
        535 540
Arg Phe Glu Phe Arg Trp Glu Asp Gln Phe Asn Leu Ala Leu Asp Pro
    550 555 560
Phe Thr Ala Arg Ala Tyr His Asp Glu Thr Leu Pro Gln Glu Ser Gly
       565 570 575
Lys Val Ala His Phe Cys Ser Met Cys Gly Pro Lys Phe Cys Ser Met
      580 585 590
Lys Ile Ser Gln Glu Val Arg Asp Tyr Ala Ala Ala Gln Thr Ile Glu
   595 600
Val Gly Met Ala Asp Met Ser Glu Thr Phe Arg Ala Lys Gly Gly Glu
 610 615
Ile Tyr Leu Lys Lys Glu Glu Ala
<210> 8219
<211> 315
<212> PRT
<213> Enterobacter cloacae
<400> 8219
Arg Ser Trp Arg Pro Thr Leu Ser Ala Leu Pro Ile Thr Pro Pro Leu
                           10
Pro Ser Ala Gly Ser Ala Leu Asn Ala Arg Pro Pro Cys Trp Lys Pro
20
                 25
                                       30
Ala Ser Ala Val Ser Pro Ser Ser Ala Leu Ser Pro Arg Pro Gln Thr
                    40
Gly Arg Pro Pro Pro His Gly Phe Tyr Asn Trp Gln Glu Gln Ala Met
50 55
                      60
Lys Asp Arg Asp Phe Met Arg Tyr Ser Arg Gln Ile Leu Leu Glu Asp
            70
                      75
                                            80
Ile Ala Ile Asp Gly Gin Gin Lys Leu Leu Ala Ser Arg Val Leu Ile
                90
Val Gly Leu Gly Gly Leu Gly Ala Pro Ala Ala Leu Tyr Leu Ala Gly
        100
                      105
                                       110
Ala Gly Val Gly Thr Leu Val Leu Ala Asp Asp Asp Glu Val His Leu
     115 120
                                    125
Ser Asn Leu Gln Arg Gln Ile Leu Phe Thr Thr Glu Asp Val Asn Gln
 130 135
                                 140
Pro Lys Ala His Val Thr Arg Gln Arg Leu Asn Gln Leu Asn Pro Asp
145 150
                              155
Ile Glu Leu Val Ala Leu Gln Thr Arg Leu Ser Gly Glu Asp Leu Gln
           165
                           170
Arg Glu Val Ala Leu Ala Asp Val Val Leu Asp Cys Thr Asp Asn Met
        180 185
                                       190
Ala Thr Arg Gln Ala Ile Asn Ala Val Cys Val Ala Gln Asn Thr Pro
 195
                    200
Leu Ile Thr Ala Ser Ala Val Gly Phe Gly Gly Gln Ile Met Val Leu
  210
                 215
                                 220
Thr Pro Pro Trp Ala Gln Gly Cys Tyr Arg Cys Leu Trp Pro Asp Glu
              230
                              235
Ala Glu Pro Glu Arg Asn Cys Arg Thr Ala Gly Ile Leu Gly Pro Val
           245
                           250
                                          255
Val Gly Val Met Gly Thr Leu Gln Ala Leu Glu Ala Ile Lys Leu Leu
               265
Ser Gly Met Glu Thr Glu Arg Asn Thr Leu Arg Leu Phe Asp Ala Arg
```

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280
                                               285
Ser Ser Gly Trp Arg His Leu Val Leu Asn Arg Ala Ser His Cys Pro
 290
                   295
Val Cys Gly Gly Arg Asn Ala His Ser Val
                   310
<210> 8220
<211> 119
<212> PRT
<213> Enterobacter cloacae
<400> 8220
Cys Arg Thr Gly Lys Ser Ala Gln Thr Ser Gly Val Ile Met Glu Asp
                             10
Leu Glu Thr Thr Ile Met Glu Leu Leu Val Asn Ala Gly Ala Ala Arg
        20
                              25
Ser Ala Ala Leu Thr Ala Leu Gln Met Ala Arg Lys Gly Asp Phe Asp
 35
                           4.0
Glu Ala Glu Lys Ala Met Glu Glu Ser Arg Glu Tyr Val Lys His Ala
                       55
His Thr Ile Gln Thr Gln Leu Ile Gly Leu Asp Glu Gly Thr Gly Lys
65 70
                                      75
                                                          8.0
Leu Pro Val Asn Leu Ile Thr Val His Ser Gln Asp His Leu Met Asn
              8.5
                                  90
Ala Met Val Ile Gln Asp Leu Ala Gly Asp Met Ile Glu Leu Tyr Arg
          100
Arg Ile Pro Leu Val Asn
<210> 8221
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 8221
Thr Ala Pro Ala Thr Ala Arg Tyr Ala Glu Ala Ala Met Arg Ile Leu
                                  10
Phe Asn Asp Glu Pro Met Thr Cys Asp Asp Asp Leu Thr Val Ala Ala
                              25
                                                   30
Leu Leu Asp Thr Leu Arg Gln Leu Lys Pro Gly Thr Ala Leu Ala Leu
                          4.0
                                              45
Asn Gln Gln Ile Leu Pro Arg Glu Arg Trp Glu His Gln Gln Val Asn
                      55
Glu Gly Asp Gln Ile Leu Leu Phe Gln Val Ile Ala Gly Gly
<210> 8222
<211> 600
<212> PRT
<213> Enterobacter cloacae
<400> 8222
Glu Arg Gln Pro Ala Gly Asp Thr Gly Asp Glu Ala Arg Gly Phe Ala
Ser Ala Gln Arg Cys His Thr Cys Ala Val Thr Gly Gly Arg Arg Asp
                              25
Ala Leu Thr Glu Tyr Leu Arg Cys Glu Asn Gly Arg Gly Ser Asn Phe
                           40
Arg Cys Ala Thr Gly Ala Gly Ser Ala Arg His Pro Leu Ala Glu Ala
                       55
Gly Asn Ser Ser Gly Arg Pro Leu Ala Val Ala Arg Ser Asp Arg Asn
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75 Pro Glu Ser Gly Arg Glu Ala Gly Ala Ala Gly Ile Tyr Arg Pro Ala 90 Leu Leu Arg Cys Arg Pro Arg Ala Val Gln Ala Ser Gly Arg Gly Arg 100 105 110 Leu Arg Gly Arg Asn Ala Val Arg Gly Thr His Trp Leu Gln Pro Gly 115 120 125 Thr Gly Asp Pro Arg Asp Ala Gly Asp His His Arg Ala Gly Asp Arg 130 135 140 Ala Arg Gly Gly Cys Gly His Arg Arg Thr Gln Ser Arg Arg Ala 150 155 Gly Ala Gly Asp Gly Gly Arg Cys Gly Ala Gly Gln Tyr Arg Asp Cys 165 Gly Gly Arg Arg Pro Gly Asp Asp Gly Ala Cys Val Pro Pro Cys Gly 180 185 190 Gly Val Arg Ser Ala Gly Thr Pro Val Arg Pro Arg Leu Ala Leu Arg 195 200 205 Ser Gly Ala Gly His Gln Pro Ala Asp Arg Phe Ser Gly Gly Ala Leu 210 215 220 Met Ala Thr Phe Thr Asp Arg Trp Arg Gln Leu Asn Trp Asp Asp Ile 225 230 235 240 Ala Leu Arg Ile Asn Ser Lys Thr Ser Ala Asp Val Glu Arg Ala Leu 245 250 Thr Ala Lys His Leu Thr Arg Glu Asp Leu Met Ala Leu Leu Ser Pro 260 265 270 Ala Ala Gly Ala Tyr Leu Glu Pro Met Ala Gln Arg Ala Gln Arg Leu 275 280 285 Thr Arg Gln Arg Phe Gly Asn Thr Val Ser Phe Tyr Val Pro Leu Tyr 300 290 295 Leu Ser Asn Leu Cys Ala Asn Asp Cys Thr Tyr Cys Gly Phe Ser Met 310 315 Ser Asn Arg Ile Lys Arg Lys Thr Leu Asp Glu His Glu Ile Ala Arg 325 330 Glu Cys Ala Ala Ile Arg Glu Met Gly Phe Glu His Leu Leu Val 340 345 350 Thr Gly Glu His Gln Gly Lys Val Gly Met Asp Tyr Phe Arg Gln His 355 360 365 Leu Pro Ala Ile Arg Arg Glu Phe Ala Ser Leu Gln Met Glu Val Gln 375 380 Pro Leu Ser Gln Glu Glu Tyr Ala Glu Leu Lys Thr Leu Gly Leu Asp 390 395 Gly Val Met Val Tyr Gln Glu Thr Tyr His Glu Ala Thr Tyr Ala Arg 405 410 His His Leu Lys Gly Lys Lys Gln Asp Phe Ile Phe Arg Leu Glu Thr 420 425 Pro Asp Arg Leu Gly Arg Ala Gly Ile Asp Lys Ile Gly Leu Gly Ala 435 440 Leu Ile Gly Leu Ser Asp Ser Trp Arg Val Asp Cys Tyr Met Val Ala 455 460 Glu His Leu Leu Trp Leu Gln Gln Arg Tyr Trp Gln Ser Arg Tyr Ser 470 475 Ile Ser Phe Pro Arg Leu Arg Pro Cys Thr Gly Gly Val Glu Pro Ala 485 490 495 Ser Leu Met Asp Glu Arg Gln Leu Val Gln Thr Leu Cys Ala Phe Arg 500 505 510Leu Phe Ala Pro Glu Val Glu Leu Ser Leu Ser Thr Arg Glu Ser Pro 515 520 Ala Phe Arg Asp Arg Ala Ile Pro Leu Ala Ile Asn Asn Val Ser Ala 535 540 Phe Ser Lys Thr Gln Pro Gly Gly Tyr Ala Asp Asp His Pro Glu Leu 550

370

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Glu Gln Phe Ala Pro His Asp Gly Arg Arg Pro Glu Ala Val Ala Glu
             565
                            570
Ala Leu Thr Ala Gln Gly Leu Gln Pro Val Trp Lys Asp Trp Asp Ser
          580
                           585
Trp Leu Gly Arg Ala Ser His
      595
<210> 8223
<211> 552
<212> PRT
<213> Enterobacter cloacae
<400> 8223
Ile Ile Ser Ser Val Ile Ala Phe Cys Ile Ile Tyr Tyr Gln Gln Pro
                              10
Asp Ser Asp Tyr Ala Glu Gly Ile Asp Arg Arg Asn Ala Ser Thr Ile
                         25
       20
Trp Ile Asp Val Gln Leu Met Ala Leu His Ser Lys Lys Leu Ser Phe
 35
           40
Thr Arg Pro Ile Met Val Ser Phe Ala Gly Ile Leu Leu Ser Phe Ala
                    55
Leu Ile Ala Ile Leu Val Ile Leu Ser Gln Arg Lys Asp Phe Leu Glu
                 70
                                7.5
Asp Tyr His Lys Ile Asn Gly Asn Phe Thr His Asn Leu Ala Val Asn
             8.5
                   90
Tyr Thr Glu Ser Ile Leu Arg Glu Asn Asp Tyr Ile Leu Gly Arg Ala
         100
              105 110
Ala Met Tyr Phe Ala Arg Asn Asp Arg Val Asn Gln Thr Ile Asn Ile
 115 120
                                          125
Asp Pro Thr His Gly Leu Gln Met Leu Met His Leu Gln Asn Leu Met
                    135
                                      140
Pro Thr Val Ser Ser Ile Ser Leu Ala Asp Thr Val Gly Arg His Leu
                150
                                  155
                                                    160
Arg Ala Pro Glu Val Leu Pro Thr Glu Lys Gly Lys Ser Phe Asp Ala
             165 170
Arg Thr Arg Pro Trp Phe Ile Gly Gln Ala Glu Ala Ser Asn Phe Pro
         180 185
                                              190
His Tyr Thr Arg Pro Tyr Leu Asp Tyr Phe Thr Gln His Pro Thr Val
      195
                        200
                                          205
Thr Leu Tyr Lys Pro Val Ile Ser Pro Glu Gly Arg Leu Lys Gly Thr
                  215
                                       220
Leu Ala Phe His Leu Asp Leu Thr Ser Met Gly Tyr Thr Leu Arg Gln
                 230
                                   235
                                                     240
Met Val Ala Pro Val Gln Gly Glu Phe Phe Val Val Glu Arg Asp Gly
              245
                               250
                                                 255
Ala Val Val Leu His Pro Asp Tnr Gly Ala Leu Phe Lys Gln Tyr Val
                           265
          260
Ser Glu Ala Leu Met Asp Lys Met Thr Ser Gly Glu Gly His Leu Phe
      275
                        280
Asp Pro Lys Ser Lys Thr Trp Tyr Tyr Tyr Tyr Ser Phe Thr Asn Pro
                     295
                                       300
Asp Trp Phe Val Ile Tyr Arg Val Ser Asp Ala Thr Leu Thr Val Ile
                 310
                                   315
Thr Arg His Glu Thr Thr Val Val Gly Trp Gly Phe Ala Leu Ala Ala
              325
                               330
Ile Ile Ile Leu Phe Gly Leu Tyr Leu Arg His Ala Ser Arg Ser
          340
                            345
                                              350
Val Leu Met Asn Ile Ile Asn Ala Ile Lys Thr Gly Asp Val Asn Gln
      355
                       360
Ala Pro Arg Leu Glu Ala Met Leu Ser His Thr Ile Arg Thr Asn Lys
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375

380

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Glu Arg Glu Leu Ala Tyr Val Arg Gln Ala Thr His Asp Ala Leu Thr
385
                 390
                                395
Gly Cys Lys Asn Arg Arg Ala Phe Asp Asn Asp Val Asp Glu Leu Leu
             405
                          410 415
Thr Ala His Gln Pro Phe Val Leu Ala Leu Val Asp Ile Asp Asn Phe
          420
                      425
Lys Ser Ile Asn Asp Thr Trp Gly His Leu Ser Gly Asp Ile Val Leu
      435
                        440 445
Arg Asn Val Ala Arg Glu Gly Ile Gln Ile Met Gln Pro His His Val
        455 460
  450
Ser Val Tyr Arg Tyr Gly Gly Glu Glu Phe Gly Val Ile Phe Pro Ala
        470 475
Glu Leu Met Asn Ser Ala His Ala Leu Leu Glu Ala Trp Arg Thr Ala
        485 490
Val Glu Lys Arg Thr Trp Arg Glu Glu Asn Leu Arg Val Thr Phe Ser
        500
                           505
                                             510
Ala Gly Thr Gly Glu Trp His Phe Glu Pro Leu Glu Gln Phe Ile Gly
      515
                       520 525
Ser Val Asp Glu Ala Leu Tyr Thr Ala Lys Gln Gln Gly Lys Asn Arg
530 535
                                      540
Ile Val Ser Thr Ala Ser Arg
545
<210> 8224
<211> 114
<212> PRT
<213> Enterobacter cloacae
<400> 8224
Leu Ser Ile Asn Thr Cys Arg Ser Arg Leu Thr Met Lys Asn Ile Val
                               10
Leu Cys Cys Ala Ala Gly Met Ser Thr Ser Met Leu Val Gln Arg Met
         20
                           25
Lys Asp Ala Ala Gln Lys Lys Gly Val Glu Val Thr Ile Lys Ala Val
                        40
Pro Val Ala Glu Phe Lys Asp Asn lie Ala Thr Ala Asp Ile Val Leu
                    55
Leu Gly Pro Gln Val Lys Tyr Glu Gln Ala Lys Leu Gln Ala Gln Ala
                 70
                                  75
Asp Pro Leu Gly Lys Lys Val Ala Val Ile Asp Met Met Asp Tyr Gly
             8.5
                         90
Met Met Lys Gly Asp Ala Val Leu Glu Lys Ala Leu Lys Leu Leu Glu
          100
                           105
Ser
<210> 8225
<211> 578
<212> PRT
<213> Enterobacter cloacae
<400> 8225
Thr Leu Ile Ser Thr Pro Gly Glu Asn Val Phe Val Lys Met Leu Ala
                               10
Leu Tyr Lys Asp Ala Ser Ser Gly Val Leu Asp Glu Phe Phe Thr Gly
                           25
          20
Lys Ile His Leu Thr Leu Ser Val Ile Val Lys Ser Arg Gly Phe Thr
                        40
Met Gln Gln Arg Arg Pro Val Arg Arg Ala Leu Leu Ser Val Ser Asp
                    55
Lys Ala Gly Ile Val Glu Phe Ala Gln Ala Leu Ser Ala Arg Gly Val
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Glu Leu Leu Ser Thr Gly Gly Thr Ala Arg Leu Leu Ala Glu Lys Gly 85 90 Leu Pro Val Thr Glu Val Ser Asp Tyr Thr Gly Phe Pro Glu Met Met 100 105 110 Asp Gly Arg Val Lys Thr Leu His Pro Lys Val His Gly Gly Ile Leu 115 120 125 Gly Arg Arg Gly Gln Asp Asp Ala Ile Met Glu Gln His Asp Ile Ala 135 140 Pro Ile Asp Met Val Val Val Asn Leu Tyr Pro Phe Ala Gln Thr Val 150 155 160 Ala Arg Glu Gly Cys Ser Leu Glu Asp Ala Val Glu Asn Ile Asp Ile 165 170 175 Gly Gly Pro Thr Met Val Arg Ser Ala Ala Lys Asn His Lys Asp Val 180 185 190 Ala Ile Val Val Lys Ser Ser Asp Tyr Asn Ala Ile Ile Asn Glu Met 195 200 205 Asp Ala Asn Glu Arg Ser Leu Thr Leu Glu Thr Arg Phe Asp Leu Ala 210 215 220 Ile Lys Ala Phe Glu His Thr Ala Ala Tyr Asp Ser Met Ile Ala Asn 230 235 Tyr Phe Gly Ser Leu Val Pro Ala Tyr His Gly Glu Ser Lys Asp Pro 245 250 255 Ser Gly Arg Phe Pro Arg Thr Leu Asn Leu Asn Phe Ile Lys Lys Gln 260 265 270 Asp Met Arg Tyr Gly Glu Asn Ser His Gln Gln Ala Ala Phe Tyr Ile 275 280 285 Glu Glu Glu Val Lys Glu Ala Ser Val Ala Thr Ala Gln Gln Val Gln 290 295 300 Gly Lys Ala Leu Ser Tyr Asn Asn Ile Ala Asp Thr Asp Ala Ala Leu 305 310 315 Glu Cys Val Lys Glu Phe Ser Glu Pro Ala Cys Val Ile Val Lys His 325 330 335 Ala Asn Pro Cys Gly Val Ala Val Ser Thr Ser Ile Leu Asp Ala Tyr 340 345 350 Asp Arg Ala Tyr Lys Thr Asp Pro Thr Ser Ala Phe Gly Gly Ile Ile 355 360 365 Ala Phe Asn Arg Glu Leu Asp Ala Glu Thr Ala Gln Ala Ile Ile Ser 370 375 380 Arg Gln Phe Val Glu Val Ile Ile Ala Pro Ser Ala Ser Glu Glu Ala 385 390 395 Leu Lys Ile Thr Ala Ala Lys Gln Asn Val Arg Val Leu Val Cys Gly 405 410 Gln Trp Ala Glu Arg Val Pro Gly Leu Asp Phe Lys Arg Val Asn Gly 420 425 4.30 Gly Leu Leu Val Gln Asp Arg Asp Leu Gly Met Val Thr Glu Ala Asp 435 440 445 Leu Arg Val Val Thr Lys Arg Gln Pro Thr Glu Gln Glu Leu Arg Asp 460 450 455 Ala Leu Phe Cys Trp Lys Val Ala Lys Phe Val Lys Ser Asn Ala Ile 465 470 475 Val Tyr Ala Lys Glu Asn Met Thr Ile Gly Ile Gly Ala Gly Gln Met 485 490 Ser Arg Val Tyr Ser Ala Lys Ile Ala Gly Ile Lys Ala Gly Asp Glu 505 510 Gly Leu Glu Val Lys Gly Ser Ala Met Ala Ser Asp Ala Phe Phe Pro 515 520 Phe Arg Asp Gly Ile Asp Ala Ala Ala Ala Val Gly Ile Thr Cys Val 535 540 Ile Gln Pro Gly Gly Ser Ile Arg Asp Asp Glu Val Ile Ala Ala Ala 555

Asp Glu His Gly Ile Ala Met Ile Phe Thr Asp Met Arg His Phe Arg 565 570 His

<210> 8226 <211> 436 <212> PRT <213> Enterobacter cloacae

<400> 8226 Phe Pro Glu Gln Lys Met Lys Val Leu Val Ile Gly Asn Gly Gly Arg 1.0 Glu His Ala Leu Ala Trp Lys Ala Ala Gln Ser Pro Gln Val Glu Thr 20 25 Val Phe Val Ala Pro Gly Asn Ala Gly Thr Ala Leu Glu Pro Ala Leu 35 40 45 Gln Asn Val Ala Ile Gly Val Thr Asp Ile Pro Ala Leu Leu Ser Phe 55 60 Ala Gln Thr Glu Asn Ile Asp Leu Thr Ile Val Gly Pro Glu Ala Pro 65 70 75 Leu Val Ile Gly Val Val Asp Ala Phe Arg Ala Ala Gly Leu Lys Ile 85 90 Phe Gly Pro Thr Glu Gly Ala Ala Gln Leu Glu Gly Ser Lys Ala Phe 100 105 110 Thr Lys Asp Phe Leu Ala Arg His Asn Ile Pro Thr Ala Glu Tyr Gln 115 120 125 Asn Phe Thr Glu Val Glu Pro Ala Leu Ala Trp Leu Arg Glu Lys Gly 130 135 140 Ala Pro Ile Val Ile Lys Ala Asp Gly Leu Ala Ala Gly Lys Gly Val 150 155 Ile Val Ala Met Thr Leu Glu Glu Ala Glu Ala Ala Val Gln Asp Met 165 170 175 Leu Ala Gly Asn Ala Phe Gly Asp Ala Gly His Arg Ile Val Ile Glu 180 185 190 Glu Phe Leu Asp Gly Glu Glu Ala Ser Phe Ile Val Met Val Asp Gly 195 200 205 Glu His Val Leu Pro Met Ala Thr Ser Gln Asp His Lys Arg Val Gly 210 215 220 Asn Gly Asp Thr Gly Pro Asn Thr Gly Gly Met Gly Ala Tyr Ser Pro 225 230 235 Ala Pro Val Val Thr Asp Glu Val His Gln Arg Thr Met Asp Arg Ile 245 250 255 Ile Trp Pro Thr Val Lys Gly Met Ala Ala Glu Gly Asn Thr Tyr Thr 265 270 Gly Phe Leu Tyr Ala Gly Leu Met Ile Asp Lys Gln Gly Asn Pro Lys 275 280 285 Val Ile Glu Phe Asn Cys Arg Phe Gly Asp Pro Glu Thr Gln Pro Ile 290 295 Met Leu Arg Met Lys Ser Asp Leu Val Asp Leu Cys Leu Ala Ala Cys 310 315 Glu Gly Lys Leu Asp Glu Lys Thr Ser Glu Trp Asp Glu Arg Ala Ser 325 330 Leu Gly Val Val Ile Ala Ala Gly Gly Tyr Pro Gly Ser Tyr Asn Thr 340 345 350 Gly Asp Glu Ile His Gly Leu Pro Leu Glu Glu Ile Asp Gly Ala Lys 355 360 365 Val Phe His Ala Gly Thr Lys Leu Ala Asp Asp Asp Arg Val Leu Thr 375 380 Asn Gly Gly Arg Val Leu Cys Ala Thr Ala Leu Gly Gln Thr Val Ala

395

390

```
Glu Ala Gln Lys Arg Ala Tyr Ala Leu Met Ala Asp Ile His Trp Asn
           405
                               410
Gly Ser Phe Ser Arg Gln Asp Ile Gly Tyr Arg Ala Ile Ala Arg Glu
                  425
Gln Gly Glu
     435
<210> 8227
<211> 239
<212> PRT
<213> Enterobacter cloacae
<400> 8227
Ser Arg His Gly Gly His Val Gly Asn Leu Pro Arg Glu Arg Arg Arg
                               1.0
Asn Leu Pro Gln Lys Arg Gly Gly Ile Met Tyr Gln Pro Asp Phe Pro
          20
                           2.5
Pro Val Pro Phe Arg Leu Gly Leu Tyr Pro Val Val Asp Ser Val Ala
      35
                       40
Trp Ile Ala Arg Leu Leu Glu Ala Gly Val Arg Thr Ile Gln Leu Arg
              5.5
Ile Lys Asp Lys Arg Asp Glu Glu Val Glu Ala Asp Val Ile Ala Ala
                70
                                  7.5
Ile Ala Leu Gly Arg Arg Tyr His Ala Arg Leu Phe Ile Asn Asp Tyr
             85
                      90
                                                9.5
Trp Arg Leu Ala Val Lys His Gln Ala Tyr Gly Val His Leu Gly Gln
   100
                           105
                                             110
Glu Asp Leu Glu Thr Thr Asp Leu Asn Ala Ile Arg Asp Val Gly Leu
 115
                        120
                                         125
Arg Leu Gly Val Ser Thr His Asp Asp Met Glu Ile Asp Val Ala Leu
 130 135
                                   140
Ala Ala Arg Pro Ser Tyr Ile Ala Leu Gly His Val Phe Pro Thr Gln
145 150 155
Thr Lys Gln Met Pro Ser Ala Pro Gln Gly Leu Thr Gln Leu Ala Ala
        165 170
His Val Lys Arg Leu Ala Asp Tyr Pro Thr Val Ala Ile Gly Gly Ile
          180
                        185
                                            190
Ser Leu Glu Arg Ala Pro Ala Val Leu Glu Thr Gly Val Gly Ser Ile
    195
                       200 205
Ala Val Val Ser Ala Ile Thr Gln Ala Ala Asp Trp Gln Ala Ala Thr
 210
                    215 220
Ala Arg Leu Leu Gln Leu Ala Gly Ala Gly Asp Glu Arg Ser
                                   235
<210> 8228
<211> 295
<212> PRT
<213> Enterobacter cloacae
<400> 8228
Ser Arg Glu Arg Arg Trp Arg Ser Ile Asn Arg Ser Cys Arg Ala Ser
                               1.0
Gly Gly Asn Ile Ser Arg Ser Met Lys Ala Thr Arg Ser Cys Cys Phe
Arg Leu Ser Gln Gly Ala Glu Met Leu Arg Ile Ala Asp Lys Val Phe
                        40
                                         45
Asp Ser His Leu Phe Thr Gly Thr Gly Lys Phe Ala Ser Pro Gln Leu
                  5.5
Met Val Asp Ala Ile Arg Glu Ser Gly Ser Gln Leu Val Thr Leu Ala
                7.0
                                  75
Met Lys Arg Val Asp Leu Arg Gln His Asn Asp Ala Ile Leu Ala Pro
```

90 Leu Arg Glu Ala Gly Val Thr Les Leu Pro Asn Thr Ser Gly Ala Lys 100 105 110 Thr Ala Glu Glu Ala Ile Phe Ala Ala Gln Leu Ala Arg Glu Ala Leu 120 125 Gly Thr Arg Trp Leu Lys Leu Glu Ile His Pro Asp Ala Arg Trp Leu 135 140 Leu Pro Asp Pro Ile Glu Thr Leu Lys Ala Ala Glu Lys Leu Val Gln 150 155 Gln Gly Phe Thr Val Leu Pro Tyr Cys Gly Ala Asp Pro Val Leu Cys 165 170 Lys Arg Leu Glu Glu Val Gly Cys Ala Ala Val Met Pro Leu Gly Ala 180 185 190 Pro Ile Gly Ser Asn Gln Gly Leu Glu Thr Arg Ala Met Leu Glu Ile 195 200 205 Ile Ile Glu Gln Ala Thr Val Pro Val Val Val Asp Ala Gly Ile Gly 210 215 220 Val Pro Ser His Ala Ala Gln Ala Leu Glu Met Gly Ala Asp Ala Val 225 230 235 Leu Val Asn Thr Ala Ile Ala Val Ala Asp Asp Pro Val Met Met Ala 245 250 255 Arg Ala Phe Arg Leu Ala Val Glu Ser Gly Leu Leu Ala Arg Gln Ser 260 265 Gly Pro Gly Ser Arg Cys Val Gln Ala Gln Ala Thr Ser Pro Leu Thr 280 Asp Phe Leu Glu Ala Leu

<210> 8229 <211> 1389 <212> PRT

<213> Enterobacter cloacae

<400> 8229 Ile Ala Met Lys Trp Phe Lys Arg Asp Ser Asn Arg Tyr Cys Gly Lys 10 Tyr Ser Ile Phe Arg Ser Thr Lys Trp Cys Cys Thr Asn Cys Pro Phe 20 2.5 Val Gly Gln Met Gly Arg Leu Val Ser Glu Leu Arg Asn Pro Met Val 40 Tyr Ser Tyr Thr Glu Lys Lys Arg Ile Arg Lys Asp Phe Gly Lys Arg 55 Pro Gln Val Leu Asp Ile Pro Tyr Leu Leu Ser Ile Gln Leu Asp Ser 70 7.5 8.0 Phe Gln Lys Phe Ile Glu Gln Asp Pro Glu Gly Gln Tyr Gly Leu Glu 85 90 Ala Ala Phe Arg Ser Val Phe Pro Ile Gln Ser Tyr Ser Gly Asn Ser 100 105 110 Glu Leu Gln Tyr Val Ser Tyr Arg Leu Gly Glu Pro Val Phe Asp Val 120 125 Gln Glu Cys Gln Ile Arg Gly Val Thr Tyr Ser Ala Pro Leu Arg Val 135 140 Lys Leu Arg Leu Val Ile Tyr Glu Arg Glu Ala Pro Glu Gly Thr Val 150 155 Lys Asp Ile Lys Glu Gln Glu Val Tyr Met Gly Glu Ile Pro Leu Met 170 165 Thr Asp Asn Gly Thr Phe Val Ile Asn Gly Thr Glu Arg Val Ile Val 185 190 Ser Gln Leu His Arg Ser Pro Gly Val Phe Phe Asp Ser Asp Lys Gly 200

Lys Thr His Ser Ser Gly Lys Val Leu Tyr Asn Ala Arg Ile Ile Pro

```
215
Tyr Arg Gly Ser Trp Leu Asp Phe Glu Phe Asp Pro Lys Asp Asn Leu
           230
                    235
Phe Val Arg Ile Asp Arg Arg Lys Leu Pro Ala Thr Ile Ile Leu
         245
                   250 255
Arg Ala Leu Asn Tyr Thr Thr Glu Gln Ile Leu Asp Leu Phe Phe Glu
       260
              265 270
Lys Val Ile Phe Glu Ile Arg Asp Asn Lys Leu Gln Met Glu Leu Val
         280 285
  275
Pro Glu Arg Leu Arg Gly Glu Thr Ala Ser Phe Asp Ile Glu Ala Asp
 290
         295 300
Gly Lys Val Tyr Val Glu Lys Gly Arg Arg Ile Thr Ala Arg His Ile
     310 315
Arg Gln Leu Glu Lys Asp Asp Ile Lys His Ile Glu Val Pro Val Glu
         325 330 335
Tyr Ile Ala Gly Lys Val Ala Ala Lys Asp Tyr Val Asp Glu Ser Thr
     340 345 350
Gly Glu Leu Ile Cys Pro Ala Asn Met Glu Leu Ser Leu Asp Leu Leu
 355 360 365
Ala Lys Leu Ser Gln Ala Gly His Lys Arg Ile Glu Thr Leu Phe Thr
370 375 380
Asn Asp Leu Asp His Gly Pro Tyr lle Ser Glu Thr Val Arg Val Asp
385 390 395 400
Pro Thr Asn Asp Arg Leu Ser Ala Leu Val Glu Ile Tyr Arg Met Met
    405 410 415
Arg Pro Gly Glu Pro Pro Thr Arg Glu Ala Ala Glu Ser Leu Phe Glu
 420 425 430
Asn Leu Phe Phe Ser Glu Asp Arg Tyr Asp Leu Ser Ala Val Gly Arg
435 440 445
Met Lys Phe Asn Arg Ser Leu Leu Arg Asp Glu Ile Glu Gly Ser Gly
450 455 460
Ile Leu Ser Lys Asp Asp Ile Ile Glu Val Met Lys Lys Leu Ile Asp
465 470 475
Ile Arg Asn Gly Lys Gly Glu Val Asp Asp Ile Asp His Leu Gly Asn
      485 490 495
Arg Arg Ile Arg Ser Val Gly Glu Met Ala Glu Asn Gln Phe Arg Val
   500 505 510
Gly Leu Val Arg Val Glu Arg Ala Val Lys Glu Arg Leu Ser Leu Gly
515 520 525
Asp Leu Asp Thr Leu Met Pro Gln Asp Met Ile Asn Ala Lys Pro Ile
530 535 540
Ser Ala Ala Val Lys Glu Phe Phe Gly Ser Ser Gln Leu Ser Gln Phe
545 550 555 560
Met Asp Gln Asn Asn Pro Leu Ser Glu 1le Thr His Lys Arg Arg Ile
          565 570
                                       575
Ser Ala Leu Gly Pro Gly Gly Leu Thr Arg Glu Arg Ala Gly Phe Glu
      580 585 590
Val Arg Asp Val His Pro Thr His Tyr Gly Arg Val Cys Pro Ile Glu
    595 600
Thr Pro Glu Gly Pro Asn 1le Gly Leu 1le Asn Ser Leu Ser Val Tyr
 610 615
                     620
Ala Gln Thr Asn Glu Tyr Gly Phe Leu Glu Thr Pro Tyr Arg Lys Val
625 630 635
Thr Asp Gly Val Val Thr Asp Glu Ile His Tyr Leu Ser Ala Ile Glu
         645
                        650
Glu Gly Asn Tyr Val Ile Ala Gln Ala Asn Ser Asn Leu Asp Asp Glu
       660
                     665 670
Gly His Phe Val Glu Asp Leu Val Thr Cys Arg Ser Lys Gly Glu Ser
  675 680
Ser Leu Phe Ser Arg Asp Gln Val Asp Tyr Met Asp Val Ser Thr Gln
               695
                              7.00
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Gln Val Val Ser Val Gly Ala Ser Leu Ile Pro Phe Leu Glu His Asp
         710
                   715
Asp Ala Asn Arg Ala Leu Met Gly Ala Asn Met Gln Arg Gln Ala Val
          725 730 735
Pro Thr Leu Arg Ala Asp Lys Pro Leu Val Gly Thr Gly Met Glu Arg
        740 745
Ala Val Ala Val Asp Ser Gly Val Thr Ala Val Ala Lys Arg Gly Gly
     755 760 765
Thr Val Gln Tyr Val Asp Ala Ser Arg Ile Val Ile Lys Val Asn Glu
 770 775 780
Asp Glu Met Tyr Pro Gly Glu Ala Gly Ile Asp Ile Tyr Asn Leu Thr
785 790 795 800
Lys Tyr Thr Arg Ser Asn Gln Asn Thr Cys Ile Asn Gln Met Pro Cys
           805 810 815
Val Ser Leu Gly Glu Pro Val Glu Arg Gly Asp Val Leu Ala Asp Gly
       820 825 830
Pro Ser Thr Asp Leu Gly Glu Leu Ala Leu Gly Gln Asn Met Arg Val
                    840 845
Ala Phe Met Pro Trp Asn Gly Tyr Asn Phe Glu Asp Ser Ile Leu Val
 850 855
                     860
Ser Glu Arg Val Val Gln Glu Asp Arg Phe Thr Thr Ile His Ile Gln
              870 875
Glu Leu Ala Cys Val Ser Arg Asp Thr Lys Leu Gly Pro Glu Glu Ile
           885 890
Thr Ala Asp Ile Pro Asn Val Gly Glu Ala Ala Leu Ser Lys Leu Asp
        900
                                      910
                       905
Glu Ser Gly Ile Val Tyr Ile Gly Ala Glu Val Thr Gly Gly Asp Ile
                 920
915
                                   925
Leu Val Gly Lys Val Thr Pro Lys Gly Glu Thr Gln Leu Thr Pro Glu
                 935
                                940
Glu Lys Leu Leu Arg Ala Ile Phe Gly Glu Lys Ala Ser Asp Val Lys
             950
                            955
Asp Ser Ser Leu Arg Val Pro Asn Gly Val Ser Gly Thr Val Ile Asp
           965
                         970 975
Val Gln Val Phe Thr Arg Asp Gly Val Glu Lys Asp Lys Arg Ala Leu
                      985
                                      990
Glu Ile Glu Glu Met Gln Leu Lys Gln Ala Lys Lys Asp Leu Ser Glu
                    1000 1005
Glu Leu Gln Ile Leu Glu Ala Gly Leu Phe Ser Arg Ile Tyr Ala Val
  1010 1015 1020
Leu Val Ala Gly Gly Val Glu Ala Glu Lys Leu Asp Lys Leu Pro Arg
1025 1030 1035
Asp Arg Trp Leu Glu Leu Gly Leu Thr Asp Glu Glu Lys Gln Asn Gln
           1045
                          1050 1055
Leu Glu Gln Leu Ala Glu Gln Tyr Asp Glu Leu Lys His Glu Phe Glu
        1060
                      1065
Lys Lys Leu Glu Ala Lys Arg Arg Lys Ile Thr Gln Gly Asp Asp Leu
     1075
                    1080
                                   1085
Ala Pro Gly Val Leu Lys Ile Val Lys Val Tyr Leu Ala Val Lys Arg
  1090
                1095
Gln Ile Gln Pro Gly Asp Lys Met Ala Gly Arg His Gly Asn Lys Gly
              1110
                            1115 1120
Val Ile Ser Lys Ile Asn Pro Ile Glu Asp Met Pro His Asp Ala Asn
           1125
                         1130 1135
Gly Thr Pro Val Asp Ile Val Leu Asn Pro Leu Gly Val Pro Ser Arg
              1145 1150
        1140
Met Asn Ile Gly Gln Ile Leu Glu Thr His Leu Gly Met Ala Ala Lys
     1155 1160
                                   1165
Gly Ile Gly Asp Lys Ile Asn Ala Met Leu Lys Gln Gln Gln Glu Val
        1175 1180
Ala Lys Leu Arg Glu Phe Ile Gln Arg Ala Tyr Asp Leu Gly Thr Asp
```

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1190
                              1195
Val Arg Gln Lys Val Asp Leu Asn Thr Phe Ser Asp Glu Glu Val Leu
                 1210 1215
           1205
Arg Leu Ala Glu Asn Leu Arg Lys Gly Met Pro Ile Ala Thr Pro Val
       1220 1225 1230
Phe Asp Gly Ala Lys Glu Ala Glu Ile Lys Glu Leu Leu Gln Leu Gly
 1235 1240 1245
Gly Leu Pro Thr Ser Gly Gln Ile Thr Leu Phe Asp Gly Arg Thr Gly
 1250 1255 1260
Glu Gln Phe Glu Arg Pro Val Thr Val Gly Tyr Met Tyr Met Leu Lys 1265 1270 1275 1280
Leu Asn His Leu Val Asp Asp Lys Met His Ala Arg Ser Thr Gly Ser
      1285 1290 1295
Tyr Ser Leu Val Thr Gln Gln Pro Leu Gly Gly Lys Ala Gln Phe Gly
    1300 1305 1310
Gly Gln Arg Phe Gly Glu Met Glu Val Trp Ala Leu Glu Ala Tyr Gly
 1315 1320 1325
Ala Ala Tyr Thr Leu Gln Glu Met Leu Thr Val Lys Ser Asp Asp Val
1330 1335 1340
Asn Gly Arg Thr Lys Met Tyr Lys Asn Ile Val Asp Gly Asn His Gln 1345 1350 1355 1360
Met Glu Pro Gly Met Pro Glu Ser Phe Asn Val Leu Leu Lys Glu Ile
 1365 1370 1375
Arg Ser Leu Gly Ile Asn Ile Glu Leu Glu Asp Glu
        1380
                        1.385
<210> 8230
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<212> PRT
<213> Enterobacter cloacae
<400> 8230
Phe Ser Ile Arg Asp Ile Ile Met Leu Gln Asn Pro Ile His Leu Arg
1
                           10
Leu Glu Lys Leu Glu Ser Trp Gln His Val Thr Phe Met Ala Cys Leu
                   25
                               30
Cys Glu Arg Met Tyr Pro Asn Tyr Ala Ala Phe Cys Lys Gln Thr Ala
                    4.0
Phe Gly Glu Gly Gln Ile Tyr Arg Arg Ile Leu Asp Leu Ile Trp Glu
                            60
Thr Leu Thr Val Lys Asp Ala Lys Val Asn Phe Asp Ser Gln Leu Glu
65 70 75
Lys Leu Glu Glu Ala Ile Pro Ala Ala Asp Asp Phe Asp Leu Tyr Gly
           85
                           90
Val Tyr Pro Ala Ile Asp Ala Cys Val Ala Leu Ser Glu Leu Ile His
   100 105
Ser Arg Leu Ser Gly Glu Thr Leu Glu His Ala Ile Glu Val Ser Lys
                     120
                                  125
Ala Ser Ile Thr Thr Val Ala Met Leu Glu Met Thr Gln Glu Gly Arg
                  135
                                 140
Glu Met Thr Asp Glu Glu Leu Arg Ala Asn Pro Ala Val Glu Gln Glu
145 150 155
Trp Asp Ile Gln Trp Glu Ile Phe Arg Leu Leu Ala Glu Cys Glu Glu
           165 170 175
Arg Asp Ile Glu Leu Ile Lys Gly Leu Arg Ala Asp Leu Arg Glu Ala
     180 185
Gly Glu Ser Asn Ile Gly Ile Ile Phe Asn Gln
     195
                    200
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<210> 8231 <211> 92

<212> PRT <213> Enterobacter cloacae

<400> 8231

Val Ser Gly Lys Ala Leu Lys Asp Ala Val Lys

<210> 8232 <211> 1422 <212> PRT <213> Enterobacter cloacae

<400> 8232 Arg Pro Thr Ala Glu Cys Ala Asn Ser Asp Gly Ser Lys Ser Val Lys

1 5 10 15
Asp Leu Leu Lys Phe Leu Lys Ala Gln Thr Lys Thr Glu Glu Phe Asp
20 25 30
Ala Ile Lys Ile Ala Leu Ala Ser Pro Asp Met Ile Arg Ser Trp Ser

The Ara Let Ala Set Ara Set Tro Asp set Tie Arg Set Trp Set 35 40 45

Phe Gly Glu Val Lys Lys Pro Glu Thr Ile Asn Tyr Arg Thr Phe Lys 50

Pro Glu Arg Asp Gly Leu Phe Cys Ala Arg Ile Phe Gly Pro Val Lys 65 70 75 80

Asp Tyr Glu Cys Leu Cys Gly Lys Tyr Lys Arg Leu Lys His Arg Gly 85 90 95 Val Ile Cys Glu Lys Cys Gly Val Glu Val Thr Gln Thr Lys Val Arg

100 105 110 Arg Glu Arg Met Gly His Ile Glu Leu Ala Ser Pro Thr Ala His Ile

115 120 125 Trp Phe Leu Lys Ser Leu Pro Ser Arg Ile Gly Leu Leu Leu Asp Met

130 135 140
Pro Leu Arg Asp Ile Glu Arg Val Leu Tyr Phe Glu Ser Tyr Val Val
145 150 155 160

Ille Glu Gly Gly Met Thr Asn Leu Glu Arg Asn Gln Ile Leu Thr Glu
165 170 175

Glu Gln Tyr Leu Asp Ala Leu Glu Glu Phe Gly Asp Glu Phe Asp Ala 180 185 190 Lys Met Gly Ala Glu Ala Ile Gln Ala Leu Leu Lys Ser Met Asp Leu

195 200 205 Glu Gln Glu Cys Glu Thr Leu Arg Glu Glu Leu Asn Glu Thr Asn Ser 210 215

210 215 220
Glu Thr Lys Arg Lys Lys Leu Thr Lys Arg Ile Lys Leu Leu Glu Ala
225 230 235 240

Phe Val Gln Ser Gly Asn Lys Pro Glu Trp Met Ile Leu Thr Val Leu 245 250 255

Pro Val Leu Pro Pro Asp Leu Arg Pro Leu Val Pro Leu Asp Gly Gly 260 265 270

Arg Phe Ala Thr Ser Asp Leu Asn Asp Leu Tyr Arg Arg Val Ile Asn 275 280 285

Arg Asn Asn Arg Leu Lys Arg Leu Leu Asp Leu Ala Ala Pro Asp Ile 290 295 300

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Ile Val Arg Asn Glu Lys Arg Met Leu Gln Glu Ala Val Asp Ala Leu
       310
                             315
Leu Asp Asn Gly Arg Arg Gly Arg Ala Ile Thr Gly Ser Asn Lys Arg
            325
                           330
                                          335
Pro Leu Lys Ser Leu Ala Asp Met Ile Lys Gly Lys Gln Gly Arg Phe
         340
             345
                                       350
Arg Gln Asn Leu Leu Gly Lys Arg Val Asp Tyr Ser Gly Arg Ser Val
                    360
      355
                                   365
Ile Thr Val Gly Pro Tyr Leu Arg Leu His Gln Cys Gly Leu Pro Lys
                375
                                380
Lys Met Ala Leu Glu Leu Phe Lys Pro Phe Ile Tyr Gly Lys Leu Glu
    390 395 400
Leu Arg Gly Leu Ala Thr Thr Ile Lys Ala Ala Lys Lys Met Val Glu
         405 410 415
Arg Glu Glu Ala Val Val Trp Asp Ile Leu Asp Glu Val Ile Arg Glu
        420 425 430
His Pro Val Leu Leu Asn Arg Ala Pro Thr Leu His Arg Leu Gly Ile
   435 440 445
Gln Ala Phe Glu Pro Val Leu Ile Glu Gly Lys Ala Ile Gln Leu His
 450 455 460
Pro Leu Val Cys Ala Ala Tyr Asn Ala Asp Phe Asp Gly Asp Gln Met
    470 475
Ala Val His Val Pro Leu Thr Leu Glu Ala Gln Leu Glu Ala Arg Ala
      485 490
Leu Met Met Ser Thr Asn Asn Ile Leu Ser Pro Ala Asn Gly Glu Pro
      500 505 510
Ile Ile Val Pro Ser Gln Asp Val Val Leu Gly Leu Tyr Tyr Met Thr
 515 520
                                  525
Arg Asp Cys Val Asn Ala Lys Gly Glu Gly Met Val Leu Thr Gly Pro
530 535 540
Lys Glu Ala Glu Arg Ile Tyr Arg Ala Gly Leu Ala Ser Leu His Ala
545 550 555
Arg Val Lys Val Arg Ile Thr Glu Tyr Glu Lys Asp Glu Asn Gly Glu
       565 570 575
Phe Val Ala His Thr Ser Leu Lys Asp Thr Thr Val Gly Arg Ala Ile
        580 585 590
Leu Trp Met Ile Val Pro Lys Gly Leu Pro Phe Ser Ile Val Asn Gln
    595 600 605
Ala Leu Gly Lys Lys Ala Ile Ser Lys Met Leu Asn Thr Cys Tyr Arg
  610 615
                                620
Ile Leu Gly Leu Lys Pro Thr Val Ile Phe Ala Asp Gln Thr Met Tyr
     630
                             635
Thr Gly Phe Ala Tyr Ala Ala Arg Ser Gly Ala Ser Val Gly Ile Asp
           645
                          650
Asp Met Val Ile Pro Glu Lys Lys His Glu Ile Ile Ser Glu Ala Glu
        660
                       665
Ala Glu Val Ala Glu Ile Gln Glu Gln Phe Gln Ser Gly Leu Val Thr
                    680
                                   685
Ala Gly Glu Arg Tyr Asn Lys Val Ile Asp Ile Trp Ala Ala Asn
                 695
                                 700
Asp Arg Val Ser Lys Ala Met Met Asp Asn Leu Gln Thr Glu Thr Val
              710
                             715
Ile Asn Arg Asp Gly Val Glu Glu Gln Gln Val Ser Phe Asn Ser Ile
           725
                           730
Tyr Met Met Ala Asp Ser Gly Ala Arg Gly Ser Ala Ala Gln Ile Arg
        740
                       745
                                      750
Gln Leu Ala Gly Met Arg Gly Leu Met Ala Lys Pro Asp Gly Ser Ile
                     760
                                   765
Ile Glu Thr Pro Ile Thr Ala Asn Phe Arg Glu Gly Leu Asn Val Leu
                 775
Gln Tyr Phe Ile Ser Thr His Gly Ala Arg Lys Gly Leu Ala Asp Thr
```

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790
                           795
Ala Leu Lys Thr Ala Asn Ser Gly Tyr Leu Thr Arg Arg Leu Val Asp
        805
                         810
Val Ala Gln Asp Leu Val Val Thr Glu Asp Asp Cys Gly Thr Leu Glu
       820
                    825 830
Gly Ile Thr Met Thr Pro Val Ile Glu Gly Gly Asp Val Lys Glu Pro
    835 840 845
Leu Arg Asp Arg Val Leu Gly Arg Val Thr Ala Glu Asp Ile Leu Lys
  850 855 860
Pro Gly Thr Ala Asp Ile Leu Val Pro Arg Asn Thr Leu Leu His Glu
    870 875 880
Gln Trp Cys Asp Leu Leu Glu Ala Asn Ser Val Asp Ser Val Lys Val
        885 890 895
Arg Ser Val Val Ser Cys Asp Thr Asp Phe Gly Val Cys Ala His Cys
      900 905 910
Tyr Gly Arg Asp Leu Ala Arg Gly His Ile Ile Asn Lys Gly Glu Ala
    915 920 925
Ile Gly Val Ile Ala Ala Gln Ser Ile Gly Glu Pro Gly Thr Gln Leu
 930 935 940
Thr Met Arg Thr Phe His Ile Gly Gly Ala Ala Ser Arg Ala Ala Ala
945 950 955
Glu Ser Ser Ile Gln Val Lys Asn Lys Gly Ser Ile Lys Leu Ser Asn
   965 970 975
Ala Lys Ser Val Val Asn Ser Ser Gly Lys Leu Val Ile Thr Ser Arg
980 985 990
Asn Thr Glu Leu Lys Leu Ile Asp Glu Phe Gly Arg Thr Lys Glu Ser
995 1000 1005
Tyr Lys Val Pro Tyr Gly Ala Val Met Ala Lys Gly Asp Gly Glu Gln
1010 1015 1020
Val Ala Gly Gly Glu Thr Val Ala Asn Trp Asp Pro His Thr Met Pro
1025 1030 1035 1040
Val Ile Thr Glu Val Ser Gly Phe Ile Arg Phe Thr Asp Met Ile Asp
      1045 1050 1055
Gly Gln Thr Ile Thr Arg Gln Thr Asp Glu Leu Thr Gly Leu Ser Ser
      1060 1065 1070
Leu Val Val Leu Asp Ser Ala Glu Arg Thr Thr Gly Gly Lys Asp Leu
1075 1080 1085
Arg Pro Ala Leu Lys Ile Val Asp Ala Gln Gly Asn Asp Val Leu Ile
1090 1095 1100
Pro Gly Thr Asp Met Pro Ala Gln Tyr Phe Leu Pro Gly Lys Ala Ile
1105 1110 1115 1120
Val Gln Leu Glu Asp Gly Val Gln Ile Ser Ser Gly Asp Thr Leu Ala
          1125 1130
Arg Ile Pro Gln Glu Ser Gly Gly Thr Lys Asp Ile Thr Gly Gly Leu
       1140 1145 1150
Pro Arg Val Ala Asp Leu Phe Glu Ala Arg Arg Pro Lys Glu Pro Ala
     1155 1160 1165
Ile Leu Ala Glu Ile Ser Gly Ile Ile Ser Phe Gly Lys Glu Thr Lys
 1170 1175 1180
Gly Lys Arg Arg Leu Val Ile Thr Pro Val Asp Gly Ser Glu Pro Tyr
1185 1190 1195 1200
Glu Glu Met Ile Pro Lys Trp Arg Gln Leu Asn Val Phe Glu Gly Glu
          1205 1210
Arg Val Glu Arg Gly Asp Val Val Ser Asp Gly Pro Glu Ala Pro His
        1220 1225 1230
Asp Ile Leu Arg Leu Arg Gly Val His Ala Val Thr Arg Tyr Ile Val
     1235 1240 1245
Asn Glu Val Gln Asp Val Tyr Arg Leu Gln Gly Val Lys Ile Asn Asp
1250 1255
Lys His Ile Glu Val Ile Val Arg Gln Met Leu Arg Lys Ala Thr Ile
             1270
                           1275
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Glu Asn Ala Gly Ser Ser Asp Phe Leu Glu Gly Glu Gln Val Glu Tyr 1285 1290 1295 Ser Arg Val Lys Ile Ala Asn Arg Asp Leu Glu Ala Asn Gly Lys Ile 1300 1305 1310 Gly Ala Thr Phe Ser Arg Asp Leu Leu Gly Ile Thr Lys Ala Ser Leu 1315 1320 1325 Ala Thr Glu Ser Phe Ile Ser Ala Ala Ser Phe Gln Glu Thr Thr Arg 1330 1335 1340

Val Leu Thr Glu Ala Ala Val Ala Gly Lys Arg Asp Glu Leu Arg Gly 1345 1350 1355 1360

Leu Lys Glu Asn Val Ile Val Gly Arg Leu Ile Pro Ala Gly Thr Gly 1365 1370 1375

Tyr Ala Tyr His Gln Asp Arg Met Arg Arg Arg Ala Ala Gly Glu Leu 1380 1385 1390

Pro Ala Ala Pro Gln Val Thr Ala Glu Asp Ala Ser Ala Ser Leu Ala 1395 1400 1405 Glu Leu Leu Asn Ala Gly Leu Gly Gly Ser Asp Asn Glu

1415

<210> 8233 <211> 364 <212> PRT

<213> Enterobacter cloacae

<400> 8233

Arg Thr Asp Ala Ile Arg Asn Cys Lys Met Thr Glu Leu Lys Asn Asp 10 Arg Tyr Leu Arg Ala Leu Leu Arg Gln Pro Val Asp Val Thr Pro Val 20 25 3.0 Trp Met Met Arg Gln Ala Gly Arg Tyr Leu Pro Glu Tyr Lys Ala Thr 35 40 45 Arg Ala Gln Ala Gly Asp Phe Met Ser Leu Cys Lys Asn Ala Glu Leu 50 55 60 Ala Cys Glu Val Thr Leu Gln Pro Leu Arg Arg Phe Pro Leu Asp Ala 65 70 75 80 Ala Ile Leu Phe Ser Asp Ile Leu Thr Ile Pro Asp Ala Met Gly Leu 90 95 Gly Leu Tyr Phe Glu Thr Gly Glu Gly Pro Arg Phe Thr Ser Pro Ile 100 105 110 Lys Ser Lys Ala Asp Val Asp Lys Leu Pro Ile Pro Asp Pro Glu Gly 115 120 Glu Leu Ser Tyr Val Met Asn Ala Val Arg Thr Ile Arg Arg Glu Leu 130 135 140 Lys Gly Asp Val Pro Leu Ile Gly Phe Ser Gly Ser Pro Trp Thr Leu 155 145 150 Ala Thr Tyr Met Val Glu Gly Gly Ser Ser Lys Ala Phe Thr Val Ile 165 170 175 Lys Lys Met Met Tyr Ala Glu Pro Leu Ala Leu His Ala Leu Leu Asp 180 185 190 Lys Leu Ala Lys Ser Val Thr Leu Tyr Leu Asn Ala Gln Ile Lys Ala 200 Gly Ala Gln Ser Val Met Ile Phe Asp Thr Trp Gly Gly Val Leu Thr 215 Gly Arg Asp Tyr Gln Gln Phe Ser Leu Tyr Tyr Met His Lys Ile Val 225 230 235 Asp Gly Leu Leu Arg Glu Asn Glu Gly Arg Arg Val Pro Val Thr Leu 245 250 Phe Thr Lys Gly Gly Gln Trp Leu Glu Ala Met Ala Ala Thr Gly 260 265

Cys Asp Ala Leu Gly Leu Asp Trp Thr Thr Asp Ile Ala Asp Ala Arg 280

```
Arg Arg Val Gly Asp Lys Val Ala Leu Gln Gly Asn Met Asp Pro Ser
    290
                       295
Met Leu Tyr Ala Gln Pro Ala Arg Ile Glu Glu Glu Val Ser Thr Ile
                   310
                                     315
Leu Ser Gly Phe Gly Gln Gly Glu Gly His Val Phe Asn Leu Gly His
               325
                                 330
Gly Ile His Gln Asp Val Pro Pro Glu His Ala Gly Val Phe Val Glu
           340 345
Ala Val His Arg Leu Ser Ala Gln Tyr His Lys
                          360
<210> 8234
<211> 227
<212> PRT
<213> Enterobacter cloacae
<400> 8234
Gly Val Val Met Asp Leu Ala Ser Leu Arg Ala Gln Gln Ile Glu Leu
                                10
Ala Ser Ser Val Ile Arg Glu Asp Arg Leu Asp Thr Asp Pro Pro Arg
    20
                              25
Tyr Ile Gly Gly Ala Asp Val Gly Phe Glu Gln Gly Gly Glu Val Thr
    35
                          40
Arg Ala Ala Met Val Val Leu Lys Tyr Pro Ser Leu Glu Leu Val Glu
                      55
                                         60
Tyr Lys Val Ala Arg Ile Ala Thr Thr Met Pro Tyr Ile Pro Gly Phe
                 70
                                     75
Leu Ser Phe Arg Glu Tyr Pro Ala Leu Leu Ala Ala Trp Glu Gln Leu
              8.5
                                  90
Ser Gln Lys Pro Asp Leu Leu Phe Val Asp Gly His Gly Ile Ser His
        100
                              105
Pro Arg Arg Leu Gly Val Ala Ser His Phe Gly Leu Leu Val Asp Val
 115
                          120
                                             125
Pro Thr Ile Gly Val Ala Lys Lys Arg Leu Cys Gly Ala Phe Glu Pro
                      135
                                         140
Leu Ser Ala Glu Pro Gly Ala Leu Ala Pro Leu Ile His Lys Gly Glu
                  150
                                     155
Gln Leu Ala Trp Val Trp Arg Ser Lys Ala Arg Cys Asn Pro Leu Phe
              165
                                 170
Ile Ala Thr Gly His Arg Val Ser Met Asp Ser Ala Leu Ala Trp Val
           180 185
                                                190
Gln Arg Cys Met Lys Gly Tyr Arg Leu Pro Glu Pro Thr Arg Trp Ala
                       200
Asp Ala Val Ala Ser Ser Arg Pro Ala Phe Ile Arg Trp Gln Glu Ile
                      215
                                          220
Gln Pro
225
<210> 8235
<211> 86
<212> PRT
<213> Enterobacter cloacae
<400> 8235
Val Lys Thr Thr Arg Met Glu His Pro Gly Ala Ala Ala Arg Leu Phe
                                 10
Lys Glu Phe Ala Lys Ala Asn Ala Lys Phe Glu Val Lys Ala Ala Ala
          2.0
                              25
Phe Glu Gly Glu Leu Ile Pro Ala Ser Gln Ile Asp Arg Leu Ala Thr
Leu Pro Thr Tyr Glu Glu Ala Ile Ala Arg Leu Met Ala Thr Met Lys
```

4060 5.5 Glu Ala Ala Ala Gly Lys Leu Val Arg Thr Leu Ala Ala Val Arg Asp Ala Lys Glu Ala Ala 85 <210> 8236 <211> 122 <212> PRT <213> Enterobacter cloacae <400> 8236 Met Ser Ile Thr Lys Asp Gln Ile Ile Glu Ala Val Ala Ala Met Ser 10 Val Met Asp Val Val Glu Leu Val Ser Ala Met Glu Glu Lys Phe Gly 20 25 Val Ser Ala Ala Ala Val Ala Val Ala Ala Gly Pro Ala Glu Ala 35 40 Ala Glu Glu Lys Thr Glu Phe Asp Val Ile Leu Lys Ala Ala Gly Ala 55 Asn Lys Val Ala Val Ile Lys Ala Val Arg Gly Ala Thr Gly Leu Gly 7.0 75 Leu Lys Glu Ala Lys Asp Leu Val Glu Ser Ala Pro Ala Ala Leu Lys 85 90 Glu Gly Val Ser Lys Asp Asp Ala Glu Ala Leu Lys Lys Ser Leu Glu 100 105 Glu Ala Gly Ala Glu Val Glu Val Lys <210> 8237 <211> 265 <212> PRT <213> Enterobacter cloacae <400> 8237 Ser Glu Gly Ser Ala Ile Asp Met Asp Arg Ile Ile Glu Lys Ser Asp 10 Leu Gly Trp Trp Ile Val Ser His Glu Gln Lys Leu Trp Leu Pro Gly 30 Gly Glu Ile Pro Tyr Gly Ala Ala Glu Ile Phe Asp Leu Val Gly Gln 4.0 Pro Ala Leu Arg Ile Gly Glu Trp Gln Gly Asp Pro Val Trp Leu Ile 55 Leu Gln Ala Arg Arg Gln Asp Met Gly Ser Val Arg Gln Val Leu Asp 70 7.5 80 Arg Asp Val Gly Leu Phe Gln Leu Ala Gly Arg Gly Val Gln Leu Ala 85 90 Glu Phe Tyr Arg Ser His Lys Tyr Cys Gly Tyr Cys Gly His Thr Met 100 105 His Pro Ser Lys Thr Glu Trp Ala Met Leu Cys Gly His Cys Arg Glu 115 120 Arg Tyr Tyr Pro Gln Ile Ala Pro Cys Ile Ile Val Ala Ile Arg Arg 135 140 Asp Asp Ser Ile Leu Leu Ala Gln His Thr Arg His Arg Asn Gly Ile 150 His Thr Val Leu Ala Gly Phe Val Glu Val Gly Glu Thr Leu Glu Gln 165 170

Ala Val Ala Arg Glu Val Met Glu Glu Ser Gly Ile Lys Val Lys Asn

Leu Arg Tyr Val Thr Ser Gln Pro Trp Pro Phe Pro Met Ser Leu Met

200

185

190

180

195

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Thr Ala Phe Met Ala Glu Tyr Asp Ser Gly Glu Ile Val Ile Asp Lys
  210
           215
Lys Glu Leu Leu Glu Ala Asn Trp Tyr Arg Tyr Asp Asp Leu Pro Leu
                   230
                                   235
Leu Pro Pro Pro Gly Thr Val Ala Arg Arg Leu Ile Glu Asp Thr Val
            245
                                  250
Ala Met Cys Arg Ala Glu Tyr Glu
           260
<210> 8238
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<212> PRT
<213> Enterobacter cloacae
<400> 8238
Val Arg Arg Val Ala Val Asn Ser Phe Asn Glu Gly Ala Ala Thr Pro
                                  10
Leu Leu Ser Phe Trp Arg Gly Pro Leu Ala Leu Ala Gly Val Leu Leu
         20
                              25
Leu Ser Ala Cys Ser His Asp Ser Ser Leu Pro Pro Phe Thr Ala Ser
35
                          40
                                              4.5
Gly Tyr Ala Asp Asn Gln Gly Ala Val Arg Ile Trp Arg Lys Asp Ser
                      55
                                          60
Ser Asp Glu Val His Met Leu Thr Ala Phe Ser Pro Trp His Asn Gly
                  7.0
                                   7.5
                                                         80
Asn Thr Ser Thr Ala Glu Tyr Arg Trp Gln Gly Asp Ala Leu Ser Leu
                                   90
Ile Glu Leu Asn Ile Tyr Ser Lys Thr Pro Glu His Val Lys Val Arg
          100
                              105
                                                  110
Phe Asp Asp His Gly Glu Leu Ser Phe Met Gln His Glu Val Ser Gly
                          120
                                              125
Leu Lys Lys Gln Leu Ser Ser Asp Gln Val Ala Leu Tyr Ser Tyr Arg
                       135
                                          140
Ala Glu Gln Leu Arg Gln Thr Ser Asp Ala Leu Arg Gln Gly Arg Val
                  150
                                   155
Val Leu Arg Gln Gly Arg Trp His Ala Asp Gly Thr Val Thr Thr Cys
              165
                                 170
Glu Gly Gln Thr Val Lys Pro Glu Leu Glu Ser Trp Ala Thr Glu His
                              185
                                                  190
Ile Gln Arg Arg Gln Arg His Ser Ser Val Glu Val Ser Val Ala Trp
                          200
                                              205
Leu Glu Ala Pro Glu Gly Ser Gln Leu Leu Leu Val Ala Asn Glu Asp
                      215
Phe Cys Thr Trp Gln Pro Thr Glu Lys Ser Phe
                   230
<210> 8239
<211> 299
<212> PRT
<213> Enterobacter cloacae
<400> 8239
Ala Pro Pro Gly Ile Arg Val Arg Thr Ser Leu Ala Pro Ser Val Arg
                                  10
Val Thr Ala Leu Ser Cys Trp Ser Ala Ile Ala Ala Thr Leu Arg Arg
Ala Asn Gly Leu Lys Trp Asn Ala Leu Thr Thr Cys Ser Glu Ala Asp
      35
                          40
Met Thr Met Glu Leu Ser Asp Pro Glu Met Met Arg Tyr Asn Arg Gln
                      55
```

Ile Val Leu Arg Gly Phe Asp Phe Glu Gly Gln Glu Ala Leu Lys Ala

```
Ala Ser Val Leu Val Val Gly Leu Gly Gly Leu Gly Cys Ala Ala Ala
          85
                         90
Gln Tyr Leu Ala Ala Gly Val Gly Ser Met Thr Leu Leu Asp Phe
        100
               105 110
Asp Thr Val Ser Val Ser Asn Leu Gln Arg Gln Thr Leu His Ser Asp
    115
         120 125
Ala Thr Val Gly Gln Pro Lys Val Glu Ser Ala Arg Thr Ala Leu Ala
 130 135 140
Arg Ile Asn Pro Asn Val Gln Phe Thr Leu Ile Asp Ala Met Leu Asp
   150 155
Asp Asp Ala Leu Phe Ala Gln Ile Ala Arg His Asp Leu Val Leu Asp
      165 170
Cys Thr Asp Asn Val Ala Ile Arg Asn Gln Leu Asn Ala Gly Cys Phe
      180 185 190
Ala His Lys Thr Pro Leu Ile Ser Gly Ala Ala Ile Arg Met Glu Gly
   195 200 205
Gln Ile Thr Val Phe Thr Tyr Ala Glu Gly Glu Pro Cys Tyr Arg Cys
 210 215 220
Leu Ser Arg Leu Phe Gly Glu Asn Ala Leu Thr Cys Val Glu Ala Gly 225 230 235 240
Val Met Ala Pro Leu Val Gly Val Ile Gly Ser Leu Gln Ala Met Glu
      245 250
Ala Ile Lys Val Leu Ala His Tyr Gly Thr Pro Ala Ala Gly Lys Ile
      260 265 270
Val Met Tyr Asp Ala Met Thr Cys Gln Phe Arg Glu Met Lys Leu Met
275 280
                        285
Arg Asn Pro Gly Cys Glu Val Cys Glu Gly
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<210> 8240

<211> 305 <212> PRT

<213> Enterobacter cloacae

<400> 8240 Ser Glu Gly Lys Lys Met Ile Phe Asn Ile Gln Arg Tyr Ser Thr His 10 Asp Gly Pro Gly Ile Arg Thr Val Val Pne Leu Lys Gly Cys Ser Leu 25 30 Gly Cys Arg Trp Cys Gln Asn Pro Glu Ser Arg Ser Arg Ser Arg Asp 4.0 4.5 Val Leu Phe Asp Ala Arg Leu Cys Leu Asp Gly Cys Glu Leu Cys Gln 55 60 Gln Ala Ala Pro Gly Cys Val Glu Arg Ala Leu Asn Gly Leu Val Ile 75 His Arg Glu Lys Leu Asn Asp Glu Thr Leu Thr Ala Leu Thr Asp Cys 8.5 90 Cys Pro Thr Gln Ala Leu Thr Val Cys Gly Glu Glu Lys Gln Val Glu 100 105 110 Glu Ile Met Ala Thr Val Leu Arg Asp Lys Pro Phe Tyr Asp Arg Ser 115 120 125 Gly Gly Gly Ile Thr Leu Ser Gly Gly Glu Pro Phe Met Asn Pro Asp 135 140 Leu Ala His Ala Leu Phe Lys Ala Ser His Glu Gln Gly Ile His Ser 150 155 Ala Val Glu Thr Cys Leu His Val Pro Trp His Tyr Ile Glu Pro Ser 165 170 Leu Pro Tyr Val Asp Leu Phe Leu Ala Asp Leu Lys His Val Asp Gly 180 185 190 Asp Val Phe Lys Gln Trp Thr Asp Gly Ser Ala Lys Arg Ile Leu Asp

200 Asn Leu Lys Arg Leu Ala Ala Ala Gly Lys Thr Ile Thr Ile Arg Val 215 220 Pro Leu Ile Gln Gly Phe Asn Ala Asp Glu Ala Ser Val Thr Ala Ile 230 235 Thr Asn Phe Ala Ala Asp Glu Leu Gly Val Asp Asp Ile His Phe Leu 245 250 255 Pro Tyr His Thr Leu Gly Met Asn Lys Tyr Thr Leu Leu Gly Gln Pro 260 265 Tyr Ser Ala Pro Asp Lys Pro Leu Asp Asn Pro Ala Leu Leu Asp Phe 275 280 285 Ala Gln Gln Tyr Ala Cys Gln Lys Gly Leu Thr Ala Thr Leu Arg Gly 305 <210> 8241 <211> 801 <212> PRT <213> Enterobacter cloacae <400> 8241 Thr Ser Arg Glu Ala Arg Leu Ile Val Asp Val Leu His Met Lys Thr 10 Leu Lys Asn Trp Thr Leu Asp Thr Gln Ser Ala Asn His Leu Glu Leu 25 3.0 Leu Val Asp Ser Gln His Arg Leu Cys Leu Tyr Val Leu Glu Glu Asn 40 Leu Phe Arg Val Leu Ile Lys Arg Lys Gly Glu Leu Ala Leu Asp Arg 5.5 60 Thr Trp Ser Ile Ala Pro Glu Lys Asp Val Pro Trp Glu Gly Arg Arg 7.0 75 8.0 Arg Asp Asp Ile Ser Gly Phe Ser Cys Pro Ala Trp Thr Leu Thr Gln 85 90 Gln Asp Asp Thr Leu Thr Val Ala Thr Glu Gln Leu Arg Val Thr Val 100 105 His Gln Pro Leu Trp Leu Glu Trp His Tyr Arg Asn Asp Ala Gly Glu 115 120 Trp Gln Pro Leu Val Asn Asp Arg Pro Thr Ser Ala Tyr Leu Leu Asn 130 135 140 Ala His Gly Asp Gly Val Ala His Tyr Leu Ser Arg Arg Lys Asp Glu 150 155 Arg Phe Tyr Gly Leu Gly Glu Lys Ala Gly Asp Leu Gln Arg Asn Gly 165 170 Lys Arg Tyr Glu Met Arg Asn Leu Asp Ala Met Gly Tyr Asn Ala Ala 180 185 190 Ser Thr Asp Pro Leu Tyr Lys His Ile Pro Phe Thr Leu Thr Arg Arg 195 200 Asp Asp Val Ser Tyr Gly Leu Phe Tyr Asp Asn Leu Ser Ser Cys Trp 215 Leu Asp Leu Gly Asn Glu Ile Asp Asn Tyr His Thr Ala Tyr Arg Arg 230 235 Trp Gln Ala Glu Ala Gly Asp Ile Asp Tyr Tyr Leu Phe Thr Gly Lys 245 250 Arg Val Leu Asp Val Thr Lys Ala Phe Val Arg Leu Thr Gly Lys Thr 260 265 270 Leu Phe Gly Pro Lys Trp Ser Leu Gly Tyr Ser Gly Ser Thr Met His 280 285 Tyr Thr Asp Ala Pro Asp Ala Gln Asn Gln Leu Met Asn Phe Ile Arg 295 300

Leu Cys Glu Glu His Ala Ile Pro Cys Asp Ser Phe Gln Leu Ser Ser

```
310
Gly Tyr Thr Ser Ile Asn Gly Lys Arg Tyr Val Phe Asn Trp Asn Tyr
        325
                  330
Asp Lys Val Pro Gln Pro Lys Val Met Ser Gln Ala Phe His Asp Ala
        340
                345 350
Gly Leu Arg Leu Ala Ala Asn Ile Lys Pro Cys Leu Leu Gln Asp His
         360 365
   355
Pro Arg Tyr Gly Glu Val Ala Glu Arg Gly Leu Phe Ile Arg Asp Ser
      375 380
Glu Thr Asp Ala Pro Glu Arg Ser Ser Phe Trp Asp Asp Glu Gly Ser
   390 395
His Leu Asp Phe Thr Asn Pro Gln Thr Val Gln Trp Trp Gln Asn Gly
    405 410 415
Val Thr Thr Gln Leu Leu Glu Met Gly Ile Asp Ser Thr Trp Asn Asp
   420 425 430
Asn Asn Glu Tyr Glu Val Trp Asp Gly Glu Ala Arg Cys Tyr Gly Phe
435 440 445
Gly Lys Glu Ile Ala Ile Lys His Ile Arg Pro Val Met Pro Leu Leu
450 455 460
Met Met Arg Ala Ser Leu Glu Ala Gln Gln Arg Phe Ala Pro Glu Lys
465 470 475
Arg Pro Tyr Leu Ile Ser Arg Ser Gly Cys Ala Gly Met Gln Arg Tyr
    485 490 495
Val Gln Thr Trp Ser Gly Asp Asn Arg Thr Asn Trp Asp Thr Leu Arg
 500 505
                         510
Tyr Asn Ile Arg Met Gly Leu Gly Met Ser Leu Ser Gly Leu Phe Asn
515 520 525
Val Gly His Asp Val Gly Gly Phe Ser Gly Asp Lys Pro Asp Ala Glu
530 535 540
Leu Phe Val Arg Trp Val Gln Asn Gly Val Met His Pro Arg Phe Thr
545 550 555
Ile His Ser Trp Asn Asp Asp His Thr Val Asn Glu Pro Trp Met Tyr
     565 570 575
Pro Gly Val Thr Pro Ala Ile Arg Gly Ala Ile Glu Leu Arg Tyr Arg
 580 585 590
Leu Leu Pro Tyr Leu Tyr Thr Leu Leu Trp Gln Ala His Ala Asp Asp
595 600
                                 605
Glu Pro Met Leu Arg Pro Thr Phe Leu Asp His Glu His Asp Ala Gln
610 615 620
Thr Phe Lys Glu Cys Asp Asp Phe Leu Leu Gly Arg Asp Leu Leu Val
625 630 635
Ala Ser Val Val Glu Ala Gly Gln Arg Glu Arg Arg Val Trp Leu Pro
          645
                        650
Asp Asn Glu Thr Gly Trp Tyr Asp Phe Tyr Thr His Ala Trp Tyr Ala
       660 665
                                    670
Gly Gly Gln Ala Ile Val Leu Asp Ala Pro Leu Glu Lys Leu Pro Leu
    675 680
Leu Val Arg Ala Gly Ala Gly Leu Pro Leu Ser Glu Arg Ile Arg His
690 695
Val Ser Ala Asp Lys Asp Asp Thr Arg Glu Leu Lys Leu Phe Pro Val
705 710
                           715 720
Lys Gly Val Gly Thr Thr Ser Gly Leu Leu Phe Glu Asp Asp Gly Glu
              730
          725
Ser Trp Gly Tyr Leu Asn Gly Asn Ala Leu Trp Val Glu Trp Glu Met
     740 745
Val Cys Asp Gly Ala Thr Ile Asn Leu Lys Val Asn Ala Arg Gly Asp
     755
                  760
Tyr Arg Pro Ala Trp Lys Ala Leu Lys Val Ser Leu Pro Ala Gly Glu
 770 775
Lys Arg Thr Leu Arg Val Asn Gly Val Glu Gly Gly Glu Trp Val Val
             790
                           795
```

13

<210> 8242

```
<211> 443
<212> PRT
<213> Enterobacter cloacae
<400> 8242
Pro Met Ser Asn Val Thr His Pro Pro Lys Ile Gly Phe Val Ser Leu
                            1.0
Gly Cys Pro Lys Asn Leu Val Asp Ser Glu Arg Ile Leu Thr Glu Leu
       20 25
Arg Thr Glu Gly Tyr Asp Val Val Pro Ser Tyr Asp Asn Ala Asp Met
    35 40 45
Val Ile Val Asn Thr Cys Gly Phe Ile Asp Ser Ala Val Gln Glu Ser
                 55 60
Leu Glu Ala Ile Gly Glu Ala Leu Thr Glu Asn Gly Lys Val Ile Val
    70
                    75
Thr Gly Cys Leu Gly Ala Lys Glu Asp Gln Ile Arg Glu Val His Pro
                 90
        85
Lys Val Leu Glu Ile Thr Gly Pro His Ser Tyr Glu Gln Val Leu Glu
       100
                       105 110
His Val His His Tyr Val Pro Lys Pro Lys His Asn Pro Phe Leu Ser
                   120 125
Leu Val Pro Glu Gln Gly Val Lys Leu Thr Pro Arg His Tyr Ala Tyr
                 135 140
Leu Lys Ile Ser Glu Gly Cys Asn His Arg Cys Thr Phe Cys Ile Ile
145 150 155
Pro Ser Met Arg Gly Asp Leu Val Ser Arg Pro Ile Gly Glu Val Leu
           165 170
                                            175
Ala Glu Ala Lys Arg Leu Ala Asp Ala Gly Val Lys Glu Leu Leu Val
 180 185
                               190
Ile Ser Gln Asp Thr Ser Ala Tyr Gly Val Asp Val Lys His Arg Ser
                     200
                                     205
Gly Phe His Asn Gly Glu Pro Val Lys Thr Ser Met Val Gly Leu Cys
 210 215
                                  220
Glu Gln Leu Ala Lys Leu Gly Ile Trp Thr Arg Leu His Tyr Val Tyr
                               235
               230
Pro Tyr Pro His Val Asp Asp Val Ile Pro Leu Met Ala Glu Gly Lys
            245
                            250
Ile Leu Pro Tyr Leu Asp Ile Pro Leu Gln His Ala Ser Pro Arg Ile
        260 265
Leu Lys Leu Met Lys Arg Pro Gly Ser Val Asp Arg Gln Leu Ala Arg
                     280 285
Ile Lys Gln Trp Arg Glu Ile Cys Pro Asp Leu Thr Leu Arg Ser Thr
                  295
                                  300
Phe Ile Val Gly Phe Pro Gly Glu Thr Glu Glu Asp Phe Gln Met Leu
305 310
                              315
Leu Asp Phe Leu Lys Glu Ala Arg Leu Asp Arg Val Gly Cys Phe Lys
           325
                330
Tyr Ser Pro Val Glu Gly Ala Thr Ala Asn Glu Leu Ala Asp Gln Val
         340
                        345
                                        350
Pro Glu Glu Val Lys Glu Glu Arg Trp Asn Arg Phe Met Gln Leu Gln
      355
                      360
Gln Gln Ile Ser Ala Glu Arg Leu Gln Glu Lys Val Gly Arg Glu Ile
                  375
Leu Val Ile Ile Asp Glu Val Asp Glu Glu Gly Ala Ile Gly Arg Ser
               390
                               395
Met Ala Asp Ala Pro Glu Ile Asp Gly Ala Val Tyr Leu Asn Gly Glu
            405
                            410
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Thr Asn Val Lys Pro Gly Asp Ile Ile Arg Val Lys Val Glu Asn Ala
           420
                           425
Asp Glu Tyr Asp Leu Trp Gly Ser Arg Val
    435
<210> 8243
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 8243
Pro Gln Lys Arg Gln Ala Gly Arg Arg Asp Asn Arg His Ala Tyr Ala
                                 1.0
His Gly Glu Ile Asp His Asp Arg Arg Asp Arg Ser Arg Gln Asn Met
           20
                              25
Ala Glu Gln Asp Gly Gly Ile Ala Gly Ser His Ala Ala Arg Arg Leu
      35
                         40
Asp Lys Gly Leu Leu Gln His Gln Arg Val Ala Thr Tyr Gln Thr
Arg Glu Ser Gly Asn Arg Glu Tyr Arg His Gly Asp Asp Asp Val Arg
               7.0
                                  75
His Ala Ala Ala His His Arg His His Gly Asn Arg Gln Gln Asn Thr
                              90
Gly Lys Gly Lys Gln His Ile Thr Asp Thr His Asp Asp Ala Val Pro
         100
                          105
                                                110
Pro Ala Phe Val Val Pro Gly Arg Gln Pro Gln His Gly Ala Asn Cys
                         120
     115
                               125
Cys Ala His Gln His Arg Lys Asp Pro Gly Arg Gln Arg Asp Leu Arg
                  135
                                         140
Pro Tyr Gln His Ala Ala Glu Asn Ile Ala Pro Glu Arg Val His Ala
                 150 155
Lys Pro Val His His Arg Arg Ser Ile Val Gln Pro Val Val Ile Glu
             165
                                 170
Val Val Phe Arg Ile Lys Arg Gly
           180
<210> 8244
<211> 391
<212> PRT
<213> Enterobacter cloacae
<400> 8244
Pro Arg Pro Tyr Glu Asp Lys Leu Met Thr Thr Leu Asn Leu Asn Thr
                                 10
Leu Ser Glu Arg Ile Lys Ala His Lys Thr Ala Leu Val His Ile Val
                             25
          20
                                                 30
Lys Pro Pro Val Cys Thr Glu Arg Ala Gln His Tyr Thr Glu Met Tyr
                         4.0
                                             4.5
Gln Gln His Met Asp Lys Pro Ile Pro Val Arg Arg Ala Leu Ala Leu
                      55
                                         60
Ala His His Leu Ala Lys Arg Thr Ile Trp Ile Lys His Asp Glu Leu
                  7.0
Ile Ile Gly Asn Gln Ala Ser Glu Val Arg Ala Ala Pro Ile Phe Pro
             8.5
                                 90
Glu Tyr Thr Val Ser Trp Ile Glu Lys Glu Ile Asp Asp Leu Ala Asp
           100
                              105
Arg Pro Gly Ala Gly Phe Ala Val Ser Glu Glu Asn Lys Arg Val Leu
      115
                         120
His Glu Ile Cys Pro Trp Trp Arg Gly Gln Thr Val Gln Asp Arg Cys
                      135
Tyr Gly Met Phe Thr Asp Glu Gln Lys Gly Leu Leu Glu Thr Gly Ile
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150
Ile Lys Ala Glu Gly Asn Met Thr Ser Gly Asp Ala His Leu Ala Val
       165
                          170
Asn Phe Pro Leu Val Leu Glu Lys Gly Leu Asp Gly Leu Arg Ala Lys
        180
                       185
                           190
Val Ala Glu Arg Arg Ser Arg Ile Asn Leu Thr Val Leu Glu Asp Leu
     195
                    200
                         205
His Gly Asp Gln Phe Leu Lys Ala Ile Asp Ile Val Leu Glu Ala Val
         215 220
Ser Leu His Ile Lys Arg Phe Ala Asp Leu Ala Arg Glu Met Ala Ser
      230 235 240
Ser Glu Thr Arg Glu Ser Arg Arg Asp Glu Leu Leu Ala Met Ala Glu
      245 250 255
Asn Cys Asp Val Ile Ala His Glu Pro Pro Lys Thr Phe Trp Gln Ala
260 265 270
Leu Gln Leu Cys Tyr Tyr Ile Gln Leu Ile Leu Gln Ile Glu Ser Asn
275 280 285
Gly His Ser Val Ser Phe Ala Arg Met Asp Gln Tyr Leu Tyr Pro Tyr
 290 295 300
Tyr Arg Arg Asp Val Glu Leu Gly Gln Ser Leu Asp Arg Glu His Ala
305 310 315
Ile Glu Leu Leu His Ser Cys Trp Leu Lys Leu Leu Glu Val Asn Lys
      325 330
Ile Arg Ser Gly Ser His Ser Lys Ala Ser Gly Gly Gln Pro Ala Val
 340 345
Ser Glu Arg His His Arg Arg Pro Glu Ala Gly Gln Arg Arg Ala Asn
355
                    360 365
Gly Arg Gly Gln Pro Ala Leu Leu Arg Asp Ser Gly Ile Leu Arg Ser
370
Pro Ala Phe His Pro Ala
385
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<211> 293 <212> PRT <213> Enterobacter cloacae

<210> 8245

<400> 8245 Ile Cys Ala Pro Arg His Leu Val Ile Arg Met Phe Gln Asn Ala Val Thr Gln Glu His Ser Met Thr Val Lys Val Ile Val Thr Asp Met Asp 25 3.0 Gly Thr Phe Leu Asp Asp Ala Lys Gln Tyr Asp Arg Asp Arg Phe Gln 40 45 Ala Gln Phe Lys Gln Leu Lys Ala Arg Asn Ile Glu Phe Val Val Ala 5.5 60 Ser Gly Asn Gln Tyr Tyr Gln Leu Ile Ser Phe Phe Pro Glu Leu Lys 70 Asp Gln Ile Ser Phe Val Ala Glu Asn Gly Ala Leu Val Phe Asp His 85 90 Gly Glu Gln Ile Phe His Gly Glu Leu Thr Arg His Glu Ser Gln Ile 100 105 Val Ile Gly Glu Leu Leu Lys Asp Lys Gly Leu Asn Phe Val Ala Cys 115 120 Gly Leu Glu Ser Ala Tyr Val Ser Asp Lys Ala Pro Asp Ala Phe Val 135 140 Ala Leu Met Ser Lys His Tyr His Arg Leu Lys Arg Ile Ser Asp Tyr 145 150 155 Arg Asp Ile Asp Asp Val Leu Phe Lys Phe Ser Leu Asn Leu Pro Asp 165 170 Ser Asp Ile Pro Asn Leu Val Asp Lys Leu His Val Ser Leu Asp Gly

```
180
                         185
Ile Met Lys Pro Val Thr Ser Gly Phe Gly Phe Val Asp Leu Ile Ile
   195
                   200
Pro Gly Leu His Lys Ala Asn Gly Ile Ser Arg Leu Leu Lys Arg Trp
  210
                  215
                                  220
Lys Ile Ser Pro Gln Glu Cys Val Ala Ile Gly Asp Ser Gly Asn Asp
          230
                       235
Ala Glu Met Leu Lys Leu Val Lys Tyr Ser Phe Ala Met Asp Asn Ala
          245
                       250 255
Ala Glu Ser Ile Lys Glu Ile Ser Arg Tyr Ser Thr Asp Asp Asn Asn
         260
                    265
His Gln Gly Ala Leu Asn Val Ile Gln Ala Val Leu Asp Asn His Ser
   275
              280 285
Pro Phe Asp Val
  290
<210> 8246
<211> 449
<212> PRT
<213> Enterobacter cloacae
<400> 8246
His Leu Asn Leu Arg Pro Leu Thr Val Arg Leu Val Glu Ser Lys Met
1 5
                 10
Ser Gln Asp Ile Asn Asn Thr Ile Ala Thr Ser Lys Thr Arg Arg Val
20 25
Ile Lys Asn Leu Arg Trp Tyr Val Leu Val Leu Phe Leu Leu Gly Val
35 40
                                    4.5
Thr Val Asn Tyr Ile Thr Arg Asn Ser Leu Gly Ile Leu Ala Pro Glu
50 55
Leu Lys Glu Ser Leu Gly Ile Thr Thr Glu Gln Tyr Ser Trp Ile Val
65 70 75
Gly Ala Phe Gln Ile Ala Tyr Thr Ile Phe Gln Pro Leu Cys Gly Trp
      85
                            90
Leu Ile Asp Val Ile Gly Leu Lys Ile Gly Phe Met Val Cys Ala Gly
 100 105 110
Ile Trp Ala Leu Met Cys Ile Phe His Ala Gly Ala Gly Ser Trp Leu
    115 120 125
His Leu Ala Ile Leu Arg Phe Phe Met Gly Ala Ser Glu Ala Ala Ala
130 135 140
Thr Pro Ala Asn Ala Lys Thr Ile Gly Glu Trp Phe Pro Lys Ser Glu 145 150 150 155
Arg Pro Val Ala Ala Gly Trp Ala Gly Val Gly Phe Ser Ile Gly Ala
           165 170 175
Met Leu Ala Pro Pro Ile Ile Tyr Phe Ala His Ala Ser Phe Gly Trp
         180
                      185
                                        190
Gln Gly Ala Phe Met Phe Thr Gly Val Leu Ala Leu Leu Trp Val Ile
    195 200
Leu Trp Trp Ala Phe Tyr His Asn Pro Glu Gln His Pro Asn Leu Ser
                215
                                  220
Lys Asp Glu Leu Ala Phe Ile Lys Gln Asp Asn Glu Pro Ala Pro Val
              230
                              235
Lys Leu Pro Phe Leu Thr Ala Leu Lys Thr Val Ser Lys Asn Lys Arg
           245 250 255
Phe Tyr Gly Ile Ala Ile Pro Ala Phe Met Ala Glu Pro Ala Trp Ala
                        265
                                        270
Val Leu Ser Phe Trp Val Pro Leu Tyr Leu Ala Lys Glu His Gly Met
                     280
                                     285
Asp Leu Lys Gln Ile Ala Met Phe Ala Trp Leu Pro Phe Leu Ala Ala
        295
                                  300
Asp Leu Gly Ser Val Ala Ser Gly Tyr Leu Thr Arg Leu Tyr Thr Arg
```

310 315 Leu Phe Gly Cys Ser Arg Val Asn Ser Val Val Ala Ser Ser Val Thr 325 330 Gly Ala Phe Leu Met Ile Ser Leu Ala Ile Val Ala Ile Thr Arg Asp 340 345 Pro Tyr Ile Thr Ile Val Leu Ile Ser Ile Gly Gly Phe Gly His Gln 360 365 Ile Ile Ser Cys Met Leu Ser Ala Leu Val Val Glu Ser Phe Asp Lys 370 375 380 Gly Gln Met Ala Thr Val Asn Gly Met Arg Gly Ser Ala Ala Trp Ile 390 395 Ala Ser Phe Leu Phe Ser Leu Leu Ile Gly Val Thr Ala Asp Lys Ile 405 410 415 Gly Phe Asn Pro Leu Phe Ile Ala Met Gly Phe Phe Asp Leu Ile Gly 420 425 430 Ala Leu Phe Leu Val Ala Phe Ile Ala Glu Arg Arg Ala Lys Arg Ala 440

<210> 8247 <211> 412 <212> PRT <213> Enterobacter cloacae

<400> 8247 Met Glu Leu Lys Gly Ala Ser Gly Trp Cys Ser Ala Ala Cys Ser Pro 1.0 His Pro Asn Pro Leu Pro Gln Gly Glu Gly Ile Lys Cys Arg Pro Gly 20 25 Lys Ala Lys Pro Pro Pro Gly Tyr Phe Leu Thr Leu Asp Thr Phe Thr 35 40 Ala Gln Val Ile Phe Val Val Thr Gly Glu Val His His Ala Leu Trp 55 60 Arg Asn Phe Asp His Ala Gly Arg Gln Arg Ala Asp Glu Leu Thr Val 65 70 7.5 Val Arg Asp Glu Asp Gln Gly Ala Leu Ile His Leu Gln Arg His Val 85 90 Gln Gly Phe Asp Arg Phe His Ile Gln Val Val Ser Arg Phe Val His 100 105 His Gln Asn Ile Arg Phe Phe His His Gln Leu Ala Glu Gln His Thr 125 Ala Leu Phe Thr Thr Gly Glu His Phe Gly Gly Leu Phe Asp Val Val 130 135 140 Leu Ala Glu Gln Gln Thr Pro Gln Asn Ala Ala Tyr Arg Leu Leu Ile 150 155 Val Ala Phe Leu Leu Pro Leu Ala His Pro Val Glu Asp Ser Gln Ile 165 170 Val Phe Glu Phe Ile Phe Met Val Leu Arg Val Val Thr Asn Leu Arg 180 185 190 Val Phe Arg Pro Phe His Gly Ser Val Val Arg Leu Gln Phe Thr His 200 Gln Gly Phe Gln His Ser Gly Phe Thr His Ala Val Gly Ala Glu Asp 210 215 220 Gly Asn Leu Leu Ala His Phe Gln Gln Gln Val Glu Val Phe Glu Gln 230 235 Arg Ala Phe Ile Glu Ala Phe Gly Glu Ser Phe His Phe Gln Arg Val 245 250 Thr Glu Gln Leu Leu Val Leu Leu Glu Ala Asp Glu Arg Val Leu Thr 260 265 270 Ala Gly Gly Phe Asn Leu Phe Gln Leu Asp Phe Val Asp Leu Thr Arg

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280
Thr Arg Gly Arg Leu Thr Arg Leu Arg Gly Val Gly Ala Glu Ala Ala
             295
                             300
Asp Glu Gly Leu Gln Val Arg Asn Leu Arg Phe Leu Leu Gly Val Val
          310
                    315
Gly Gln Gln Thr Phe Thr Cys Leu Gly Cys Arg Arg His Val Leu Ile
            325 330
                                  335
Val Val Ala Arg Ile Asn Ala Gln Leu Ala Val Val Gln Ile Arg His
        340
             345 350
Val Gly Thr His His Val Gln Glu Met Thr Val Val Arg Asn Asp Asp
    355 360 365
His Gly Ala Val Ala Ile Val Gln Arg Leu Leu Gln Pro Ala Asp Gly
 370 375 380
Val Asp Val Gln Val Val Gly Arg Phe Val Glu Gln Gln Asp Val Arg
385 390 395
Val Arg Glu Gln Arg Leu Arg Gln Gln His Thr
            405 410
<210> 8248
<211> 230
<212> PRT
<213> Enterobacter cloacae
<400> 8248
Leu Leu Gly Leu Ser His His Gly Glu Lys Leu Thr Arg Ile His Ile
Ser Ser Gly Val Asn Met Ile Thr Leu Trp Gly Arg Asn Asn Ser Thr
        20 25
Asn Val Lys Lys Val Leu Trp Thr Leu Glu Glu Leu Asp Leu Pro Phe
                    40
Asn Gln Ile Met Ala Gly Met Ala Phe Gly Val Asn Lys Asp Ala Asp
50 55
                                  60
Tyr Leu Ala Met Asn Pro Asn Gly Leu Val Pro Leu Leu Arg Asp Asp
65 70 75
Glu Thr Asp Ala Thr Leu Trp Glu Ser Asn Thr Ile Val Arg Tyr Leu
          85 90
Ala Ala Gln Tyr Gly Gln Gly Arg Leu Trp Val Glu Asn Pro Ala Gln
         100
                         105
                                        110
Arg Ala Gln Gly Glu Lys Trp Met Asp Trp Ala Asn Gln Thr Leu Ser
     115
                 120 125
Pro Thr His Arg Val Ile Leu Met Gly Leu Ile Arg Thr Pro Glu Ala
130 135 140
Asp Arg Asp Tyr Pro Ala Ile His Ala Ala Gln Asp Ala Cys Glu Ser
145 150
                               155
Leu Phe Ala Met Met Asp Asp Glu Leu Ala Lys His Thr Trp Phe Ser
            165 170
                                           175
Gly Asp Thr Phe Gly Val Gly Asp Ile Ala Val Ala Pro Phe Val Trp
                        185
                                        190
Asn Leu Thr Asn Met Gly Leu Ser Trp Thr Pro Arg Pro His Leu Glu
                          205
Arg Trp Ile Gin Gln Leu Ser Glu Arg Pro Ala Tyr Arg Asn Val Val
                  215
                                   220
Met Ile Pro Val Thr
<210> 8249
<211> 429
<212> PRT
<213> Enterobacter cloacae
<400> 8249
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```
Pro His Phe Ser Ala Ile Met Ser Ala Phe Val Val Thr Pro Gln Glu
                         1.0
Pro Thr Met Asp Phe Thr Ala Gly Leu Met Pro Leu Glu Thr Ala Leu
        20
Ser Gln Met Leu Asp Arg Ile Thr Pro Leu His Asp Val Glu Thr Leu
Pro Leu Val Arg Cys Phe Gly Arg Ile Ala Ala Arg Asp Ile Val Ser
               55
                               60
Pro Leu Asn Val Pro Gly Phe Asp Asn Ala Ala Met Asp Gly Tyr Ala
           70
                  75
Val Arg Leu Ala Asp Leu Gln Thr Gly Gln Pro Leu Pro Val Ala Gly
      85
              90
Lys Ala Phe Ala Gly Gln Pro Phe Asn Gly Glu Trp Pro Ala Asp Thr
    100 105 110
Cys Val Arg Ile Met Thr Gly Ala Pro Val Pro Thr Gly Cys Glu Ala
 115 120 125
Val Val Met Gln Glu Glu Thr Glu Gln Thr Asp Asp Gly Val Arg Phe
130 135 140
Thr Ala Ser Val Lys Ala Gly Gln Asn Ile Arg His Ile Gly Glu Asp
145 150 155 160
Ile Thr Leu Gly Ala Thr Val Phe Ala Ala Gly Gln Lys Leu Thr Val
   165 170 175
Ala Glu Leu Pro Val Leu Ala Ser Leu Gly Ile Ala Glu Ile Asp Val
      180 185 190
Val Arg Lys Val Arg Val Ala Val Phe Ser Thr Gly Asp Glu Leu Gln
195 200 205
Leu Pro Gly Gln Pro Leu Asn Glu Gly Gln Ile Tyr Asp Thr Asn Arg
210 215 220
Leu Ala Val His Leu Met Leu Glu Gln Leu Gly Cys Glu Val Ile Asn
225 230 235
Leu Gly Ile Ile Pro Asp Asp Pro Gln Lys Leu Arg Ala Ala Phe Ile
          245 250
Asp Ala Asp Ala Ser Ala Asp Val Val Ile Ser Ser Gly Gly Val Ser
  260 265 270
Val Gly Glu Ala Asp Tyr Thr Lys Asn Leu Leu Glu Glu Leu Gly Glu
    275 280 285
Ile Ala Phe Trp Lys Leu Ala Ile Lys Pro Gly Lys Pro Phe Ala Phe
 290 295 300
Gly Lys Leu Pro His Ser Trp Phe Cys Gly Leu Pro Gly Asn Pro Val
305 310 315
Ser Ala Ala Leu Thr Phe Tyr Gln Leu Val Ile Pro Leu Leu Ala Lys
325 330 335
Leu Ser Gly Asn Asn Ala Ser Pro Leu Pro Glu Arg Val Arg Val Arg
                      345 350
Ala Ala Thr Arg Leu Lys Lys Ser Pro Gly Arg Leu Asp Phe Gln Arg
     355
                   360 365
Gly Ile Leu Ala Arg Asn Ala Asp Gly Glu Leu Glu Val Ser Thr Thr
  370 375
                               380
Gly His Gln Gly Ser His Ile Phe Ser Ser Phe Ser Gln Gly Asn Cys
              390
                            395 400
Phe Ile Val Leu Glu Arg Asp Arg Gly His Val Glu Ala Gly Glu Trp
         405 410
Val Glu Val Glu Arg Phe Asn His Leu Phe Gly Gly
        420
                      425
```

<210> 8250

<211> 485

<212> PRT

<213> Enterobacter cloacae

<400> 8250

Thr Lys Ser Ala Pro Ala Arg Thr Pro Lys Pro Leu Ala Gly Ser Pro Leu Tyr Gln Asn Val Thr Ile Gly Gly Gln Lys Leu Val Asn Gly Glu 25 Pro Met Asp Ala Val Asn Pro Leu Ser Tyr Ala Ile Leu Glu Ser Cys 40 Gly Arg Leu Arg Ser Thr Gln Pro Asn Leu Ser Val Arg Tyr His Ala 55 60 Gly Met Ser Asn Asp Phe Leu Asp Ala Cys Val Gln Val Ile Arg Cys 70 75 Gly Phe Gly Met Pro Ala Phe Asn Asn Asp Glu Ile Val Ile Pro Glu 85 90 Phe Ile Lys Leu Gly Val Glu Arg Asp Asp Ala Tyr Asp Tyr Ala Ala 100 105 110 Ile Gly Cys Ile Glu Thr Ala Val Gly Gly Lys Trp Gly Tyr Arg Cys 115 120 125 Thr Gly Met Ser Phe Ile Asn Phe Ala Arg Val Met Leu Ala Ala Leu 135 140 Glu Gly Gly Arg Asp Ala Thr Ser Gly Lys Val Phe Leu Pro Gln Glu 145 150 155 160 Lys Ala Leu Ser Ala Gly Asn Phe Asp Asn Phe Glu Glu Val Met Ala 165 170 175 Ala Trp Asp Thr Gln Ile Arg Tyr Tyr Thr Arg Lys Ser Ile Glu Ile 180 185 190 Glu Tyr Val Val Asp Thr Met Leu Glu Glu Asn Val His Asp Ile Leu 195 200 205 Cys Ser Ala Leu Val Asp Asp Cys Ile Glu Arg Ala Lys Ser Ile Lys 210 215 220 Gln Gly Gly Ala Lys Tyr Asp Trp Val Ser Gly Leu Gln Val Gly Ile 225 230 235 Ala Asn Leu Gly Asn Ser Leu Ala Ala Val Lys Lys Leu Val Phe Asp 245 250 Gln Gly Val Ile Gly Gln Gln Leu Ala Ala Ala Leu Ala Asp Asp 260 265 Phe Glu Gly Leu Thr His Glu Gln Leu Arg Gln Arg Leu Ile Asn Gly 275 280 285 Ala Pro Lys Tyr Gly Asn Asp Asp Asp Ser Val Asp Leu Leu Thr 290 295 300 Arg Ala Tyr Glu Thr Tyr Ile Glu Glu Leu Lys Gln Tyr His Asn Pro 305 310 315 320Arg Tyr Gly Arg Gly Pro Ile Gly Gly Asn Tyr Tyr Ala Gly Thr Ser 325 330 Ser Ile Ser Ala Asn Val Pro Phe Gly Ala Ala Thr Met Ala Thr Pro 340 345 350 Asp Gly Arg Lys Ala His Thr Pro Leu Ala Glu Gly Ala Ser Pro Ala 355 360 365 Ser Gly Thr Asp His Leu Gly Pro Thr Ala Val Ile Gly Ser Val Gly 370 375 380 Lys Leu Pro Thr Glu Ala Ile Leu Gly Gly Val Leu Leu Asn Gln Lys 390 395 Leu Asn Pro Ser Thr Leu Glu Asn Asp Ser Asp Arg Gln Lys Leu Met 405 410 415 Val Leu Leu Arg Thr Phe Phe Glu Val His Lys Gly Trp His Ile Gln 420 425 Tyr Asn Ile Val Ser Arg Glu Thr Leu Leu Glu Ala Lys Lys His Pro 435 440 Asp Gln Tyr Arg Asp Leu Val Val Arg Val Ala Gly Tyr Ser Ala Phe 450 455 460 Phe Thr Ala Leu Ser Pro Asp Ala Gln Asp Asp Ile Ile Ala Arg Thr 470 475 Glu His Thr Leu

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<210> 8251
<211> 431
<212> PRT
<213> Enterobacter cloacae
<400> 8251
Thr Phe Leu Leu Ser Asn Glu Arg Cys Glu Ala Val Met Thr Phe Thr
1 5
                10
Ser Glu Thr Leu Pro Ala Asp His Lys Ala Ala Ile Arg Gln Leu Lys
   20
                      2.5
Arg Glu Leu Arg Ala Gln Ile Gly Asp Val Gln Ala Val Phe Asp Lys
            40
Leu Ser Asp Ser Ile Ala Thr Arg Val Ala Glu Ile Asn Ala Leu Lys
       55
                                 60
Asn Lys Gly Glu Ser Val Trp Pro Val Ile Pro Phe Asn Asp Val Lys
               70
                              75
Asn Gly Thr Ile Thr Asp Ala Gln Arg Glu Ala Val Lys Arg Arg Gly
            85
                           90
Cys Ala Val Ile Lys Gly His Phe Pro Arg Glu Gln Ala Leu Ala Trp
       100 105 110
Asp Gln Ser Met Leu Asp Tyr Leu Asp Leu Asn Lys Phe Asp Glu Val
     115
                     120
                         125
Tyr Lys Gly Pro Gly Asp Asn Phe Phe Gly Thr Leu Thr Ala Ser Arg
 130 135
                                 140
Pro Glu Ile Tyr Pro Ile Tyr Trp Ser Gln Ala Gln Met Gln Ala Arg
145 150 155
Gln Ser Glu Glu Met Ala Gln Val Gln Ser Phe Leu Asn Arg Leu Trp
           165
                           170 175
Thr Phe Glu Ser Asn Gly Lys Gln Trp Phe Asp Pro Asp Val Ser Val
         180 185 190
Ile Tyr Pro Asp Arg Ile Arg Arg Pro Pro Gly Thr Thr Ser Lys
195 200
                                     205
Gly Leu Gly Ala His Thr Asp Ser Gly Ala Leu Glu Arg Trp Leu Leu
 210 215
                                  220
Pro Ala Tyr Gln Gln Val Phe Ala Arg Val Phe Asp Gly Asn Val Glu
225
              230 235
Lys Tyr Asp Pro Trp Asn Ala Ala His Arg Thr Glu Val Glu Glu Tyr
           245
                           250
Thr Val Asp Asn Thr Thr Lys Cys Ser Val Phe Arg Thr Phe Gln Gly
         260
                        265
Trp Thr Ala Leu Ser Asp Met Ile Pro Gly Gln Gly Leu Leu His Val
      275
                      280
                                     285
Val Pro Ile Pro Glu Ala Met Ala Tyr Ile Leu Leu Arg Pro Leu Leu
                 295
                                  300
Asp Asp Val Pro Glu Asp Glu Leu Cys Gly Val Ala Pro Gly Arg Val
305
               310
                               315
                                               320
Leu Pro Val Ser Glu Lys Trp His Pro Leu Leu Ile Glu Ala Leu Thr
            325
                           330
Ser Ile Pro Ala Leu Glu Ala Gly Asp Ser Val Trp Trp His Cys Asp
         340
                        345
Val Ile His Ser Val Ala Pro Val Asp Asn Gln Gln Gly Trp Gly Asn
      355
                     360
                                     365
Val Met Tyr Ile Pro Ala Ala Pro Met Cys Glu Lys Asn Leu Ala Tyr
  370
                  375
                                  380
Ala Lys Lys Val Lys Glu Ala Leu Glu Thr Gly Ala Ser Pro Gly Asp
385
              390
                              395
Phe Pro Arg Glu Asp Tyr Glu Lys Thr Trp Gln Asp Arg Phe Thr Val
           405
                  410
```

Asn Asp Leu Asn Ile His Gly Lys Arg Ala Leu Gly Met Val

430

<210> 8252 <211> 629

<212> PRT <213> Enterobacter cloacae

<400> 8252

Ile Arg Gly His Cys Val Pro His Arg Glu Glu Leu Asp Asn Cys Glu
1 5 10 15

Val Leu Ala Val His Gln Leu Asn Ile Ala Phe Gln Glu Glu Arg Gln 20 25 30

Phe Ile Pro Ala Val Gln Asn Leu Ser Phe Ser Leu Arg Arg Gly Glu 35 40 45

Thr Leu Ala Ile Val Gly Glu Ser Gly Ser Gly Lys Ser Val Thr Ala 50 60

Leu Ala Leu Met Arg Leu Leu Glu Gln Thr Gly Gly Gln Val Thr Ser 65 70 75 80

Glu Arg Met Leu Leu Arg Arg Arg Asn Arg Gln Val Ile Asp Leu Asn 85 90 95

Glu Leu Ser Ala Ser Arg Met Gln Gly Val Arg Gly Ala Asp Ile Ala $100 \\ 105 \\ 110$

Met Ile Phe Gln Glu Pro Met Thr Ser Leu Asn Pro Val Phe Pro Val 115 120 125

Gly Glu Gln Ile Ala Glu Ser Ile Arg Leu His Gln Gly Leu Ser Gly 130 135 140

Asp Glu Ala Leu Asn Glu Ala Lys Arg Met Leu Glu Leu Val Arg Ile 145 \$150\$

Pro Glu Ala His Ala Ile Leu Ser Arg Tyr Pro His Gln Leu Ser Gly 165 170 175

Gly Met Arg Gln Arg Val Met Ile Ala Met Ala Leu Ser Cys Arg Pro 180 185 190

Ala Val Leu Ile Ala Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Ile 195 200 205

Gln Ala Gln Ile Leu Gln Leu Ile Lys Val Leu Gln Gln Glu Met Glu

210 215 220 Met Gly Val Ile Phe Ile Thr His Asp Met Gly Val Val Ala Asp Ile

225 230 235 240 Ala Asp Arg Val Leu Val Met His Gln Gly Asn Ala Val Glu Thr Gly

245 250 255
Thr Val Glu Gln Val Phe His Ala Pro Val His Ser Tyr Thr Lys Ala

260 265 270
Leu Leu Ala Ala Val Pro Arg Leu Gly Ala Met Asn Gly Ser Asp Phe

275 280 285

Pro Arg Arg Phe Pro Leu Ile Ser Gln Thr Glu Gln Gly Lys Gln Glu 290 295 300

Asp Glu Thr Glu Gln Asp Thr Val Val Pro Gly Arg Pro Ile Leu Glu 305 310 315 320

Val Arg Asp Leu Val Thr Arg Phe Pro Leu Arg Ser Gly Ile Leu Asn $325 \hspace{1.5cm} 330 \hspace{1.5cm} 335$

Arg Val Lys Arg Glu Val His Ala Val Glu Asn Val Ser Phe Asp Leu 340 345 350

Trp Pro Gly Glu Thr Leu Ala Leu Val Gly Glu Ser Gly Cys Gly Lys 355 360 365

Ser Thr Thr Gly Arg Ala Leu Leu Arg Leu Val Ala Ser Gln Glu Gly 370 375 380

Ser Ile Thr Phe Asn Gly Glu Arg Ile Asp Thr Leu Pro Asn Ser Lys 385 390 395 400 Leu Gln Ala Val Arg Arg Asp Ile Gln Phe Ile Phe Gln Asp Pro Tru

405 410 415
Ala Ser Leu Asp Pro Arg His Thr Val Gly Tyr Ser Ile Met Glu Pro

£3

```
420
                         425
                                         430
Leu Arg Val His Asn Leu Leu Asp Gly Glu Asp Ala Gln Arg Arg Val
 435 440 445
Ala Trp Leu Leu Glu Arg Val Gly Leu Lys Pro Glu His Ala Trp Arg
 450 455 460
Tyr Pro His Glu Phe Ser Gly Gly Gln Arg Gln Arg Ile Cys Ile Ala
   470 475 480
Arg Ala Leu Ala Leu Asn Pro Lys Val Val Ile Ala Asp Glu Ser Val
       485 490 495
Ser Ala Leu Asp Val Ser Ile Arg Ala Gln Ile Ile Asn Leu Leu Leu
       500 505
Asp Leu Gln Arg Asp Leu Gly Ile Ala Phe Leu Phe Ile Ser His Asp 515 520 525
Met Ala Val Val Glu Arg Ile Ser His Arg Val Ala Val Met Tyr Met
 530 535 540
Gly Gln Ile Val Glu Ile Gly Pro Arg Arg Ala Val Phe Glu Asn Pro
    550 555 560
Gln His Pro Tyr Thr Arg Lys Leu Met Ala Ala Val Pro Val Ala Asp
            565 570 575
Pro Glu His Arg His Ala Gln Arg Val Leu Leu Gln Asp Glu Met Pro
         580 585 590
Ser Asn Ile Arg Lys Arg Gly Glu Thr Leu Glu Arg Val Ala Leu Arg
 595 600 605
Glu Val Gly Pro Gly His Phe Val Ala Pro Pro Arg Gln Gly Asn Ala
610
                   615
                       620
Phe Ser Arg Leu
625
<210> 8253
<211> 138
<212> PRT
<213> Enterobacter cloacae
<400> 8253
Gly Asn Met Ala Asp Arg Gly Gly Asn Ser Met Ser Val Asp Arg Leu
Lys Arg Asp Leu Leu Asn Lys Leu Ile Asn Ala Arg Ile Asp Leu Ala
        20
                         25
                                         3.0
Ala Tyr Leu Gln Leu Arg Lys Ala Lys Gly Tyr Met Ser Val Ser Glu
 35
                     40
                                      4.5
Ser Glu Asn Leu Arg Asp Asn Phe Phe Glu Leu Cys Asn Phe Met Arg
                  55
                           60
Glu Lys Ala Pro Ile Leu Lys Ala His Tyr Ala Glu Ser Glu Leu Val
               70
                              75
Ala Leu Arg Arg Ala Ala Glu Val Leu Ser Ile Ala Gly Val Cys Leu
            85 90
                                             95
Met Asn Gly Arg His Asp Cys Pro Asn Phe Ile Ala Val Asn Ala Asp
         100
                         105
Lys Leu Glu Asn Cys Leu Thr Thr Leu Ala Leu Cys Ile Met Cys Leu
               120
Asn Lys Pro Glu Thr Leu Ala Arg His
 130
                   135
<210> 8254
<211> 230
<212> PRT
<213> Enterobacter cloacae
<400> 8254
Val Gln Ala Lys Phe Glu Gly Asp Ile Met Glu Leu Tyr Leu Asp Thr
```

Ser Asp Val Ala Ala Val Lys Lys Leu Ala Arg Ile Phe Pro Leu Ala Gly Val Thr Thr Asn Pro Ser Ile Val Ala Ala Gly Lys Thr Pro Leu 40 Glu Glu Leu Leu Pro Ala Leu His Asp Ala Leu Gly Gly Lys Gly Arg 55 60 Leu Phe Ala Gln Val Met Ala Lys Thr Ala Glu Gly Met Val Glu Asp 75 70 Ala Arg Lys Leu Arg Ala Ile Ile Asn Asp Leu Val Val Lys Val Pro 85 90 Val Thr Ala Glu Gly Leu Ala Ala Ile Lys Met Leu Lys Ala Glu Gly 100 105 Ile Pro Thr Leu Gly Thr Ala Val Tyr Gly Ala Ala Gln Gly Met Leu 115 120 125 Ser Ala Leu Ala Gly Ala Glu Tyr Val Ala Pro Tyr Val Asn Arg Val 130 135 140 Asp Ala Gln Gly Gly Asp Gly Ile Gln Thr Val Val Glu Met Gln Gln 150 155 Leu Leu Thr Leu His Ala Pro Gln Ser Lys Val Leu Ala Ala Ser Phe 165 170 Lys Thr Pro Arg Gln Ala Leu Asp Cys Leu Leu Ala Gly Cys Glu Ser 180 185 190 Ile Thr Leu Pro Leu Asp Val Ala Gln Gln Phe Ile Thr Ser Pro Ala 195 200 205 Val Asp Ala Ala Ile Val Lys Phe Glu Gln Asp Trp Gln Gly Ala Phe 210 220

Gly Arg Thr Ser Ile 225 230

<210> 8255 <211> 315 <212> PRT

<213> Enterobacter cloacae

<400> 8255

Cys Glu Met Ser Lys Ala Val Ile Ala Ile His Gly Gly Ala Gly Ala 1.0 Ile Thr Arg Ala Gln Leu Ser Pro Glu Gln Glu Lys Arg Tyr Ile Asp 25 Ala Leu Asn Ala Ile Val Glu Thr Gly Gln Arg Met Leu Glu Ala Gly 40 Asp Ser Ala Leu Asp Val Val Thr Glu Ala Val Arg Leu Leu Glu Glu 55 Cys Pro Leu Phe Asn Ala Gly Ile Gly Ser Val Phe Thr Arg Asp Glu 75 7.0 Thr His Glu Leu Asp Ala Cys Val Met Asp Gly Val Thr Leu Lys Ala 8.5 90 Gly Ala Val Ala Gly Val Ser Arg Leu Arg Asn Pro Val Leu Ala Ala 105 Arg Leu Val Met Glu Gln Ser Pro His Val Leu Leu Ala Gly Ala Gly 115 120 Ala Glu Lys Phe Ala Val Glu His Gly Met Asp Thr Val Ser Pro Glu 135 Leu Phe Ser Thr Glu Glu Arg Tyr Arg Gln Leu Leu Glu Ala Arg Thr 150 155 Ala Gly Met Thr Gln Leu Asp His Ala Ala Pro Leu Asp Glu Arg Ser 165 170 Lys Met Gly Thr Val Gly Ala Val Ala Leu Asp Lys Ala Gly Asn Leu 185 190 Ala Ala Ala Thr Ser Thr Gly Gly Met Thr Asn Lys Leu Pro Gly Arg

```
Val Gly Asp Ser Pro Leu Pro Gly Ala Gly Cys Tyr Ala Asn Asn Ala
             215
  210
Thr Ala Ala Val Ser Cys Thr Gly Thr Gly Glu Val Phe Ile Arg Ala
             230 235
Leu Ala Ala Tyr Asp Ile Thr Ala Leu Met Asp Tyr Gly Gly Leu Ser
         245 250 255
Leu Ser Glu Ala Cys Glu Arg Val Val Met Glu Lys Leu Pro Ala Leu
    260 265 270
Gly Gly Ile Gly Gly Leu Ile Ala Val Asp Arg Glu Gly Asn Val Ala
     275 280 285
Leu Pro Phe Asn Ser Glu Gly Met Tyr Arg Ala Trp Gly Tyr Ala Gly
290 295 300
Asp Ala Pro Ser Thr Gly Ile Tyr Arg Glu
              310
<210> 8256
<211> 314
<212> PRT
<213> Enterobacter cloacae
<400> 8256
Arg Gly Phe Lys Ile Lys Leu Met Leu Asn Tyr Val Cys Lys Arg Leu
                          1.0
Leu Gly Leu Ile Pro Thr Leu Leu Ile Val Ala Val Leu Val Phe Leu
       20
                        2.5
                                        3.0
Phe Val His Met Leu Pro Gly Asp Pro Ala Arg Leu Ile Ala Gly Pro
                     40
                         45
Glu Ala Asp Ala Thr Val Ile Glu Leu Val Arg Lys Gln Leu Gly Leu
                5.5
Asp Gln Pro Leu Tyr Arg Gln Phe Leu Arg Tyr Ile Gly Asn Val Leu
    70
                              7.5
Gln Gly Asp Phe Gly Ile Ser Met Val Ser Arg Arg Pro Val Ser Glu
          85 90
Glu Ile Ala Ser Arg Phe Met Pro Thr Phe Trp Leu Thr Ile Ala Ser
       100 105
                                      110
Met Ser Trp Ala Val Val Phe Gly Leu Gly Ala Gly Ile Val Ala Ala
   115 120 125
Val Trp Arg Asn Arg Trp Pro Asp Lys Leu Gly Met Ala Leu Ala Val
 130 135
                                  140
Thr Gly Ile Ser Phe Pro Ala Phe Ala Leu Gly Met Leu Leu Met Gln
145 150 155 160
Ile Phe Ser Val Glu Leu Gly Trp Leu Pro Thr Val Gly Ala Asp Thr
           165 170
Trp Lys His Tyr Ile Leu Pro Ser Met Thr Leu Gly Ala Ala Val Ala
        180
                        185
                                     190
Ala Val Met Ala Arg Phe Thr Arg Ala Ser Phe Val Asp Val Leu Ser
                      200 205
Glu Asp Tyr Ile Arg Thr Ala Arg Ala Lys Gly Val Ser Glu Lys Trp
 210
                  215 220
Val Ile Leu Lys His Gly Phe Arg Asn Ala Met Ile Pro Val Val Thr
               230 235
Met Met Gly Leu Gln Phe Gly Phe Leu Leu Gly Gly Ser Ile Val Val
           245
                           250
Glu Lys Val Phe Asn Trp Pro Gly Leu Gly Arg Leu Leu Val Asp Ser
                        265
```

Val Asp Met Arg Asp Tyr Pro Val Ile Gln Ala Glu Val Leu Leu Phe

Ser Leu Glu Phe Ile Leu Ile Asn Leu Val Val Asp Val Leu Tyr Ala

285

Ala Ile Asn Pro Ala Ile Arg Tyr Lys 305 310

290

275 280

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<210> 8257
<211> 384
<212> PRT
<213> Enterobacter cloacae
<400> 8257
Ser Leu Ser His Met Ser Ile Lys Glu Cys Val Met Pro Arg Ser Ser
                        10
Leu Ile Phe Leu Pro Val Leu Leu Phe Pro Leu Ser Leu Leu Ala Ala
      20
            25
Pro Glu Thr Val Lys Val Asp Val Leu Gln Thr Lys Leu Asp His Pro
 35 40
Trp Ser Leu Ala Phe Leu Pro Asp Asn Lys Gly Leu Leu Ile Thr Leu
            55 60
Lys Asp Gly Gln Leu Lys His Trp Gln Ala Gly Lys Gly Leu Ser Asp
65 70 75
Pro Ile Val Gly Val Pro Lys Val Trp Ala Ser Gly Gln Gly Gly Leu
           85
                90
Leu Asp Val Ala Leu Ala Pro Asp Phe Ala Gln Ser Arg Arg Val Trp
 100 105 110
Leu Ser Phe Ala Glu Ala Gly Asn Asp Gly Lys Ala Gly Thr Ala Val
115 120 125
Gly Tyr Gly Arg Leu Ser Asp Leu Ser Arg Ile Glu Gly Phe Gln
 130 135 140
Val Val Phe Arg Gln Met Pro Lys Leu Ser Thr Gly Asn His Phe Gly
145 150 155
Gly Arg Leu Val Phe Asp Gly Lys Gly His Leu Phe Ile Gly Leu Gly
           165
                          1.70
Glu Asn Asn Gln Arg Pro Thr Ala Gln Asp Leu Asp Lys Leu Gln Gly
      180
                       185
                                      190
Lys Val Val Arg Leu Thr Glu Asp Gly Lys Val Pro Pro Asp Asn Pro
 195 200
                                 205
Phe Val Asn Thr Ala Gly Ala Arg Pro Glu Ile Trp Ser Tyr Gly Ile
210 215
                                220
Arg Asn Pro Gln Gly Met Ala Met Asn Pro Trp Ser Asp Thr Leu Trp
225 230
                             235 240
Leu Asn Glu His Gly Pro Arg Gly Gly Asp Glu Ile Asn Ile Pro Glu
           245
                          250
Lys Gly Lys Asn Tyr Gly Trp Pro Leu Ala Thr His Gly Ile Asn Tyr
        260 265
Ser Gly Leu Lys Ile Pro Glu Ala Lys Gly Glu His Val Glu Gly Thr
                    280
Glu Lys Pro Leu Phe Val Trp Lys Val Ser Pro Ala Val Ser Gly Met
 290 295
                                300
Ala Phe Tyr Asn Ser Asp Val Phe Pro Gln Trp Lys Asn Lys Leu Phe
305 310
                             315
Ile Gly Ala Leu Lys Glu Lys Asp Val Ile Val Leu Ser Val Lys Gly
                          330
           325
Asn Ser Val Thr Glu Asp Gly Arg Ile Leu Gly Asp Lys Asp Gln Arg
                       345 350
         340
Ile Arg Asp Val Arg Val Gly Pro Asp Gly Tyr Leu Tyr Val Leu Thr
     355
                    360
                                   365
Asp Glu Thr Asp Gly Gln Leu Trp Lys Val Ser Pro Ser Gly Ser
                  375
<210> 8258
<211> 115
<212> PRT
<213> Enterobacter cloacae
```

```
<400> 8258
Cys Ala Ile Thr His Arg Phe Leu Arg His Gly Asp Cys Asp Val Ile
Phe Arg Met Asp Thr Arg Val Ala Phe Met Thr Gln Lys Thr Ser Ser
                             25
Leu Arg Ser Leu Ala Ala Gly Ser Ala Leu Leu Phe Leu Phe Ala Pro
                          4.0
                                         4.5
Thr Leu His Ala Ala Glu Gln Thr Ala Pro Glu Ala Pro Pro Val Asp
                     5.5
Ala Arg Ala Trp Ile Leu Met Asp Tyr Ala Ser Gly Lys Val Leu Ala
                  70
                             75
Glu Gly Asn Ala Asp Glu Lys Leu Asp Pro Ala Ser Leu Thr Lys Ile
                       90 95
              8.5
Met Thr Ser Tyr Val Val Gly Val Phe Thr His Val Gly Arg Ser Ile
           100
                           105
Arg Asp His
      115
<210> 8259
<211> 544
<212> PRT
<213> Enterobacter cloacae
<400> 8259
Cys Arg Val Tyr His Thr Phe Arg Arg Asn Leu Ser Val Leu Val Thr
                                 10
Ser Asn Val Thr Met Gln Phe Gly Ser Lys Pro Leu Phe Glu Asn Ile
                             2.5
Ser Val Lys Phe Gly Gly Gly Asn Arg Tyr Gly Leu Ile Gly Ala Asn
      35
                         4.0
Gly Ser Gly Lys Ser Thr Phe Met Lys Ile Leu Gly Gly Asp Leu Glu
                      55
                                         60
Pro Thr Leu Gly Asn Val Ser Leu Asp Pro Asn Glu Arg Ile Gly Lys
                  7.0
                                    7.5
Leu Arg Gln Asp Gln Phe Ala Phe Glu Glu Phe Thr Val Leu Asp Thr
              85
                                90
Val Ile Met Gly His Ala Glu Leu Trp Glu Val Lys Gln Glu Arg Asp
           100 105
                                                110
Arg Ile Tyr Gly Leu Ala Glu Met Ser Glu Glu Asp Gly Tyr Lys Val
       115
                         120
Ala Asp Leu Glu Thr Gln Tyr Gly Glu Met Asp Gly Tyr Ser Ala Glu
                      135
                                         140
Ala Arg Ala Gly Glu Leu Leu Gly Val Gly Ile Pro Val Glu Gln
                  150
                                     155
                                                        160
His Tyr Gly Pro Met Ser Glu Val Ala Pro Gly Trp Lys Leu Arg Val
               165
                                  170
Leu Leu Ala Gln Ala Leu Phe Ser Asn Pro Asp Ile Leu Leu Leu Asp
           180
                              185
                                                 190
Glu Pro Thr Asn Asn Leu Asp Ile Asp Thr Ile Arg Trp Leu Glu Gln
                         200
                                             205
Thr Leu Asn Asp Arg Asp Ser Thr Met Ile Ile Ile Ser His Asp Arg
   210
                      215
                                         220
His Phe Leu Asn Met Val Cys Thr His Met Ala Asp Leu Asp Tyr Gly
                  230
                                     235
Glu Leu Arg Val Tyr Pro Gly Asn Tyr Asp Glu Tyr Met Thr Ala Ala
                                  250
               245
                                                    255
Thr Gln Ala Arg Glu Arg Leu Leu Ala Asp Asn Ala Lys Lys Lys Ala
           260
                             265
Gln Ile Ala Asp Leu Gln Ser Phe Val Ser Arg Phe Ser Ala Asn Ala
                          280
Ser Lys Ser Arg Gln Ala Thr Ser Arg Ala Arg Gln Ile Asp Lys Ile
```

```
295
Lys Leu Glu Glu Val Lys Ala Ser Ser Arg Gln Asn Pro Phe Ile Arg
                    315
         310
Phe Glu Gln Asp Lys Lys Leu Phe Arg Asn Ala Leu Glu Val Glu Ala
           325
                 330
Leu Thr Lys Gly Phe Asp Glu Gly Pro Leu Phe Lys Asn Phe Asn Leu
             345
        340
                          350
Leu Leu Glu Val Gly Glu Lys Ile Ala Ile Leu Gly Ala Asn Gly Val
 355
            360 365
Gly Lys Ser Thr Met Leu Lys Thr Leu Val Gly Glu Leu Gln Pro Asp
         375 380
Asn Gly Thr Val Lys Trp Ser Glu Asn Ala Gln Ile Gly Tyr Tyr Ala
           390 395
Gln Asp His Glu Tyr Glu Phe Glu Asn Asp Leu Thr Val Phe Asp Trp
         405 410 415
Met Ser Gln Trp Lys Gln Glu Gly Asp Asp Glu Gln Ala Val Arg Ser
      420 425 430
Ile Leu Gly Arg Leu Leu Phe Ser Gln Asp Asp Ile Lys Lys Pro Ala
435 440 445
Lys Val Leu Ser Gly Gly Glu Lys Gly Arg Met Leu Phe Gly Lys Leu
450 455 460
Met Met Glu Lys Pro Asn Ile Leu Val Met Asp Glu Pro Thr Asn His
465 470 475 480
Leu Asp Met Glu Ser Ile Glu Ser Leu Asn Met Ala Leu Glu Met Tyr
     485 490 495
Gln Gly Thr Leu Ile Phe Val Ser His Asp Arg Glu Phe Val Ser Ser
 500 505 510
Leu Ala Thr Arg Val Ile Glu Ile Thr Pro Glu Arg Val Val Asp Phe
515 520 525
Thr Gly Asn Tyr Glu Asp Tyr Leu Arg Ser Lys Gly Ile Glu Ser
```

<210> 8260 <211> 375 <212> PRT

<213> Enterobacter cloacae

<400> 8260 His Thr Arg Tyr Glu Asn Phe Phe Ile Ser Gln Met Glu Pro Asp His 10 Lys Met Asp Lys Arg Leu Lys Ile Thr Glu Ile Ala Ala Arg Thr Gln 2.5 30 Leu Ser Ile Ser Thr Val Ser Arg Val Leu Ala Gly Lys Ala Asn Thr 4.0 45 Ser Glu Lys Ala Arg Ala Lys Val Leu Ala Cys Ala Arg Glu Leu Gly 50 55 60 Val Met Asp Gly Met Ala Ala Gly Arg Leu Leu Leu Asn Ser Leu Val 70 Val Phe Ala Pro Gln Arg Ala Phe Asp Glu Arg Ser Asp Ile Phe Tyr 8.5 90 95 Tyr Arg Val Ile Gln Ser Val Ser Lys Ala Leu Ala Ser His Glu Val 100 105 110 Arg Leu Arg Tyr Cys Ala Leu Glu Glu Asn Asp Ser Asp Ala Gln Leu 115 120 125 Phe Leu Ala Arg Met Asn Glu Pro Asp Thr Gln Ala Ala Ile Leu Leu 130 135 140 Gly Ile Asp Asp Pro His Ile His Asp Leu Ala Val Asp Val Gly Lys 150 155 Pro Cys Met Leu Ile Asn Cys Arg Asp Arg His Met Arg Leu Pro Ala 165 170 Val Ala Pro Asp His Arg Ala Ile Gly Giu Arg Ala Ala Glu Tyr Leu

```
180
                            185
Phe Glu Met Gly His Arg Glu Val Met Asn Val Leu Cys Leu Arg Arg
      195
                       200
                                  205
Tyr Thr Met Glu Leu Arg Leu Ser Gly Ile Arg Asp Ala Trp Gln Ser
   210
                    215
                             220
His Asn Leu Ala Phe Asn Asp Lys Arg Asp Leu Leu Val Val Pro Ser
        230
                          235
Phe Ser Ala Arg Glu Thr Glu Gln Leu Val Ser Asp Trp Leu Asn Gln
             245 250 255
Gln Gln Gly Lys Asp Leu Pro Thr Ala Phe Leu Val Gly Gly Asp Phe
         260
               265
Met Ala Ala Gly Thr Ile Ser Ala Leu Lys Asn His Gly Leu Arg Val
              280 285
      275
Pro Gln Asp Val Ser Val Met Ser Ile Asp Gly Phe Asn Leu Ala Ala
  290 295 300
Ile Gln Asp Val Pro Leu Thr Ala Val His Val Pro Arg Asp Glu Leu
              310 315
Gly Thr Glu Ala Val His Met Leu Gln Gln Arg Leu Met Arg Pro Asp
             325 330
Ala Pro Val Gly Thr Leu Leu Leu Asn Gly Thr Leu Thr Val Arg Glu
       340 345 350
Ser Val Arg Arg Ile Arg Gln Gly Lys Arg Arg Thr Ala Val Glu Arg
    355
Glu Gly Leu Tyr Asp Ser
<210> 8261
<211> 541
<212> PRT
<213> Enterobacter cloacae
<400> 8261
Gly Gly Ser Arg Ser Phe Cys Arg Thr Thr Ala Ser Gly Gln Cys Ile
                              10
Leu Ala Val Ile Thr Tyr Asn Arg Gln Glu Asn Thr Met Val Pro Phe
                                             30
Val Ala Arg Gln Trp Leu Leu Ala Ala Ser Val Thr Ala Ala Leu Ala
                        4.0
                                         45
Ala Ala Pro Ala Phe Ala Ala Lys Asp Val Val Val Ala Val Gly Ser
                    55
                                     60
Asn Phe Thr Thr Leu Asp Pro Tyr Asp Ala Asn Asp Thr Leu Ser Gln
                7.0
                                  75
Ala Val Ala Lys Ser Phe Tyr Gln Gly Leu Phe Gly Leu Asp Arg Glu
             8.5
                               90
Met Lys Leu Lys Asn Val Leu Ala Glu Gly Tyr Thr Val Ser Asp Asp
         100
                           105
Gly Leu Val Tyr Thr Val Lys Leu Arg Thr Gly Val Lys Phe Gln Asp
                        120
Gly Thr Asp Phe Asn Ala Glu Ala Val Lys Ile Asn Leu Asp Arg Ala
                    135
                                      140
Ser Asn Pro Glu Asn Gly Leu Lys Arg Tyr Asn Leu Tyr Lys Asn Ile
                150
                                  155
Ala Ser Thr Glu Ala Val Asp Pro Ala Thr Val Lys Ile Val Leu Lys
             165
                              170
Glu Pro Phe Ser Ala Phe Ile Asn Ile Leu Ala His Pro Ala Thr Ala
        180
                           185
Met Ile Ser Pro Ala Ala Leu Lys Lys Tyr Gly Lys Glu Ile Gly Phe
      195
                       200
His Pro Val Gly Thr Gly Pro Tyr Glu Leu Leu Thr Trp Asn Gln Thr
                    215
Asp Phe Val Lys Val Lys Lys Phe Ala Gly Tyr Trp Gln Gln Gly Leu
```

```
230
Pro Lys Leu Asp Thr Ile Thr Trp Arg Pro Val Val Asp Asn Asn Thr
          245
                 250
Arg Ala Ala Met Leu Gln Thr Gly Glu Ala Gln Phe Ala Phe Pro Ile
       260
           265 270
Pro Tyr Glu Gln Ala Ala Leu Leu Ala Lys Asn Ser Lys Leu Glu Leu
   275 280 285
Val Ala Ser Pro Ser Ile Met Gln Arg Tyr Ile Ser Met Asn Val Thr
290 295 300
Gln Lys Pro Phe Asp Asn Pro Lys Val Arg Glu Ala Ile Asn Tyr Ala
305 310 315 320
Ile Asn Arg Gln Ala Leu Val Lys Val Ala Phe Ala Gly Tyr Ala Thr
        325 330
Pro Ala Thr Gly Val Met Pro Pro Ala Ile Glu Tyr Ala Gln Ser Tyr
      340 345 350
Gln Pro Trp Pro Tyr Asp Pro Ala Lys Ala Arg Glu Leu Leu Lys Glu
355 360 365
Ala Gly Tyr Pro Asn Gly Phe Ser Thr Thr Leu Trp Ser Ser His Asn
     375 380
His Ser Thr Ala Gln Lys Val Leu Gln Phe Thr Gln Gln Gln Leu Ala
385 390 395 400
Gln Val Gly Ile Lys Ala Arg Val Thr Ala Met Asp Ala Gly Gln Arg
          405
                        410
Ala Ala Glu Val Glu Gly Lys Gly Gln Lys Glu Ser Gly Val Arg Met
     420 425
Phe Tyr Thr Gly Trp Thr Ala Ser Thr Gly Glu Ala Asp Trp Ser Leu
435 440
                       445
Ser Pro Leu Phe Ala Ser Gln Asn Trp Pro Pro Thr Leu Phe Asn Thr
450 455
                     460
Ala Phe Tyr Ser Asn Pro Gln Val Asp Lys Asp Leu Ala Asp Ala Leu
     470 475
Lys Thr Thr Lys Pro Glu Glu Lys Ala Arg Leu Tyr Lys Glu Ala Gln
        485 490 495
Asp Ile Ile Trp Lys Glu Ser Pro Trp Val Pro Leu Val Val Glu Lys
       500 505 510
Leu Val Ser Ala His Asn Lys Ala Leu Thr Gly Phe Tyr Ile Met Pro
  515 520
Asp Thr Gly Phe Ser Phe Asp Asp Ala Asp Leu Lys
                535
 530
```

<210> 8262 <211> 321 <212> PRT

<213> Enterobacter cloacae

<400> 8262

Trp Trp Met Cys Cys Thr Pro Pro Leu Thr Arg Pro Ser Gly Ile Ser Lys Met Arg Leu Leu Asn Trp Arg Arg Gln Ala Ile Leu Asn Ala Met 20 25 3.0 Pro Gly Ile Arg Pro Asp His Ile Arg Thr Pro Trp Ile Glu Phe Trp 35 40 Arg Arg Phe Arg Arg Gln Pro Val Ala Met Val Ala Gly Leu Phe Val 55 Leu Leu Ile Leu Val Ala Ile Ile Ala Pro Trp Leu Ala Pro Phe 70 75 Asp Ala Glu Asn Tyr Phe Asp Tyr Asp Arg Leu Asn Asp Gly Pro Ser 8.5 90 Met Met His Trp Phe Gly Val Asp Ser Leu Gly Arg Asp Ile Phe Ser 100 105 Arg Val Leu Val Gly Ala Gln Ile Ser Leu Ala Ala Gly Val Phe Ala

```
120
Val Leu Met Gly Ala Ala Ile Gly Thr Val Leu Gly Leu Ala Ala Gly
                        140
           135
Tyr Tyr Glu Gly Trp Trp Asp Arg Ile Ile Met Arg Ile Cys Asp Val
            150
                  155
Leu Phe Ala Phe Pro Gly Ile Leu Leu Ala Ile Ala Val Val Ala Val
       165 170 175
Met Gly Ser Gly Met Ala Asn Val Ile Ile Ala Val Ala Val Phe Ser
      180 185 190
Ile Pro Ala Phe Ala Arg Leu Val Arg Gly Asn Thr Leu Val Leu Lys
   195 200 205
Gln Gln Thr Phe Ile Glu Ser Ala Arg Ser Met Gly Ala Ser Asp Ala
210 215 220
Thr Ile Leu Phe Ser His Ile Leu Pro Gly Thr Val Ser Ser Ile Val
225 230 235
Val Tyr Phe Thr Met Arg Ile Gly Val Ser Ile Ile Ser Ala Ala Ser 245 250 255
Leu Ser Phe Leu Gly Leu Gly Ala Gln Pro Pro Thr Pro Glu Trp Gly
      260 265 270
Ala Met Leu Asn Glu Ala Arg Ala Asp Met Val Ile Ala Pro His Val
275 280 285
Ala Ile Phe Pro Ser Leu Ala Ile Phe Leu Thr Val Leu Ala Phe Asn
290 295 300
Leu Leu Gly Asp Gly Leu Arg Asp Ala Leu Asp Pro Arg Ile Lys Gly
                             315
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<210> 8263 <211> 276 <212> PRT

<213> Enterobacter cloacae

<400> 8263 Phe Thr Gly Thr Asn Cys Pro Ala Ser Gly Lys Trp Thr Leu Met Ile 1.0 Glu Leu Leu Pro Gly Trp Leu Ala Gly Ile Met Leu Ala Cys Ala 25 Ala Gly Pro Leu Gly Ser Phe Val Val Trp Arg Arg Met Ser Tyr Phe 40 Gly Asp Thr Leu Ala His Ala Ser Leu Leu Gly Val Ala Phe Gly Leu 5.5 60 Leu Leu Asp Val Asn Pro Phe Tyr Ala Val Ile Val Val Thr Leu Leu 7.0 75 Leu Ala Ala Gly Leu Val Trp Leu Glu Lys Arg Pro His Leu Ala Ile 8.5 90 Asp Thr Leu Leu Gly Ile Met Ala His Ser Ala Leu Ser Leu Gly Leu 100 105 110 Val Val Val Ser Leu Met Ser Asn Ile Arg Val Asp Leu Met Ala Tyr 115 120 125 Leu Phe Gly Asp Leu Leu Ala Val Thr Pro Glu Asp Leu Ile Ser Ile 130 135 140 Ala Ile Gly Val Ala Val Val Leu Gly Ile Leu Leu Trp Gln Trp Arg 150 155 Ser Leu Leu Ala Met Thr Val Ser Pro Asp Leu Ala Phe Val Asp Gly 165 170 175 Val Lys Leu Gln Arg Val Lys Leu Leu Leu Met Leu Val Thr Ala Leu 180 185 Thr Ile Gly Val Ala Met Lys Phe Val Gly Ala Leu Ile Ile Thr Ser 195 200

Leu Leu Ile Ile Pro Ala Ala Thr Ala Arg Arg Phe Ala Arg Thr Pro

```
Glu Gln Met Ala Gly Ile Ala Val Ile Ile Gly Met Ile Ala Val Thr
            230
                             235
Gly Gly Leu Thr Phe Ser Ala Phe Tyr Asp Thr Pro Ala Gly Pro Ser
            245
                       250 255
Val Val Leu Cys Ala Ala Val Leu Phe Ile Phe Ser Met Met Lys Lys
         260
                  265
Thr Ala Gln
      275
<210> 8264
<211> 100
<212> PRT
<213> Enterobacter cloacae
<400> 8264
His Cys Thr Asn Asn Gln Tyr Lys Phe Ser Leu Lys Ile Gln Ser Phe
                                10
Pro Glu Val Phe Met Phe Val Glu Leu Val Tyr Asp Lys Arg Asn Val
          20
                             2.5
Asp Gly Leu Val Gly Ala Arg Glu Ile Ile Leu Ala Glu Leu Thr Lys
 35
                   4.0
                                            4.5
Arg Val His Gln Ile Phe Pro Asp Ala Glu Val Arg Val Lys Pro Met
 50 55
Gln Ala Asn Gly Leu Asn Ser Asp Ala Ser Lys Ser Asp Arg Glu Lys
                 7.0
Leu Asn Arg Met Leu Glu Glu Met Phe Glu Asp Ala Asn Met Trp Leu
Val Asn Asp
<210> 8265
<211> 254
<212> PRT
<213> Enterobacter cloacae
<400> 8265
Ile Asp Met Thr Thr Leu Val Ser Leu Glu Asn Val Ser Val Ser Phe
                                 10
Gly Gln Arg Arg Val Leu Ser Asp Val Ser Leu Asn Leu Lys Pro Gly
          20
                             2.5
                                               30
Lys Ile Leu Thr Leu Leu Gly Pro Asn Gly Ala Gly Lys Ser Thr Leu
                         40
Val Arg Val Val Leu Gly Leu Val Ala Pro Asp Ala Gly Val Ile Val
Arg Glu Asp Lys Leu Arg Ile Gly Tyr Val Pro Gln Lys Leu His Leu
                 70
                                    75
                                                       80
Asp Ala Thr Leu Pro Leu Thr Val Ser Arg Phe Leu Arg Leu Arg Pro
              8.5
                                 90
Gly Thr Arg Lys Ala Asp Ile Leu Pro Ala Leu Lys Arg Val Gln Ala
           100
                             105
Gly His Leu Val Glu Ala Pro Leu Gln Lys Leu Ser Gly Gly Glu Thr
       115
                        120
Gln Arg Val Leu Leu Ala Arg Ala Leu Leu Ser Ser Pro Gln Leu Leu
   130
                      135
Val Leu Asp Glu Pro Thr Gln Gly Val Asp Val Asn Gly Gln Val Ala
                  150
Leu Tyr Asp Leu Ile Asp Gin Leu Arg Arg Glu Leu Asn Cys Ala Val
             165
                                 170
                                                   175
Leu Met Val Ser His Asp Leu His Leu Val Met Ala Lys Thr Asp Glu
```

185

190

```
Val Leu Cys Leu Asn His His Ile Cys Cys Ser Gly Thr Pro Glu Val
      195
                      200
                                             205
Val Ser Met His Pro Glu Phe Ile Ser Met Phe Gly His Arg Gly Ala
 210
                      215
                                  220
Glu Gln Leu Gly Ile Tyr Arg His Asn His Asn His Arg His Asp Leu
225
                230 235
Gln Gly Arg Ile Val Leu Arg Arg Gly Asn Gly His Ser
              245
<210> 8266
<211> 198
<212> PRT
<213> Enterobacter cloacae
<400> 8266
Lys Ser Asn His Leu Thr Gly Ala Thr Met Phe Thr Leu Asp Ala Thr
                                10
Lys Thr Ala Leu Val Val Ile Asp Leu Gln Glu Gly Ile Leu Pro Phe
          20
                             25
                                                 30
Ala Gly Gly Pro His Thr Ala Asp Asp Val Val Ser Arg Ala Ala Arg
                         40
                                             45
Leu Ala Glu Lys Cys Arg Ala Ser Gly Ser Pro Val Val Met Val Arg
                      55
Val Gly Trp Ser Ala Asp Phe Ala Glu Ala Leu Lys Gln Pro Val Asp
                  7.0
                                      75
                                                         80
Ala Gln Ala Pro Ala Gln Ala Leu Pro Asp Asn Trp Trp Thr Tyr Pro
              85
                                 90
Val Ser Leu Gly Lys Arg Asp Ser Asp Ile Glu Val Thr Lys Arg Gln
          100
                           105
                                                 110
Trp Gly Ala Phe Tyr Gly Thr Asp Leu Glu Leu Gln Leu Arg Arg Arg
                          120
                                             125
Gly Ile Asp Thr Ile Ile Leu Cys Gly Ile Ser Thr Asn Ile Gly Val
 130
                     135
                                          140
Glu Ser Thr Ala Arg Asn Ala Trp Glu Leu Gly Phe Asn Leu Val Ile
                  150
                                     155
                                                         160
Ala Glu Asp Ala Cys Ser Ala Ala Ser Ala Asp Gln His Gln Cys Ser
              165
                                  170
                                                    175
Met Thr His Ile Phe Pro Arg Ile Gly Arg Val Arg Ser Thr Asp Glu
          180
                              185
Ile Leu Ser Ala Leu
      195
<210> 8267
<211> 274
<212> PRT
<213> Enterobacter cloacae
<400> 8267
Ile Lys Val Gly Leu Gly Asp Glu Val Thr Ala Asn Phe Ala Ser Leu
Glu Ile Gly Ala Lys Lys Pro Ser Ser Ala Ser Phe Val Asp Phe His
                                                 30
Phe Leu Gly Thr Asn Asp Tyr Asp Gly Arg Ile Leu Cys Ser Ser Gly
                          40
Ile Ser Gly Thr Ala Gly Ala Gly Ala Met Thr Tyr Tyr Gly Gly Ser
  50
                      55
His Arg Phe Val Gly Ser Val Ser Phe Asp His Ser Ala Thr Phe Asp
                  70
                                     7.5
Ser Ser Val Asp Ala Lys Gly Ile Val Ala Gly Val Thr Ser Leu Asn
                                 90
Val Arg Ala Ser Ser Asp Thr Gln Tyr Ser His Val Trp Phe Tyr Gly
```

```
105
                                          110
Ala Ser Gly Pro Ser Arg Gly Val Ile Tyr Ala Val Lys Asp Gly Ser
    115
             120
                           125
Ile Arg Leu Arg Pro Asp Asn Asp Asn Gly Gly Ala Asn Gly Tyr
  130
       135 140
Ser Phe Ser Phe Gly Ala Asp Gly Lys Phe Thr Cys Val Thr Met Asn
      150 155 160
Gln Thr Ser Asp Glu Arg Val Lys Phe Asp Lys Glu Pro Val Ser Lys
            165 170 175
Ala Leu Glu Lys Ile Cys Ser Leu Thr Gly Tyr Thr Phe Gly Ile Gln
       180 185 190
Leu Thr Glu Ser Glu Ser Val Arg Ser Ala Gly Ile Ile Ala Gln Asp
 195 200
                                       205
Leu Glu Lys Val Leu Pro Val Ala Val Ser Ser Gly Gly Thr Gly Thr
 210 215
                                    220
Thr Pro Ala Gly Glu Glu Ile Asn Asp Leu Lys Thr Val Asp Tyr Ser
225 230 235
Ala Met Ser Ala Leu Tyr Val Glu Ala Ile Lys Glu Leu Thr Glu Arg
            245 250
Leu Lys Ile Ile Glu Lys Glu Leu Ala Asp Leu Arg Gly Ala Thr Val
                         265
Val
<210> 8268
<211> 72
<212> PRT
<213> Enterobacter cloacae
<400> 8268
Pro Val Lys Gly Ile Thr Gly Ala Val Leu Arg Leu Ile Val Leu Leu
                             10
Ala Asp Ser Val Asp Leu Asp Ala Ala Phe Leu Ser Ala Asp Gln Gly
                          25
                                          30
Cys Ser Gly Ala Tyr Gly Leu Leu Leu Leu Asn Asn Ala Ser Ala Thr
35
                   40
Gly Glu Gln Tyr Arg Tyr Arg Gln Ala Lys Asn His Ile Phe His Ser
                55
 50
Gly Tyr Ile Pro Gly Arg Ser
<210> 8269
<211> 132
<212> PRT
<213> Enterobacter cloacae
<400> 8269
Arg Thr Gly Gln His Ala Gly Phe Ala Ser Val Ala Ile Asn Gln Gly
                            10
                                 15
Ser Leu Thr Met Ala Val Glu Thr Phe Ser Trp Cys Pro Lys Val Ala
         20
                          25
Ser Gln Val Asp Thr Ser Phe Arg Thr Arg Lys Ala Gln Phe Gly Asp
      35
                      40
Gly Tyr Ala Gln Val Ala Gly Asp Gly Ile Asn Pro Val Thr Pro Gln
Trp Ser Val Ser Phe Thr Gly Asp Glu Ala Tyr Ile Gln Ala Ile Lys
             70
Asn Phe Leu Asn Arg His Ala Gly Trp Lys Ser Phe Ile Trp Lys Pro
          85
                             90
                                            95
Pro Leu Glu Pro Ser Gly Leu Trp Arg Ala Glu Ser Phe Gln Ile Ser
```

105

```
Thr His Gly Asn Lys Lys Tyr Thr Leu Ser Ser Thr Phe Ile Gln Ala
  115
                       120
Tvr His Pro
  130
<210> 8270
<211> 199
<212> PRT
<213> Enterobacter cloacae
<400> 8270
Gly Phe Asp Val Met Glu Arg Lys Thr Val Ile Lys Leu Ser Gly Ser
                                  10
Met Ala Gln Arg Phe Gly Arg Thr His Arg Arg Ala Leu Thr Ser Ala
                              25
Ser Glu Val Phe Arg Ala Leu Ser Asn Thr Ile Asp Gly Phe Asp Ala
      3.5
                          4.0
                                              4.5
Tyr Leu Arg Glu Ala Arg Ala Lys Gly Leu Asp Phe Val Ile Phe Arg
 50
                       55
Asp Arg Arg Asn Ile Gly His Glu Glu Phe Glu Leu Leu Gly Pro Gly
                   70
                                      75
Asp Glu Leu Arg Ile Ile Pro Val Ile Arg Gly Ser Lys Arg Ala Gly
                                  90
              85
Val Phe Gln Ala Leu Leu Gly Thr Ala Leu Val Ala Ala Ala Ile Trp
           100
                              105
Met Pro Gly Val Ser Ile Ala Ala Ser Asn Leu Met Phe Ser Val Gly
      115
                          120
Ala Ala Met Ala Val Gly Gly Val Val Gln Met Leu Ser Pro Gln Val
                      135
                                          140
Ser Gly Leu Arg Met Arg Gln Glu Pro Asp Asn Lys Pro Ser Tyr Ala
        150
                                      155
                                                          160
Phe Gly Gly Pro Val Asn Thr Thr Ala Ser Gly Asn Pro Val Pro Leu
                                  170
              165
Leu Tyr Gly Gln Arg Glu Ile Gly Gly Ala Ile Ile Ser Ala Gly Val
           180
                              185
Tyr Ala Glu Asp Gln Gln
       195
<210> 8271
<211> 155
<212> PRT
<213> Enterobacter cloacae
<400> 8271
Arg Arg Lys Arg Lys Thr Asp Met Ala Tyr Lys Arg Pro Val Ser Val
                                  10
Leu Val Val Ile Tyr Ala Glu Asp Thr Lys Arg Val Leu Met Leu Gln
           20
                              25
Arg Arg Asp Asp Pro Asp Phe Trp Gln Ser Val Thr Gly Ser Leu Glu
       35
                          4 0
Glu Gly Glu Thr Ala Pro Gln Ala Ala Ala Arg Glu Val Lys Glu Glu
Val Ala Ile Asp Val Ala Tyr Glu Gln Leu Thr Leu Lys Asp Cys Gln
                   70
                                      75
Arg Thr Val Glu Phe Glu Ile Phe Ser His Leu Arg His Arg Tyr Ala
              85
                                  90
Pro Gly Ile Glu Arg Asn Thr Glu Ser Trp Phe Cys Leu Ala Leu Pro
           100
                              105
                                                  110
```

His Glu Arg Glu Ile Val Phe Thr Glu His Leu Thr Tyr Arg Trp Val 120

Asp Ala Ala Asp Ala Ala Ala Leu Thr Lys Ser Trp Ser Asn Arg Gln

```
4088
                   135
                                    140
Ala Ile Glu Glu Phe Val Ile Asn Ala Ala
                150
<210> 8272
<211> 256
<212> PRT
<213> Enterobacter cloacae
<400> 8272
Glu Gly Ala Ile Phe Gly Glu Leu Phe Met Ala Gly His Ser Lys Trp
                       10
Ala Asn Thr Lys His Arg Lys Ala Ala Gln Asp Ala Lys Arg Gly Lys
 20
                   25
Ile Phe Thr Lys Ile Ile Arg Glu Leu Val Thr Ala Ala Arg Leu Gly
   35
                      4.0
Gly Gly Asp Pro Ala Ser Asn Pro Arg Leu Arg Ala Ala Val Asp Lys
        5.5
Ala Leu Ser Asn Asn Met Thr Arg Asp Thr Leu Asn Arg Ala Ile Ala
      70 75
Arg Gly Val Gly Gly Asp Glu Asp Ala Asn Met Glu Thr Ile Ile Tyr
            8.5
                             90
Glu Gly Tyr Gly Pro Gly Gly Thr Ala Val Met Val Glu Cys Leu Ser
         100
                        105 110
Asp Asn Arg Asn Arg Thr Val Ala Glu Val Arg His Ala Phe Thr Lys
                      120
                                       125
Thr Gly Gly Asn Leu Gly Thr Asp Gly Ser Val Ala Tyr Leu Phe Ser
 130 135
                                    140
Lys Lys Gly Val Ile Ser Phe Glu Lys Gly Asp Glu Asp Ala Ile Met
145
               150
                    155
Glu Ala Ala Leu Glu Ala Gly Ala Glu Asp Val Val Thr Tyr Asp Asp
            165
                             170 175
Gly Ala Ile Asp Val Tyr Thr Ala Trp Glu Glu Met Gly Ala Val Arg
                         185 190
         180
Asp Ala Leu Glu Ala Ala Gly Leu Lys Ala Asp Asn Ala Glu Val Ser
195 200
                           205
Met Ile Pro Ser Thr Lys Ala Asp Met Asp Ala Glu Thr Ala Pro Lys
210 215
                                    220
Leu Leu Arg Leu Ile Asp Met Leu Glu Asp Cys Asp Asp Val Gln Glu
225 230 235
Val Tyr His Asn Gly Glu Ile Ser Asp Glu Val Ala Ala Thr Leu
            245
                             250
<210> 8273
<211> 290
<212> PRT
<213> Enterobacter cloacae
<400> 8273
Arg Gly Glu Lys Pro Gly Ala Ala His Gly Ala Tyr Pro Ala Glu Ala
Pro Cys Glu Pro Ala Gly Arg Arg Gly Cys Ala Gly His Cys Asp
         20
                          25
Tyr Pro Leu Ser Arg Gln Pro Glu Cys Asp Ala Asn Glu Arg Val Ala
      35
                      4.0
Ala Gln Ser Gly Ala Arg Gln Val Thr Ile Met Thr Asn Gln Ala Gly
                   55
Cys Leu Ser Ser Leu Phe Leu Leu Cys Arg Gln Ile Ile Ser Ser Arg
65
             7.0
                                 75
Thr Gln Glu Arg His Val Ile Gly Arg Leu Arg Gly Ile Ile Ile Glu
```

90

```
Lys Gln Pro Pro Leu Val Leu Leu Glu Val Gly Gly Val Gly Tyr Glu
    100
                         105
Val His Met Pro Met Thr Cys Pne Tyr Glu Leu Pro Glu Ala Gly Lys
                     120
                                      125
Glu Ala Val Val Phe Thr Gln Phe Val Val Arg Glu Asp Ala Gln Leu
       135 140
Leu Tyr Gly Phe Asn Asn Lys Gln Glu Arg Thr Leu Phe Arg Glu Leu
    150 155
Ile Lys Thr Asn Gly Val Gly Pro Lys Leu Ala Leu Ala Ile Leu Ser
       165 170 175
Gly Met Ser Ala Pro Gin Phe Val Asn Ala Val Glu Arg Glu Asp Pro
   180 185 190
Ala Ala Leu Ile Lys Leu Pro Gly Ile Gly Lys Lys Thr Ala Glu Arg
 195 200 205
Leu Ile Val Glu Met Lys Asp Arg Phe Lys Gly Leu His Gly Asp Leu
 210 215 220
Phe Thr Pro Ala Ala Asp Leu Val Leu Thr Ser Pro Gly Ala Pro Ala
225 230 235
Ser Asp Asp Asp Ala Glu Gln Glu Ala Val Ala Ala Leu Val Ala Leu
      245 250 255
Gly Tyr Lys Pro Gln Glu Ala Ser Arg Met Val Ser Lys Ile Ala Lys
    260 265 270
Pro Asp Ala Ser Ser Glu Thr Leu Ile Arg Glu Ala Leu Arg Ala Ala
                     280
  290
<210> 8274
<211> 1164
<212> PRT
<213> Enterobacter cloacae
<400> 8274
Met Ala Thr Leu Arg Glu Leu Ile Ile Lys Ile Ser Ala Asn Ser Gln
                     10
Ser Phe Gln Thr Glu Ile Ser Arg Ala Ser Arg Met Gly Gln Asp Tyr
                         25
                                          30
Tyr Arg Thr Met Gln Asn Gly Gly Arg Gln Ala Ala Ala Ala Arg
                40
                                    4.5
Glu Ser Glu Arg Ala Leu Ser Asp Leu Thr Ala Gly Phe Ala Ser Ala
                 55
                                   60
Gly Arg Ala Ala Ala Ala Thr Ala Ala Phe Ala Thr Gly Lys Leu
             70
                                                8.0
Val Gln Ile Ala Asp Glu Trp Asn Ser Val Asn Ala Arg Leu Lys Gln
            8.5
                            90
Ala Ser Ser Ser Ala Asp Asp Phe Ala Ala Ser Gln Arg Gln Leu Met
         100
                         105
Glu Ile Ser Gln Arg Thr Gly Thr Ala Phe Ser Asp Asn Ala Asn Leu
     115
Phe Ser Arg Ala Ala Ala Ser Met Arg Glu Phe Gly Tyr Ser Ser Asp
 130
                  135
                                   140
Glu Val Leu Lys Ile Thr Glu Ala Val Ser Thr Gly Leu Lys Leu Ser
                150
                                155
Gly Ala Asn Thr Gln Glu Ala Ser Ser Val Ile Thr Gln Phe Ser Gln
            165
                            170
```

Ala Leu Ala Gln Gly Val Leu Arg Gly Glu Glu Phe Asn Ala Val Asn

Glu Ala Gly Asp Arg Val Ile Arg Ala Leu Ala Ala Gly Met Gly Val

Ala Arg Lys Asp Leu Lys Ser Met Ala Asp Gln Gly Gln Leu Thr Ile

200

215

185

190

205

180

210

Asp Lys Val Val Pro Ala Leu Met Ser Gln Leu Gly Ser Leu Gln Gly 235 225 230 Glu Phe Ala Ser Met Pro Gln Thr Val Ser Gly Ser Leu Gln Lys Val 250 255 245 Thr Asn Ser Phe Met Ala Tro Val Gly Gly Val Asn Gln Ala Thr Gly 260 265 270 Ala Thr Asp Ala Leu Ser Gly Gly Leu Asp Gly Val Ala Gln Thr Leu 275 280 285 Asp Ser Phe Thr Ser Ser Ala Val Ser Gly Ala Leu Ser Asp Val Ala 290 295 300 Asp Asn Met Ser Thr Ile Thr Thr Val Ala Gly Ala Leu Val Gly Val 310 315 320 Gly Leu Ala Arg Tyr Leu Ser Gly Val Val Thr Ser Ala Thr Ser Ala 325 330 335 Thr Gly Ala Leu Ile Ser Ala Ala Lys Ser Glu Val Ala Leu Ala Val 340 345 Ala Gln Asp Lys Ala Ala Gln Ser Ala Val Ala Ala Ser Arg Ala Glu 355 360 Val Tyr Arg Ala Gln Gln Ala Val Gln Arg Ser Arg Ser Ala Asp Val 370 375 380 Gln Ala Ala Gln Gln Glu Lys Ile Ala Ala Ala Glu Ala Lys Val Thr 390 395 Ala Ala Gln Ala Arg Leu Thr Thr Ala Leu Ala Ser Gly Ser Ala Thr 410 415 405 Glu Lys Val Arg Ala Arg Thr Ala Leu Glu Arg Ala Gln Ala Gly Leu 420 425 430 Val Ala Ala Lys Asn Ala Asp Ala Gln Ala Ile Ala Glu Arg Arg Leu 440 445 435 Ala Ser Ala Glu Ala Ala Arg Asp Arg Asn Leu Ala Asn Arg Val Thr 455 460 Thr Gln Ser Asn Leu Asn Ser Val Thr Ser Val Gly Thr Arg Leu Leu 470 475 Ser Ser Ala Leu Gly Leu Ile Gly Gly Val Pro Gly Leu Val Met Leu 485 490 495 Gly Ala Gly Ala Trp Tyr Ala Val Tyr Gln Asn Gln Glu Gln Ala Arg 500 510 Arg Ser Ala Gln Glu Tyr Ala Ser Thr Ile Asp Glu Val Ser Lys Lys 525 515 520 Thr Arg Ala Met Thr Leu Pro Glu Ala Ser Asp Asn Ala Glu Lys Thr 540 530 535 Arg Ala Ala Leu Asn Glu Gln Asn Arg Leu Ile Asp Glu Gln Lys Ser 550 555 Lys Val Glu Ser Leu Lys Glu Gln Ile Ala Gly Tyr Gln Ser Val Ile 565 570 575 Ser Asn Pro Gly Pro Thr Thr Ser Gly Gly Phe Met Ile Asn His Leu 585 590 580 Thr Tyr Leu Asp Thr Val Thr Arg Gly Leu Ala Thr Ala Thr Glu Gln 600 605 595 Leu Ser Val Glu Gln Glu Arg Leu Ala Gln Met Gln Gln Glu Ser Ala 615 620 Ser Ile Gln Gln Val Leu Glu Gly Leu Glu His Arg Arg Val Ala Leu 630 635 Ile Arg Glu Glu Ala Ala Asn Gln Asn Arg Ala Tyr Gln Ser Leu Leu 645 650 Leu Met Asn Gly Gln His Asp Glu Phe Asn Arg Leu Leu Gly Leu Gly 660 665 670 Asn Gln Leu Leu Met Ala Arg Gln Gly Leu Ala Asn Val Pro Leu Arg 675 680 685 Leu Pro Gln Ala Asp Leu Asp Lys Lys Gln Thr Asp Ala Leu Glu Lys 700 695 Ser Arg Arg Asp Leu Glu Leu Ser Arg Leu Lys Gly Glu Ala Lys Glu

```
710
                            715
Arg Leu Arg Leu Ser Tyr Ala Ala Asp Asp Leu Gly Leu Thr Ser Asp
        725
               730 735
Pro Gln Phe Gln Thr Gly Arg Gln Glu Leu Ile Asn Asn Gly Leu Ala
    740 745 750
Glu Trp Arg Asn Asn Glu Ala Asn Lys Pro Lys Ala Lys Gly Gly Lys
 755 760 765
Thr Glu Gly Glu Lys Thr Glu Asp Val Tyr Lys Arg Leu Ile Lys Gln
770 775 780
Gln Lys Glu Gln Ile Ala Leu Gln Gly Gln Asn Thr Glu Leu Ala Lys 785 790 795 800
Val Lys Tyr Gln Val Ser Gln Gly Glu Leu Ala Ser Leu Thr Glu Ala
      805 810 815
Gln Lys Lys Thr Val Leu Gln Asn Ala Ala Leu Ile Asp Gln Val Lys 820 \hspace{1.5cm} 825 \hspace{1.5cm} 830
Leu Arg Glu Gln Leu Arg Asn Tyr Glu Ala Asn Leu Ala Asp Ser Asn
   835 840 845
Ala Ser Ala Arg Ala Ala Asn Glu Ala Gln Leu Leu Gly Tyr Gly Gln
 850 855 860
Gly Ala Arg Phe Arg Glu Arg Leu Gln Glu Gln Phe Asn Leu Arg Lys
865 870 875 880
Glu Phe Glu Gln Lys Asn Thr Asp Leu Leu Arg Gln Arg Gln Ala Gly
      885 890 895
Glu Ile Asp Glu Thr Phe Tyr Gln Gln Gly Leu Ala Leu Asn Lys Arg
 900 905 910
Tyr Leu Glu Glu Arg Leu Arg Asp Gln Glu Gly Tyr Tyr Ala Ala Ser
915 920 925
Asp Ala Gln Arg Asp Asp Trp Met Thr Gly Leu Ser Glu Gly Tyr Ala
930 935
                               940
Asn Trp Val Asp Glu Ala Thr Asp Tyr Ser Ser Met Ala Ala Asp Gly
945 950 955
Met Lys Gln Ala Met Gly Gly Ala Val Thr Thr Ile Thr Asp Met Leu
     965 970 975
Asn Gly Asn Val Asp Ser Trp Lys Asp Trp Gly Val Ser Val Leu Lys
            985 990
  980
Ile Ile Gln Asn Val Leu Val Asn Met Ala Val Ala Asn Gly Val Ser
    995 1000 1005
Ser Ile Gly Ser Leu Phe Ser Phe Gly Ala Ser Ser Ala Ala Thr Ala
1010 1015 1020
Ser Ser Gly Thr Ala Ile Gln Asn Ala Gly Ala Asn Phe Thr Phe Asn
1025 1030 1035 1040
Ala Lys Gly Asn Val Tyr Asp Ser Pro Ser Leu Ser Ala Tyr Ser Asn
         1045 1050 1055
Gly Val Phe Gln Thr Pro Gln Leu Phe Ala Phe Ala Lys Gly Ala Gly
        1060 1065 1070
Val Phe Ala Glu Ala Gly Pro Glu Ala Ile Met Pro Leu Thr Arg Ala
1075 1080 1085
Ala Asp Gly Ser Leu Gly Val Arg Ala Val Gly Ala Pro Gln Val Ser
1090 1095 1100
Gly Gly Val Pro Ser Val Asn Phe Gly Asp Ile Asn Ile Gln Gly Gly 1105 1110 1115 1120
Ser Pro Gin Ala Ala Ser Gin Gly Thr Ala Gly Ala Ala Gly Arg Gin
        1125 1130 1135
Leu Lys Asp Ala Ile Thr Gly Val Ile Asn Glu Gln Ala Ser Met Pro
        1140 1145
Gly Ser Pro Leu Trp Arg Leu Ile Lys Gly Val
           1160
```

<210> 8275 <211> 254 <212> PRT <213> Enterobacter cloacae

```
<400> 8275
Thr Ala Gly Leu Trp Gly Leu Pro Arg Arg Phe Thr Ser Glu Arg Ile
Thr Met Arg Glu Lys Thr Val Ser Ala Ile Leu Ala His Ala Ala Ser
                          25
                                          30
Ser Cys Pro Asp Glu Cys Cys Gly Val Val Ile Gln Lys Gly Arg Val
     3.5
                    4.0
                                      45
Glu Lys Tyr Ile Pro Cys Arg Asn Gln Ala Glu Ser Pro Thr Glu Gln
                  55
                                   60
Phe Glu Leu Ser Pro Glu Asp Tyr Ala Ala Ala Glu Glu Gln Gly Thr
             70
                          7.5
Val Val Ala Ile Val His Ser His Pro Gly Asp Gly Ala Thr Thr Gln
           85
                           90
Pro Ser Glu Leu Asp Met Leu Met Cys Asp Ala Thr Glu Leu Pro Trp
         100 105
Val Ile Ala Ser Trp Pro Glu Gly Asp Ile Arg Thr Val Met Pro Arg
     115 120
                                     125
Gly Asp Arg Pro Leu Thr Gly Arg Gln Phe Val Leu Gly His Ala Asp
       135 140
Cys Trp Ser Leu Ile Met Asp Tyr Phe Arg Thr Glu His Gly Ile Thr
    150
                                155
Leu Pro Asn Tyr Ser Val Asp Arg His Trp Trp Glu Gln Gly Glu Asn
          165 170
Leu Tyr Met Asp Asn Trp Tyr Glu Cys Gly Phe Arg Glu Phe Asp Gly
        180
              185 190
Pro Ser Gln Pro Gly Asp Met Val Ile Met Gln Val Gln Ser Thr Val
                      200
                                       205
Pro Asn His Ala Gly Ile Leu Leu Glu Gly Asn Val Leu Leu His His
                 215 220
Met Tyr Gly Gln Leu Ser Gln Arg Ile Pro Tyr Gly Gly Tyr Tyr Arg
             230 235
Asp Arg Thr Ile Lys Ile Leu Arg Tyr Lys Asp Leu Met
             245
```

<210> 8276 <211> 1291 <212> PRT <213> Enterohact

<213> Enterobacter cloacae

<400> 8276 Arg Trp Leu Phe Tyr Gly Arg Asp Met Thr Thr Thr Ile Ile Lys Gly 10 15 Arg Gly Lys Gly Gly Ser Asn Gln Thr Arg Thr Pro Ile Glu Ala Pro 20 25 Asp Ser Ile Gln Ser Ile Ala Arg Ala Lys Val Leu Ile Ala Leu Gly 35 40 Glu Gly Glu Phe Ala Gly Gly Leu Asp Gly Lys Asn Ile Phe Leu Gly 55 60 Asp Ser Ser Ser Tyr Thr Pro Leu Gln Asn Ala Asp Gly Ser Tyr Asn 70 Phe Asn Asn Val Lys Tyr Glu Phe Arg Ser Gly Thr Gln Asp Gln Asp 90 8.5 Tyr Ile Gln Gly Phe Pro Gly Ile Glu Asn Glu Leu Gln Val Ser Tyr 100 105 110 Glu Leu Lys Gln Ala Val Pro Tyr Val Arg Ala Val Ser Asn Thr Gln 115 120 Leu Ser Ala Leu Arg Ile Arg Leu Gly Trp Pro Thr Leu Leu Leu Gln 135 Lys Asn Asn Gly Asp Lys Val Gly Thr Arg Val Glu Tyr Ala Ile Asp

```
145
             150
                            155
Leu Ser Val Asp Gly Gly Pro Tyr Glu Thr Val Val Asn Gly Ala Val
       165
                170 175
Asp Asp Lys Thr Thr Ser Leu Tyr Glu Arg Ser His Arg Val Asn Leu
     180 185 190
Pro Lys Ala Ser Thr Gly Trp Gln Leu Arg Val Arg Arg Ile Thr Pro
 195 200 205
Asp Ser Thr Ser Val Asn Ile Val Asp Thr Met Arg Val Val Ala Val
 210 215 220
Thr Glu Ile Ile Asp Ala Lys Leu Arg Tyr Val Asn Thr Ala Leu Leu
    230 235 240
Tyr Val Glu Phe Asp Ala Thr Gln Phe Pro Asn Gly Ile Pro Gln Val
      245 250 255
Val Cys Asn Pro Lys Gly Arg Ile Ile Arg Val Pro Asp Thr Tyr Asp
      260 265 270
Pro Glu Thr Arg Thr Tyr Ser Gly Thr Trp Glu Gly Val Phe Lys Trp
   275 280 285
Ala Trp Thr Asp Asn Pro Ala Trp Ile Tyr Tyr Asp Ile Ile Leu Asn
 290 295 300
Glu Arg Phe Gly Leu Gly Gln Arg Ile Asp Ala Thr Gln Ile Asp Lys
305 310 315 320
Trp Glu Leu Tyr Arg Ile Ala Gln Tyr Cys Asp Gln Leu Val Pro Asp
         325 330 335
Gly Lys Gly Gly Ser Gly Thr Glu Pro Arg Phe Arg Cys Asn Val Tyr
        340 345 350
Ile Gln Asp Arg Asn Asp Ala Trp Thr Val Leu Arg Asp Leu Ala Gly
 355 360 365
Ile Phe Arg Gly Met Thr Tyr Trp Gly Asp Asn Lys Met Tyr Val Leu
              375 380
370
Ala Asp Met Pro Arg Asp Val Trp His Ile Tyr Asn His Ala Ser Val
385 390 395 400
Val Glu Gly Lys Phe Thr Phe Ala Asp Pro Ser Glu Thr Thr Arg Asn
          405 410 415
Thr Ala Ala Leu Val Asn Trp Ser Asp Pro Ala Asn His Tyr Lys Asp
            425 430
      420
Thr Pro Glu Pro Val Tyr Asp Asn Asp Leu Ala Met Arg Phe Asp Tyr
                       445
 435 440
Arg Gln Leu Glu Met Thr Ala Ile Gly Cys Thr Arg Gln Ser Glu Ala
      455 460
  450
Asn Arg Arg Gly Arg Trp Ala Leu Leu Thr Asn Gly Ile Gly Glu Val
     470 475
Val Thr Phe Ser Thr Gly Met Asp Val Pro Pro Val Gly Glu Val Ile
                         490
           485
Gly Val Ala Ala Asn Glu Leu Ala Gly Arg Thr Ile Gly Gly Arg Val
       500 505
                                     510
Ser Gly Val Asn Gly Arg Asn Ile Thr Leu Asp Arg Ala Ala Asp Val
     515 520
                       525
Lys Ala Gly Asn Arg Leu Phe Leu Asn Leu Pro Ser Gly Thr Ala Gln
      535
                              540
Ala Arg Thr Val Gln Ala Val Asn Gly Asn Thr Val Thr Val Thr Thr
     550 555
Pro Tyr Ser Glu Thr Pro Glu Ala Glu Cys Asn Trp Gly Val Asp Ser
               570
           565
                                       575
Asp Asp Leu Phe Ile Ala Leu Phe Arg Val Thr Gly Thr Arg Asp Asn
                    585
                                     590
Asn Asp Gly Thr Phe Glu Val Thr Gly Thr Thr Tyr Asn Pro Asp Ile
  595
                   600
Tyr Ser Ala Val Asp Thr Gly Ala Arg Leu Asp Glu Arg Pro Val Ser
                 615 620
Val Ile Pro Pro Gly Val Gln Ala Pro Pro Gly Asn Ile Val Val Asp
              630
                            635
```

Ser Tyr Ser Thr Val Asn Gln Asn Ile Ala Ile Thr Thr Met Arg Val 650 655 645 Ala Trp Asp Ser Val Gln Gly Ala Val Ala Tyr Glu Ala Glu Trp Arg 660 665 Arg Asp Ser Gly Asn Trp Ile Ser Val Pro Arg Thr Ser Ser Leu Gly 680 685 Phe Glu Val Gln Gly Ile Tyr Ser Gly Arg Tyr Leu Val Arg Val Arg 700 690 695 Ala Val Asn Ala Ser Asp Val Ser Ser Val Trp Val Thr Ser Ser Glu 710 715 Val Asn Leu Thr Gly Lys Val Gly Asn Pro Pro Lys Pro Val Gly Phe 725 730 735 Ile Ala Ser Asp Asn Val Val Phe Gly Ile Glu Leu Ser Trp Gly Phe 740 745 750 Pro Ala Asn Thr Asp Asp Thr Leu Lys Thr Glu Ile Gln Tyr Ser Leu 760 765 Thr Gly Thr Glu Asp Asp Ala Met Leu Leu Ala Asp Val Pro Tyr Pro 780 770 775 Gln Arg Lys Tyr Gln Gln Met Gly Leu Lys Ala Gly Gln Thr Phe Trp 790 795 785 Tyr Arg Ala Gln Leu Val Asp Arg Ser Gly Asn Glu Ser Gly Tyr Thr 805 810 815 Asp Phe Val Arg Gly Gln Ala Ser Ile Asp Val Ser Asp Ile Thr Asp 825 830 820 Ala Ile Leu Glu Glu Ile Lys Asp Ser Glu Val Phe Lys Asp Leu Ile 835 840 845 Glu Ser Ala Val Asp Ser Asn Glu Lys Leu Ala Glu Leu Ser Asp Ala 860 850 855 Ile Lys Glu Asn Ala Asp Gly Leu Ala Ala Ala Val Gly Ser Asn Lys 870 875 Gln Thr Ala Glu Ala Ile Ile Gly Asn Ala Leu Ala Ile Ala Asp Val 885 890 Ile Val Arg Gln Thr Ala Gln Gln Gly Ala Asn Ser Ala Thr Phe Glu 905 910 900 Gln Leu Arg Glu Val Ile Ala Thr Glu Thr Glu Ala Arg Val Thr Asp 925 915 920 Val Thr Arg Leu Glu Ala Lys Thr Ala Gln Asn Glu Ala Gly Val Thr 935 930 940 Glu Val Arg Gln Ala Leu Ser Asp Glu Ala Gln Ala Arg Ala Thr Ala 950 955 Val Asp Gln Leu Thr Ala Ser Thr Gln Val Ile Ser Asp Lys Ala Asp 965 970 975 Ser Ala Ser Ser Lys Ala Asp Ala Ala Ser Gly Lys Ala Asp Ala Ala 980 985 990 Glu Gln Ala Ser Ser Gln Asn Thr Ala Asp Ile Thr Thr Leu Arg Gln 1000 1005 Val Val Thr Asp Thr Thr Ser Ser Met Ala Ser Arg Leu Glu Glu Leu 1015 1010 1020 Gly Ala Arg Thr Asp Thr Ala Ser Gly Gly Ile Gln Asn Asn Ala Ile 1030 1035 Ala Leu Ile Thr Ser Thr Leu Ala Gln Val Asp Gln Arg Val Arg Leu 1045 1050 1055 Ser Ala Gln Tyr Gly Asp Ser Lys Ala Ser Ile Asp Arg Leu Asp Asn 1065 1070 1060 Val Met Ala Ser Asp Arg Glu Ala Thr Ala Arg Ser Leu Leu Ser Leu 1080 1085 1075 Gln Thr Asp Val Asn Gly Asn Lys Ala Ser Ile Asn Ser Leu Asn Gln 1095 1100 1090 Thr Ala Thr Ile Asn Gly His Thr Ser Ala Ile Thr Thr Asn Ala Gln

```
1125
                         1130
Ala Ile Ala Asn Val Asn Gly Asp Leu Lys Ala Met Tyr Ser Ile Lys
     1140 1145
Val Gly Leu Ser Ser Asn Gly Gln Tyr Tyr Ala Ala Gly Met Gly Ile
   1155 1160 1165
Gly Val Glu Asn Thr Pro Ser Gly Met Gln Ser Gln Val Ile Phe Leu
 1170 1175 1180
Ala Asp Arg Phe Ala Val Thr His Gln Ala Gly Ala Thr Val Thr Leu
1185 1190 1195 1200
Pro Phe Val Ile Gln Asn Gly Gln Val Ile Ile Arg Asp Thr Val Ile
        1205 1210 1215
Gly Asp Ala Thr Ile Thr Arg Ala Lys Leu Ala Glu Thr Ile Ser Ser
        1220 1225 1230
Val Asn Tyr Val Gln Asn Gln Ala Gly Leu Ser Ile Asn Phe Arg Thr
    1235 1240 1245
Gly Thr Leu Glu Asn Tyr Gly Ser Thr Ala Gly Glu Gly Ala Met Lys
1250 1255 1260
Gln Thr Asn Gln Thr Ile Ser Val Lys Asp Ala Asn Asn Val Leu Arg
1265 1270 1275
Val Glm Ile Gly Arg Ile Thr Gly Thr Trp
           1285
<210> 8277
<211> 202
<212> PRT
<213> Enterobacter cloacae
<400> 8277
Phe Phe Cys Arg Lys Tyr Trp Val Lys Asn Met Gln Ile Gly Tyr Val
                        10
Arg Val Ser Thr Asn Asp Gln Asn Thr Asp Leu Gln Arg Gln Ala Leu
20 25 30
Glu Arg Ala Gly Cys Glu Gln Val Phe Glu Glu Lys Met Ser Gly Thr
35
                   4.0
Val Ala Asn Arg Pro Ala Leu Lys Lys Leu Leu Arg Thr Leu Asn Glu
50 55
                    60
Gly Asp Thr Leu Val Val Trp Lys Leu Asp Arg Leu Gly Arg Ser Met
            7.0
                   7.5
Arg Asn Leu Val Leu Leu Val Asp Glu Leu Arg Gln Arg Gly Ile His
                         90 95
           85
Phe Lys Ser Leu Thr Asp Ser Ile Asp Thr Ser Ser Pro Met Gly Arg
     100
                    105 110
Phe Ile Phe His Ile Met Ser Ala Leu Ala Glu Met Glu Arg Glu Leu
   115
                    120 125
Ile Val Glu Arg Thr Arg Ala Gly Leu Ala Ala Ala Arg Glu Lys Gly
 130
                 135 140
Arg Ile Gly Gly Arg Arg Pro Lys Leu Thr Pro Glu Gln Trp Ala Gln
              150 155
145
Ala Gly Arg Leu Ile Ala Asn Gly Val Asp Arg Lys Gln Val Ala Ile
           165
                         170 175
Ile Tyr Asp Val Ala Val Cys Thr Leu Tyr Lys Lys Phe Pro Val Asn
        180 185
Lys Asp Val Thr Arg Thr Ser Thr His
     195
<210> 8278
```

<211> 181

<212> PRT

<213> Enterobacter cloacae

<400> 8278

```
Ile Arg Tyr Arg Arg Arg Val Met Ser Ile Ile Leu Gly Ile Asp Pro
Gly Ser Arg Val Thr Gly Tyr Gly Val Ile Arg Gln Val Gly Arg Gln
                              25
Leu Thr Tyr Leu Gly Ser Gly Cys Ile Arg Thr Lys Val Asp Asp Leu
Pro Ser Arg Leu Lys Leu Ile Tyr Ala Gly Val Ser Glu Ile Ile Thr
                      55
Gln Phe Gln Pro Asp Tyr Phe Ala Ile Glu Gln Val Phe Met Ala Lys
                  7.0
Asn Ala Asp Ser Ala Leu Lys Leu Gly Gln Ala Arg Gly Val Ala Ile
             8.5
                                 90
                                                    9.5
Val Ala Ala Val Asn Gln Asp Leu Pro Val Phe Glu Tyr Ala Ala Arg
          100 105
                                               110
Gln Val Lys Gln Thr Val Val Gly Ile Gly Ser Ala Glu Lys Ser Gln
       115 120
                                125
Val Gln His Met Val Arg Thr Leu Leu Lys Leu Pro Ala Asn Pro Gln
                      135
                            140
Ala Asp Ala Asp Ala Leu Ala Ile Ala Ile Thr His Cys His Val
       150 155
Ser Gln Asn Ala Met Gln Met Ser Glu Ser Arg Leu Asn Leu Ala Arg
                       170
Gly Arg Leu Arg
<210> 8279
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 8279
Val Phe Cys Arg Ala Ser Asp Ser Ala Thr Arg Gln Lys Gly Arg Gly
                                 10
Ala Gly Arg Met Arg Pro Lys His Phe Gln Glu Lys Leu Lys Ser Ser
           20
                              25
Cys Gln Phe Lys Leu Ala Glu Val Ile Glu Cys Tyr Asn Ile Thr Phe
                          40
His Ala Phe Ile Thr Met Ile Ser Arg Ile Met Leu Gln Lys Asn Thr
  5.0
                      55
Leu Leu Phe Ala Ala Leu Ser Ala Ala Leu Trp Gly Thr Thr Ala Gln
                  7.0
                                     75
Asp Val Asn Ala Ala Val Val Ala Ser Leu Lys Pro Leu Gly Phe Ile
              85
                                 90
Ala Ser Ala Ile Ala Asp Gly Ile Thr Glu Thr Gln Val Leu Leu Pro
                              105
                                                110
           100
Asp Gly Ala Ser Glu His Asp Tyr Ser Leu Arg Pro Ser Asp Val Lys
                          120
                                             125
       115
Arg Leu Gln Asn Ala Asp Leu Val Val Trp Ile Gly Pro Glu Met Glu
                                         140
                      135
Gly Ser Ile Arg Ser Pro Ser Val Asp Gly Gly Ser Ala Ile Val
                   150
                                     155
145
<210> 8280
<211> 285
<212> PRT
<213> Enterobacter cloacae
```

<400> 8280

Ala Leu Arg Leu Met Ala Arg Gly Ile Leu Pro Asp Ile Tyr Pro Arg I 1 5 10 15 Cln Gln Glu Ile Tyr Pro Gln Gln Tyr Ile His Thr Gly Ile Pro Ser

4097 Met Ser Ile Ser Ser Asp Val Gln Lys Leu Glu Pro Gly Lys Arg Val 35 Arg Leu Ile Glu Val Asp Gly Ser Ala Phe Gly Ala Gly Ile Leu Arg 55 Phe His Asn Glu Thr Ile Pro His Thr Glu Ala Glu Ile Ile Ala Ala 70 Gly Gly Asp Glu Ser Lys Leu Glu Pro Lys Ser Val Trp Trp Gln Gly 8.5 90 Glu Glu Tyr Gly Ala Trp Pro Tyr Glu Leu Thr Gly Ile Ser Val Ser 100 105 Ser Asp Gly Gln Ser Ser Arg Pro Ser Leu Thr Val Ala Asn Ile Ser 115 120 125 Gly Thr Ile Gly Ser Leu Cys Arg Arg Phe Gln Gly Met Ala Lys Ala 135 140 Lys Val Ile Ile His Asp Thr Phe Ala His Tyr Leu Asp Ala Arg Asn 150 155 Phe Pro Asp Gly Asn Pro Thr Ala Asn Pro Asn Glu Glu Arg Lys Gln 165 170 175 Val Tyr Tyr Ile Asp Arg Lys Ser Gly Ser Asp Asp Glu Thr Val Glu 180 185 190 Phe Glu Leu Ser Ser Pro Ala Asp Leu Arg Gly Gln Leu Ile Pro Thr 195 200 205 Arg Gln Ile Gln Pro Met Cys Tar Trp Cys Met Arg Gly Trp Tyr Lys 210 215 220 Thr Gly Asn Gly Cys Thr Tyr Ala Gly Gln Asn Gly Trp Phe Asp Lys 235 230 Asp Gly Asn Arg Val Asp Asp Pro Ser Gln Asp Val Cys Ser Gly Leu 245 250 Leu Ser Thr Gly Cys Lys Pro Arg Phe Gly Glu Asn Glu Gln Leu Asp 260 265 Tyr Gly Gly Phe Pro Gly Ala Ser Leu Leu Arg Gly 280

<210> 8281 <211> 607

<212> PRT

<213> Enterobacter cloacae

<400> 8281

Pro Ala Arg Gln Ala Thr Ile Ser Leu Arg Leu Ile Lys Gly Tyr Leu 1 0 15 15 10 15 Met Arg Thr Glu Tyr Cys Gly Gln Leu Arg Gln Ser His Val Gly Gln 20 30 30 Gln Val Thr Leu Cys Gly Trp Val Asn Arg Arg Arg Asp Leu Gly Ser

35 40 45 Leu Ile Phe Ile Asp Met Arg Asp Arg Glu Gly Ile Val Gln Val Phe

50 Fig. 12 Asp Pro Asp Arg Ala Asp Ala Leu Lys Leu Ala Ser Glu Leu Arg 65 70 75 80

Asn Glu Phe Cys Ile Gln Val Thr Gly Thr Val Arg Ala Arg Asp Glu 85 90 95 Lys Asn Val Asn Ala Asp Met Ala Thr Gly Ala Ile Glu Val Leu Ala

100 105 110 Ser Asp Leu Thr Ile Ile Asn Arg Ala Glu Ala Leu Pro Leu Asp Ser 115 120 125

Asn His Val Asn Thr Glu Glu Ala Arg Leu Lys Tyr Arg Tyr Leu Asp 130 135 Leu Arg Arg Pro Glu Met Ala Gln Arg Leu Lys Thr Arg Ala Lys Ile

145 $$150\,$ $155\,$ $160\,$ Thr Ser Leu Val Arg Arg Phe Met Asp Asp His Gly Phe Leu Asp Ile

```
170
Glu Thr Pro Met Leu Thr Lys Ala Thr Pro Glu Gly Ala Arg Asp Tyr
     180
                 185
                                 190
Leu Val Pro Ser Arg Val His Lys Gly Lys Phe Tyr Ala Leu Pro Gln
 195 200
Ser Pro Gln Leu Phe Lys Gln Leu Leu Met Met Ser Gly Phe Asp Arg
210 215
Tyr Tyr Gln Ile Val Lys Cys Phe Arg Asp Glu Asp Leu Arg Ala Asp
    230 235 240
Arg Gln Pro Glu Phe Thr Gln Ile Asp Val Glu Thr Ser Phe Met Thr
      245 250 255
Ala Glu Gln Val Arq Glu Val Met Glu Ala Leu Val Arg Ser Leu Trp
       260 265 270
Asn Asp Val Lys Gly Val Glu Leu Gly Asp Phe Pro Ile Met Thr Phe
275 280 285
Ala Glu Ala Glu Arg Arg Tyr Gly Ser Asp Lys Pro Asp Leu Arg Asn
 290 295 300
Pro Met Glu Leu Val Asp Val Ala Asp Leu Val Lys Ala Val Glu Phe
305 310 315 320
Ala Val Phe Ala Gly Pro Ala Asn Asp Pro Lys Gly Arg Val Ala Ala
      325 330 335
Leu Arg Val Pro Gly Gly Ala Ala Leu Ser Arg Lys Gln Ile Asp Asp
   340 345 350
Tyr Gly Asn Phe Ile Lys Ile Tyr Gly Ala Lys Gly Leu Ala Tyr Ile
355 360 365
Lys Val Thr Glu Arg Ala Lys Gly Leu Glu Gly Ile Thr Ser Pro Val
      375 380
Ala Lys Phe Leu Asn Ala Asp Ile Val Glu Ala Ile Leu Glu Arg Thr
                 395 400
     390
Gly Ala Gln Asp Gly Asp Met Ile Phe Phe Gly Ala Asp Asn Lys Lys
          405 410 415
Val Val Ala Asp Ala Met Gly Ala Leu Arg Leu Lys Leu Gly Lys Asp
       420 425 430
Leu Asn Leu Thr Asp Glu Ser Lys Trp Ala Pro Leu Trp Val Ile Asp
435 440 445
Phe Pro Met Phe Glu Asp Asp Gly Glu Gly Gly Leu Thr Ala Met His
 450 455 460
His Pro Phe Thr Ser Pro Lys Asp Met Thr Pro Ala Glu Leu Lys Ala
465 470 475 480
Ala Pro Glu Asp Ala Val Ala Asn Ala Tyr Asp Met Val Ile Asn Gly
          485 490 495
Tyr Glu Val Gly Gly Ser Val Arg Ile His Ser Gly Glu Met Gln
        500
            505 510
Gln Thr Val Phe Gly Ile Leu Gly Ile Asn Glu Gln Glu Gln Arg Glu
                 520 525
Lys Phe Gly Phe Leu Leu Asp Ala Leu Lys Tyr Gly Thr Pro Pro His
 530 535 540
Ala Gly Leu Ala Phe Gly Leu Asp Arg Leu Thr Met Leu Leu Thr Gly
545 550 555 560
Thr Asp Asn Ile Arg Asp Val Ile Ala Pne Pro Lys Thr Thr Ala Ala
           565 570 575
Ala Cys Leu Met Thr Glu Ala Pro Ser Phe Ala Asn Pro Ala Ala Leu
           585
      580
Ala Glu Leu Gly Ile Glu Val Val Lys Lys Glu Glu Lys Asn
                   600
```

<210> 8282

<211> 338 <212> PRT

<213> Enterobacter cloacae

```
<400> 8282
Arg Met Ile Glu Ala Asp Arg Leu Val Ser Ala Gly Thr Ile Gln Pro
Asp Asp Val Val Asp Arg Ala Ile Arg Pro Lys Leu Leu Asp Glu Tyr
          20
                            25
Ile Gly Gln Pro Gln Val Arg Ser Gln Met Glu Ile Phe Ile Gln Ala
      35
                     40
                                         4.5
Ala Lys Leu Arg Gly Asp Ala Leu Asp His Leu Leu Ile Phe Gly Pro
       55
                                      60
Pro Gly Leu Gly Lys Thr Thr Leu Ala Asn Ile Val Ala Asn Glu Met
          70 75
Gly Val Asn Leu Arg Thr Thr Ser Gly Pro Val Leu Glu Lys Ala Gly
                              90
Asp Leu Ala Ala Met Leu Thr Asn Leu Glu Pro His Asp Val Leu Phe
          100 105
Ile Asp Glu Ile His Arg Leu Ser Pro Val Val Glu Glu Val Leu Tyr
             120
                              125
      115
Pro Ala Met Glu Asp Tyr Gln Leu Asp Ile Met Ile Gly Glu Gly Pro
                    135
Ala Ala Arg Ser Ile Lys Ile Asp Leu Pro Pro Phe Thr Leu Ile Gly
                 150
                                  155
145
Ala Thr Thr Arg Ala Gly Ser Leu Thr Ser Pro Leu Arg Asp Arg Phe
                               170
              165
Gly Ile Val Gln Arg Leu Glu Phe Tyr Gln Val Pro Asp Leu Gln His
          180
                           185
                                 190
Ile Val Gly Arg Ser Ala Arg Tyr Met Gly Leu Asp Met Ser Glu Glu
      195
                        200
                                          205
Gly Ala Phe Glu Val Ala Lys Arg Ser Arg Gly Thr Pro Arg Ile Ala
                     215
   210
Asn Arg Leu Leu Arg Arg Val Arg Asp Phe Ala Glu Val Lys His Asp
                 230
                                   235
Gly Thr Ile Ser Ala Glu Ile Ala Ala Gln Ala Leu Asp Met Leu Asn
                               250
              245
Val Asp Ala Glu Gly Phe Asp Tyr Met Asp Arg Lys Leu Leu Leu Ala
                            265
                                              270
          260
Val Leu Asp Lys Phe Phe Gly Gly Pro Val Gly Leu Asp Asn Leu Ala
                        280
                                          285
Ala Ala Ile Gly Glu Glu Arg Glu Thr Ile Glu Asp Val Leu Glu Pro
   290
                     295
                                       300
Tyr Leu Ile Gln Gln Gly Phe Leu Gln Arg Thr Pro Arg Gly Arg Met
              310
                                   315
Ala Thr Val Arg Ala Trp Asn His Phe Gly Ile Thr Pro Pro Ala Met
              325
                                330
Pro
```

<210> 8283 <211> 197 <212> PRT

<213> Enterobacter cloacae

Thr Val Ser Gln Leu Ala His Asn Ala Gly Val Ser Val His Ile Val 90 85 Arg Asp Tyr Leu Val Arg Gly Leu Leu Arg Pro Val Ala Cys Thr Thr 100 105 Gly Gly Tyr Gly Val Phe Asp Asp Ala Ala Leu Gln Arg Leu Cys Phe 115 120 Val Arg Ala Ala Phe Glu Ala Gly Ile Gly Leu Asp Ala Leu Ala Arg 135 140 130 Leu Cys Arg Ala Leu Asp Ala Ala Asp Gly Ala Gln Ala Ala Ala Gln 150 155 Leu Ala Val Leu Arg Gln Leu Val Glu Arg Arg Arg Ala Ala Leu Ala 165 170 175 His Leu Asp Ala Gln Leu Ala Ser Met Pro Ala Glu Arg Ala His Glu 180 185 Glu Ala Leu Pro 195

<210> 8284 <211> 441 <212> PRT

<213> Enterobacter cloacae

<400> 8284 Ser Ala Pro Ile Ser Thr Met Leu Asn Thr Arg Val His Gln Ser Glu 1.0 Val Ser Met Ala Ala Asp Thr Pro Arg Ile Pro Glu Gln Gly Val Ala 25 Thr Leu Pro Asp Glu Ala Trp Glu Arg Ala Arg Arg Arg Ala Glu Ile 40 Ile Ser Pro Leu Ala Gln Ser Glu Thr Val Gly His Glu Ala Ala Asp 55 Met Ala Ala Gln Ala Leu Gly Leu Ser Arg Arg Gln Val Tyr Val Leu 7.0 7.5 Ile Arg Arg Ala Arg Gln Gly Ser Gly Leu Val Thr Asp Leu Val Pro 85 90 Gly Gln Ser Gly Gly Gly Lys Gly Lys Gly Arg Leu Pro Glu Pro Val 105 110 Glu Arg Val Ile His Glu Leu Leu Gln Lys Arg Phe Leu Thr Lys Gln 115 120 125 Lys Arg Ser Leu Ala Ala Phe His Arg Glu Val Thr Gln Val Cys Lys 130 135 140 Ala Gln Lys Leu Arg Val Pro Ala Arg Asn Thr Val Ala Leu Arg Ile 145 150 155 Ala Ser Leu Asp Pro Arg Lys Val Ile Arg Arg Arg Glu Gly Gln Asp 165 170 Ala Ala Arg Asp Leu Gln Gly Val Gly Gly Glu Pro Pro Ala Val Thr 180 185 190 Ala Pro Leu Glu Gln Val Gln Ile Asp His Thr Val Ile Asp Leu Ile 195 200 205 Val Val Asp Asp Arg Asp Arg Gln Pro Ile Gly Arg. Pro Tyr Leu Thr 215 220 Leu Ala Ile Asp Val Phe Thr Arg Cys Val Leu Gly Met Val Val Thr 230 235 Leu Glu Ala Pro Ser Ala Val Ser Val Gly Leu Cys Leu Val His Val 245 250 255 Ala Cys Asp Lys Arg Pro Trp Leu Glu Gly Leu Asn Val Glu Met Asp 265 260 270 Trp Gln Met Ser Gly Lys Pro Leu Leu Leu Tyr Leu Asp Asn Ala Ala 280 Glu Phe Lys Ser Glu Ala Leu Arg Arg Gly Cys Glu Gln His Gly Ile

```
295
Arg Leu Asp Tyr Arg Pro Leu Gly Gln Pro His Tyr Gly Gly Ile Val
                 310
                                315
Glu Arg Ile Ile Gly Thr Ala Met Gln Met Ile His Asp Glu Leu Pro
             325
                      330
Gly Thr Thr Phe Ser Asn Pro Asp Gln Arg Gly Asp Tyr Asp Ser Glu
          340
                     345
                                             350
Asn Lys Ala Ala Leu Thr Leu Arg Glu Leu Glu Arg Trp Leu Thr Leu
      355 360
                                365
Ala Val Gly Thr Tyr His Gly Ser Val His Asn Gly Leu Leu Gln Pro
               375
                             380
Pro Ala Ala Arg Trp Ala Glu Ala Val Ala Arg Val Gly Val Pro Ala
                390 395
Val Val Thr Arq Ala Thr Ser Phe Leu Val Asp Phe Leu Pro Ile Leu
             405 410
Arg Arg Thr Leu Thr Arg Thr Gly Phe Val Ile Asp His Ile His Tyr
        420 425
Tyr Ala Asp Gly His Cys Cys Lys
<210> 8285
<211> 165
<212> PRT
<213> Enterobacter cloacae
<400> 8285
Asn Val Arg Pro Leu Asn Lys Thr Lys Gly Cys Leu Ile Ala Asn Phe
                               10
Ala Thr Val Pro Ala Asp Ala Leu Lys Pro Trp Ile Ala Arg Arg Glu
 20
                            25
Arg Trp Pro Ser Phe Leu Ile Arg Arg Asp Pro Arg Asp Ile Ser Arg
                        40
Ile Trp Val Leu Glu Pro Glu Gly Gln His Tyr Leu Glu Ile Pro Tyr
                    5.5
                                      60
Arg Thr Leu Ser His Pro Ala Val Thr Leu Trp Glu Gln Arg Gln Ala
                 70
                                   7.5
Leu Ala Lys Leu Arg Gln Gln Gly Arg Glu Gln Val Asp Glu Ser Ala
             8.5
                               90
Leu Phe Arg Met Ile Gly Gln Met Arg Glu Ile Val Thr Ser Ala Gln
          100
                           105
                                              110
Lys Ala Thr Arg Lys Ala Arg Arg Asp Ala Asp Arg Arg Gln His Leu
      115
                        120
                                          125
Lys Thr Ser Ala Arg Pro Asp Lys Pro Val Pro Pro Asp Thr Asp Ile
  130
                    135
                                      140
Ala Asp Pro Gln Ala Asp Asn Leu Pro Pro Ala Lys Pro Phe Asp Gln
145
                 150
                                   155
Ile Glu Glu Trp
             165
<210> 8286
<211> 521
<212> PRT
<213> Enterobacter cloacae
<400> 8286
```

His Cys Phe Pro Ser Gly Tyr Gly Gly Arg Asn Gln Gly Val Ile Asn Val Ala Ile Leu Ser Ala Ile Arg Arg Trp His Phe Arg Asp Gly Ala 25 30 Ser Ile Arg Glu Ile Ala Arg Arg Ser Gly Leu Ser Arg Asn Thr Val 40

```
Arg Lys Tyr Leu Gln Ser Lys Val Val Glu Pro Gln Tyr Pro Ala Arg
Asp Ser Val Gly Lys Leu Ser Pro Phe Glu Pro Lys Leu Arg Gln Trp
                              7.5
Leu Ser Thr Glu His Lys Lys Thr Lys Lys Leu Arg Arg Asn Leu Arg
           85
                           90
Ser Met Tyr Arg Asp Leu Val Ala Leu Gly Phe Thr Gly Ser Tyr Asp
             105
         100
Arg Val Cys Ala Phe Ala Arg Gln Trp Lys Asp Ser Glu Gln Phe Lys
                          125
   115
                     120
Ala Glm Thr Ser Gly Lys Gly Cys Phe Ile Pro Leu Arg Phe Ala Cys
       135
                       140
Gly Glu Ala Phe Gln Phe Asp Trp Ser Glu Asp Phe Ala Arg Ile Ala
145
   150 155 160
Gly Lys Gln Val Lys Leu Gln Ile Ala Gln Phe Lys Leu Ala His Ser
         165 170
Arg Ala Phe Val Leu Arg Ala Tyr Tyr Gln Gln Lys His Glu Met Leu
        180 185
Phe Asp Ala His Trp His Ala Phe Gln Ile Phe Gly Gly Ile Pro Lys
     195 200 205
Arg Gly Ile Tyr Asp Asn Met Lys Thr Ala Val Asp Ser Val Gly Arg
  210
                      220
      215
Gly Lys Glu Arg Arg Val Asn Gln Arg Phe Thr Ala Met Val Ser His
   230 235
Tyr Leu Phe Asp Ala Gln Phe Cys Asn Pro Ala Ser Gly Trp Glu Lys
            245 250
Gly Gln Ile Glu Lys Asn Val Gln Asp Ser Arg Gln Arg Leu Trp Gln
         260 265
                                        270
Gly Ala Pro Asp Phe Gln Ser Leu Ala Asp Leu Asn Val Trp Leu Glu
 275 280
                         285
His Arg Cys Lys Ala Leu Trp Ser Glu Leu Arg His Pro Glu Leu Asp
      295
                                  300
Gin Thr Val Gin Glu Ala Phe Ala Asp Glu Gin Gly Glu Leu Met Ala
                              315
               310
Leu Pro Asn Ala Phe Asp Ala Phe Val Glu Gln Thr Lys Arg Val Thr
            325
                           330 335
Ser Thr Cys Leu Val His His Glu Gly Asn Arg Tyr Ser Val Pro Ala
         340
                        345
                                        350
Ser Tyr Ala Asn Arg Ala Ile Ser Leu Arg Ile Tyr Ala Asp Lys Leu
      355
                     360
                                     365
Val Met Ala Ala Glu Gly Gln His Ile Ala Glu His Pro Arg Leu Phe
                  375
                                  380
Gly Ser Gly His Ala Arg Arg Gly His Thr Gln Tyr Asp Trp His His
               390
                               395
Tyr Leu Ser Val Leu Gln Lys Lys Pro Gly Ala Leu Arg Asn Gly Ala
            405
                           410
Pro Phe Ala Glu Leu Pro Pro Ala Phe Lys Lys Leu Gln Ser Ile Leu
         420
                        425
                                        430
Leu Gln Arg Pro Gly Gly Asp Arg Asp Met Val Glu Ile Leu Ala Leu
                     440
                                     445
Val Leu His His Asp Glu Gly Ala Val Leu Ser Ala Val Glu Leu Ala
                  455
                                  460
Leu Glu Cys Gly Lys Pro Ser Lys Glu His Val Leu Asn Leu Leu Gly
              470
                               475
Arg Leu Thr Glu Glu Pro Pro Pro Lys Pro Ile Pro Ile Pro Lys Gly
            485
                           490
                                495
Leu Arg Leu Thr Leu Glu Pro Gln Ala Asn Val Asn Arg Tyr Asp Ser
        500
Leu Arg Arg Ala His Asp Ala Ala
      515
```

```
<210> 8287
<211> 340
<212> PRT
<213> Enterobacter cloacae
<400> 8287
Gln Ala Met Lys Thr Ala Thr Ala Pro Leu Pro Pro Leu Arg Ser Val
      5
                    10
Lys Val Leu Asp Gln Leu Arg Glu Arg Ile Arg Tyr Leu His Tyr Ser
                                           30
   20
              25
Leu Pro Thr Glu Gln Ala Tyr Val His Trp Val Arg Ala Phe Ile Arg
   35 40
Phe His Gly Val Arg His Pro Ala Thr Leu Gly Ser Ser Glu Val Glu
                 5.5
Ala Phe Leu Ser Trp Leu Ala Asn Glu Arg Lys Val Ser Val Ser Thr
                70
His Arg Gln Ala Leu Ala Ala Leu Leu Phe Phe Tyr Gly Lys Val Leu
            8.5
                              90
Cys Thr Asp Leu Pro Trp Leu Gln Glu Ile Gly Arg Pro Arg Pro Ser
         100 105
                                           110
Arg Arg Leu Pro Val Val Leu Thr Pro Asp Glu Val Val Arg Ile Leu
115
                       120
                                        125
Gly Phe Leu Glu Gly Glu His Arg Leu Phe Ala Gln Leu Leu Tyr Gly
                   135
                                     140
Thr Gly Met Arg Ile Ser Glu Gly Leu Gln Leu Arg Val Lys Asp Leu
                150
                                155
                                                  160
Asp Phe Asp His Gly Thr Ile Ile Val Arg Glu Gly Lys Gly Ser Lys
            165
                              170
                                               175
Asp Arg Ala Leu Met Leu Pro Glu Ser Leu Ala Pro Ser Leu Arg Glu
         180
                          185
                                          190
Gln Leu Ser Arg Ala Arg Ala Trp Trp Leu Lys Asp Gln Ala Glu Gly
195
                       200
                                        205
Arg Ser Gly Val Ala Leu Pro Asp Ala Leu Glu Arg Lys Tyr Pro Arg
 210
                   215
                                    220
Ala Gly His Ser Trp Pro Trp Phe Trp Val Phe Ala Gln His Thr His
                230
                                235
                                                 240
Ser Thr Asp Pro Arg Ser Gly Val Val Arg Arg His His Met Tyr Asp
             245
                             250 255
Gln Thr Phe Gln Arg Ala Phe Lys Arg Ala Val Glu Gln Ala Gly Ile
         260
                          265
                                           270
Thr Lys Pro Ala Thr Pro His Thr Leu Arg His Ser Phe Ala Thr Ala
      275
                       280
                                        285
Leu Leu Arg Ser Gly Tyr Asp Ile Arg Thr Val Gln Asp Leu Leu Gly
                   295
 290
                                     300
His Ser Asp Val Ser Thr Thr Met Ile Tyr Thr His Val Leu Lys Val
                310
                               315 320
Gly Gly Ala Gly Val Arg Ser Pro Leu Asp Ala Leu Pro Pro Leu Thr
             325
                              330
Ser Glu Arg
         340
<210> 8288
<211> 170
<212> PRT
<213> Enterobacter cloacae
<400> 8288
Thr Ser Val Glu His Ile Tyr Ala Ala Gly Asp Cys Thr Asp Gln Pro
                            10
Gln Phe Val Tyr Val Ala Ala Ala Gly Thr Arg Ala Ala Ile Asn
```

```
Met Thr Gly Gly Asp Ala Ala Leu Asn Leu Thr Ala Met Pro Ala Val
       35
                       40
Val Phe Thr Asp Pro Gln Val Ala Thr Val Gly Tyr Ser Glu Ala Glu
Ala His His Asp Gly Ile Lys Thr Asp Ser Arg Thr Leu Thr Leu Asp
                 7.0
                                  75
Asn Val Pro Arg Ala Leu Ala Asn Phe Asp Thr Arg Gly Phe Ile Lys
                              90
Leu Val Val Glu Glu Gly Ser Gly Arg Leu Ile Gly Val Gln Ala Val
                          105
          100
Ala Pro Glu Ala Gly Glu Leu Ile Gln Thr Ala Ala Leu Ala Ile Arg
                       120
 115
                             125
Asn Arg Met Thr Val Gln Glu Leu Ala Asp Gln Leu Phe Pro Tyr Leu
 130
        135 140
Thr Met Val Glu Gly Leu Lys Leu Ala Ala Gln Thr Phe Asn Lys Asp
145 150
Val Lys Gln Leu Ser Cys Cys Ala Gly
    165
<210> 8289
<211> 309
<212> PRT
<213> Enterobacter cloacae
<400> 8289
Gln Thr Ala Ala Arg Asp Ala Pro Thr Arg Phe Arg Leu Pro Val Gly
                            10
Cys Ala Gly Arg Val Asp Leu Pro Leu Pro Ser Ala Asp Ser Arg Arg
         20
Arg Ala Gly Arg Asp Asp Arg Arg Cys Leu Pro Trp Arg Ala Leu Gly
                      40
Cys Cys Arg Ala Arg Ala Asp Arg Leu Val Arg Ser Gly Arg Asn Ala
                 5.5
Ala Ala Arg Leu Pro Gly Arg Ile Met Thr Ser Ser Gln Pro Ala
              70
                                 75
Gly Trp Thr Ala Ala Glu Leu Ala Gln Ala Ala Ala Arg Gly Gln Leu
            85
                             90
Asp Leu His Tyr Gln Pro Leu Val Asp Leu Arg Asp His Arg Ile Ala
         100 105 110
Gly Ala Glu Ala Leu Met Arg Trp Arg His Pro Arg Leu Gly Leu Leu
      115 120
Pro Pro Gly Gln Phe Leu Pro Leu Ala Glu Ser Phe Gly Leu Met Pro
  130 135 140
Glu Ile Gly Ala Trp Val Leu Gly Glu Ala Cys Arg Gln Met His Lys
              150
                                 155
                                                  160
Trp Gln Gly Pro Ala Trp Gln Pro Phe Arg Leu Ala Ile Asn Val Ser
             165
                              170 175
Ala Ser Gln Val Gly Pro Thr Phe Asp Asp Glu Val Lys Arg Val Leu
         180
                           185
                                           190
Ala Asp Met Ala Leu Pro Ala Glu Leu Leu Glu Ile Glu Leu Thr Glu
                        200
      195
                                         205
Ser Val Ala Phe Gly Asn Pro Ala Leu Phe Ala Ser Phe Asp Ala Leu
                  215
Arg Ala Ile Gly Val Arg Phe Ala Ala Asp Asp Phe Gly Thr Gly Tyr
                230
                                 235
                                                   240
Ser Cys Leu Gln His Leu Lys Cys Cys Pro Ile Thr Thr Leu Lys Ile
             245
                              250
Asp Gln Ser Phe Val Ala Arg Leu Pro Asp Asp Ala Arg Asp Gln Thr
          260
                           265
Ile Val Arg Ala Val Ile Gln Leu Ala His Gly Leu Gly Met Asp Val
```

```
Ile Phe Arg Arg Leu His Gln Leu Ile Glv Arg Asn Glv Cvs Cvs
                    295
   290
Ala Ala Ser Ser
305
<210> 8290
<211> 246
<212> PRT
<213> Enterobacter cloacae
<400> 8290
Thr Tyr His Pro Leu Leu Leu Met Glu Leu His Met Asn Pro Phe Lys
                                10
Gly Arg His Phe Gln Arg Asp Ile Ile Leu Trp Ala Val Arg Trp Tyr
          20
                     2.5
Cys Lys Tyr Gly Ile Ser Tyr Arg Glu Leu Gln Glu Met Leu Ala Glu
      35
                      40
                              4.5
Arg Gly Val Asn Val Asp His Ser Thr Ile Tyr Arg Trp Val Gln Arg
                     55
Tyr Ala Pro Glu Met Glu Lys Arg Leu Arg Trp Tyr Trp Arg Asn Pro
                 7.0
                                   75
Ser Asp Leu Cys Pro Trp His Met Asp Glu Thr Tyr Val Lys Val Asn
                                90
Gly Arg Trp Ala Tyr Leu Tyr Arg Ala Val Asp Ser Arg Gly Arg Thr
        100
               105
                                 110
Val Asp Phe Tyr Leu Ser Ser Arg Arg Asn Ser Lys Ala Ala Tyr Arg
      115
                        120
                                           125
Phe Leu Gly Lys Ile Leu Asn Asn Val Lys Lys Trp Gln Ile Pro Arg
                   135
                                        140
Phe Ile Asn Thr Asp Lys Ala Pro Ala Tyr Gly Arg Ala Leu Ala Leu
               150
                                    155
Leu Lys Arg Glu Gly Arg Cys Pro Ser Asp Val Glu His Arg Gln Ile
           165
                                170
Lys Tyr Arg Asn Asn Val Ile Glu Cys Asp His Gly Lys Leu Lys Arg
          180
                            185
Ile Ile Gly Ala Thr Leu Gly Phe Lys Ser Met Lys Thr Ala Tyr Ala
                         200
Thr Ile Lys Gly Ile Glu Val Met Arg Ala Leu Arg Lys Gly Gln Ala
                     215
                                       220
Ser Ala Phe Tyr Tyr Gly Asp Pro Leu Gly Glu Met Arg Leu Val Ser
                                    235
              230
                                                      240
Arg Val Phe Glu Met
              245
<210> 8291
<211> 92
<212> PRT
<213> Enterobacter cloacae
<400> 8291
Pro Val Gly Lys Ser Leu Arg Ala Asp Asp Ala Ala Gly Met Gly Gly
Gln Arg Arg Leu Leu Thr Ala Gly Gln Leu Arg Arg Phe Ala Pro
          20
                             25
Ala Ala Pro Ala Phe Pro Asn Cys His Ala Gly His Gly Ser Leu Pro
       35
                         4.0
                                          45
Ala His Thr Gln Arg Gly His His Arg Gly Thr Gly Ala Leu Ala Asp
                     55
                                      60
Gly Gly Gly His Arg Arg Gly Glu Arg Arg Gly Ser Asp Gln Pro
                  70
                                   75
Ser His Thr Gln His Gly Leu Leu Ser Cys Ile
```

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<210> 8292
<211> 68
<212> PRT
<213> Enterobacter cloacae
<400> 8292
Arg Pro Leu Trp Ile Arg Trp Gly Val Ala Lys Ser Ala Gly Ser Ile
                           10
Ser Gly Ser Leu Pro Trp Ser Ala Thr Thr Cys Leu Met Arg Ser Ser
       20
                                            30
                           25
Val Ile Gln His Arg Val Gly Arg Lys Ala Arg Leu Arg Arg Thr Cys
                             45
                 40
Arg Ile Pro Ala Asn Ala Cys Gly Lys Gly His Gln Thr Phe Lys Ala
 50
                    55
Leu Leu Ile
65
<210> 8293
<211> 265
<212> PRT
<213> Enterobacter cloacae
<400> 8293
Gly Glu Pro Met Met Gln His Glu Gly His Val Arg Ile Leu Lys Ser
                              10
Leu Lys Leu Phe Gly Met Ala His Ala Ile Glu Glu Leu Gly Asn Gln
                           25
Asn Ser Pro Ala Phe Asn Gln Ala Leu Pro Met Leu Asp Ser Leu Ile
35 40
Lys Ala Glu Val Ala Glu Arg Glu Val Arg Ser Val Asn Tyr Gln Leu
       55
Arg Val Ala Lys Phe Pro Val Tyr Arg Asp Leu Val Gly Phe Asp Phe
            7.0
                                  7.5
Ser Gln Ser Leu Val Asn Glu Ala Thr Val Lys Gln Leu His Arg Cys
            85 90
Asp Phe Met Glu Gln Ala Gln Asn Val Val Leu Ile Gly Gly Pro Gly
         100 105
Thr Gly Lys Thr His Leu Ala Thr Ala Ile Gly Thr Gln Ala Val Met
     115 120
                                         125
His Leu Asn Arg Arg Val Arg Phe Phe Ser Thr Val Asp Leu Val Asn
                  135
                                     140
Ala Leu Glu Gln Glu Lys Ser Ser Gly Arg Gln Gly Gln Ile Ala Asn
                 150
                                  155
                                                    1.60
Arg Leu Leu Tyr Ala Asp Leu Val Ile Leu Asp Glu Leu Gly Tyr Leu
             165
                              170
                                                175
Pro Phe Ser Gln Thr Gly Gly Ala Leu Leu Phe His Leu Leu Ser Lys
                           185 190
         180
Leu Tyr Glu Lys Thr Ser Val Ile Leu Thr Thr Asn Leu Ser Phe Ser
                       200
                                        205
     195
Glu Trp Ser Arg Val Phe Gly Asp Glu Lys Met Thr Thr Ala Leu Leu
                    215
   210
Asp Arg Leu Thr His His Cys His Ile Leu Glu Thr Gly Asn Glu Ser
225
                230
                                  235
                                                   240
Tyr Arg Phe Lys His Ser Ser Thr Gln Asn Lys Gln Glu Glu Lys Gln
             245
                              250
Thr Arg Lys Leu Lys Ile Glu Thr
```

```
<211> 116
<212> PRT
<213> Enterobacter cloacae
```

<400> 8294 Lys Pro Pro Leu Arg Arg Tyr His Arg Cys Val Arg Ser Arg Phe Trp 1.0 Thr Ser Cys Val Ser Ala Tyr Ala Thr Cys Ile Thr Ala Tyr Gln Pro 30 20 25 Asn Arg Leu Met Ser Thr Gly Phe Val Pro Ser Ser Val Ser Thr Val 35 40 45 Cys Val Thr Arg Gln Pro Trp Ala Ala Ala Lys Ser Arg His Phe Cys 55 Pro Gly Trp Arg Thr Ser Ala Arg Phe Arg Ser Pro Arg Ile Val Arg 70 75 His Trp Arg Pro Cys Cys Ser Ser Thr Ala Arg Cys Cys Ala Arg Ile 90 85 Cys Pro Gly Phe Arg Arg Ser Glu Asp Leu Ala Arg Arg Gly Ala Cys Arg Trp Cys

<210> 8295 <211> 1008 <212> PRT

<213> Enterobacter cloacae

<400> 8295 Leu Arg His Gln Pro Arg Asn Leu Val Pro Val Pro Ala Gly Arg Leu Thr Met Pro Arg Arg Ser Ile Leu Ser Ala Thr Glu Arg Glu Ser Leu 20 25 Leu Ala Leu Pro Asp Ala Lys Asp Glu Leu Ile Arg His Tyr Thr Phe 35 40 45 Asn Glu Thr Asp Leu Ser Val Ile Arg Gln Arg Arg Gly Ala Ala Asn 50 55 60 Arg Leu Gly Phe Ala Val Gln Leu Cys Tyr Leu Arg Phe Pro Gly Thr 7.0 75 Phe Leu Gly Val Asp Glu Pro Pro Phe Pro Pro Leu Leu Arg Met Val 90 85 Ala Ala Gln Leu Lys Met Pro Val Glu Ser Trp Ser Glu Tyr Gly Gln 100 105 110 Arg Glu Gln Thr Arg Arg Glu His Leu Val Glu Leu Gln Thr Val Phe 115 120 125 Gly Phe Lys Pro Phe Thr Met Ser His Tyr Arg Gln Ala Val His Thr 135 140 Leu Thr Glu Leu Ala Leu Gln Thr Asp Lys Gly Ile Val Leu Ala Ser 150 155 160 145 Ala Leu Val Glu Asn Leu Arg Arg Gln Ser Ile Ile Leu Pro Ala Met 170 175 165 Asn Ala Ile Glu Arg Ala Ser Ala Glu Ala Ile Thr Arg Ala Asn Arg 180 185 190 Arg Ile Tyr Ala Ala Leu Thr Asp Ser Leu Leu Ser Pro His Arg Gln 200 195 Arg Leu Asp Glu Leu Leu Lys Arg Lys Asp Gly Ser Lys Val Thr Trp 215 220 Leu Ala Trp Leu Arg Gln Ser Pro Ala Lys Pro Asn Ser Arg His Met 240 230 235 Leu Glu His Ile Glu Arg Leu Lys Ser Trp Gln Ala Leu Asp Leu Pro 245 250 Ala Gly Ile Glu Arg Gln Val His Gln Asn Arg Leu Leu Lys Ile Ala

```
265
        260
Arg Glu Gly Gly Gln Met Thr Pro Ala Asp Leu Ala Lys Phe Glu Val
             280
                                  285
Gln Arg Arg Tyr Ala Thr Leu Val Ala Leu Ala Ile Glu Gly Met Ala
         295
                               300
Thr Val Thr Asp Glu Ile Ile Asp Leu His Asp Arg Ile Ile Gly Lys
      310 315
Leu Phe Asn Ala Ala Lys Asn Lys His Gln Gln Gln Phe Gln Ala Ser
          325 330 335
Gly Lys Ala Ile Asn Asp Lys Val Arg Met Tyr Gly Arg Ile Gly Gln
       340 345 350
Ala Leu Ile Glu Ala Lys Gln Ser Gly Ser Asp Pro Phe Ala Ala Ile
  355 360 365
Glu Ala Val Met Pro Trp Asp Thr Phe Ala Ala Ser Val Thr Glu Ala
 370 375 380
Gln Thr Leu Ala Arg Pro Ala Asp Phe Asp Phe Leu His His Ile Gly
385 390 395 400
Glu Ser Tyr Ala Thr Leu Arg Arg Tyr Ala Pro Gln Phe Leu Gly Val
      405 410 415
Leu Lys Leu Arg Ala Ala Pro Ala Ala Lys Gly Val Leu Asp Ala Ile
 420 425 430
Asp Met Leu Arg Gly Met Asn Ser Asp Ser Ala Arg Lys Val Pro Ala
435 440 445
Asp Ala Pro Thr Ala Phe Ile Lys Pro Arg Trp Ala Lys Leu Val Leu
450 455
Thr Asp Asp Gly Ile Asp Arg Arg Tyr Tyr Glu Leu Cys Ala Leu Ser
465 470 475 480
Glu Leu Lys Asn Ala Leu Arg Ser Gly Asp Val Trp Val Gln Gly Ser
       485 490 495
Arg Gln Phe Lys Asp Phe Asp Glu Tyr Leu Val Pro Val Glu Lys Phe
 500 505
Ala Thr Leu Lys Leu Ala Ser Glu Leu Pro Leu Ala Val Ala Thr Asp
515 520 525
Cys Asp Gln Tyr Leu His Asp Arg Leu Glu Leu Leu Glu Ala Gln Leu
 530 535 540
Ala Thr Val Asn Arg Met Ala Ala Ala Asn Asp Leu Pro Asp Ala Ile
545 550 555 560
Ile Thr Thr Ala Ser Gly Leu Lys Ile Thr Pro Leu Asp Ala Ala Val
       565 570 575
Pro Asp Ala Ala Gln Ala Met Ile Asp Gln Thr Ala Met Leu Leu Pro
                      585
His Leu Lys Ile Thr Glu Leu Leu Met Glu Val Asp Glu Trp Thr Gly
                   600 605
Phe Thr Arg His Phe Thr His Leu Lys Thr Ser Asp Thr Ala Lys Asp
 610 615
                               620
Lys Thr Leu Leu Thr Thr Ile Leu Ala Asp Ala Ile Asn Leu Gly
625 630 635 640
Leu Thr Lys Met Ala Glu Ser Cys Pro Gly Thr Thr Tyr Ala Lys Leu
          645 650 655
Ser Trp Leu Gln Ala Trp His Ile Arg Asp Glu Thr Tyr Ser Thr Ala
                          670
       660
                      665
Leu Ala Glu Leu Val Asn Ala Gin Phe Arg Gln Pro Phe Ala Gly Asn
                       685
                   680
Trp Gly Asp Gly Thr Thr Ser Ser Ser Asp Gly Gln Asn Phe Arg Thr
                695
                               700
Gly Ser Lys Ala Glu Ser Thr Gly His Ile Asn Pro Lys Tyr Gly Ser
705 710
                            715
Ser Pro Gly Arg Thr Phe Tyr Thr His Ile Ser Asp Gln Tyr Ala Pro
                         730
Phe Ser Ala Lys Val Val Asn Val Gly Ile Arg Asp Ser Thr Tyr Val
                      745
        740
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Leu Asp Gly Leu Leu Tyr His Glu Ser Asp Leu Arg Ile Glu Glu His
                    760
Tyr Thr Asp Thr Ala Gly Phe Tnr Asp His Val Phe Gly Leu Met His
                  775
Leu Leu Gly Phe Arg Phe Ala Pro Arg Ile Arg Asp Leu Gly Glu Thr
              790
                             795
Lys Leu Phe Ile Pro Lys Gly Asp Ala Ala Tyr Asp Ala Leu Lys Pro
           805
                          810
                              815
Met Ile Ser Ser Asp Arg Leu Asn Ile Lys Gln Ile Arg Ala His Trp
        820 825 830
Asp Glu Ile Leu Arg Leu Ala Thr Ser Ile Lys Gln Gly Thr Val Thr
  835 840
                        845
Ala Ser Leu Met Leu Arg Lys Leu Gly Ser Tyr Pro Arg Gln Asn Gly
 850 855 860
Leu Ala Val Ala Leu Arg Glu Leu Gly Arg Ile Glu Arg Thr Leu Phe
865 870 875
Ile Leu Asp Trp Leu Gln Ser Val Glu Leu Arg Arg Arg Val His Ala
         885 890
Gly Leu Asn Lys Gly Glu Ala Arg Asn Ala Leu Ala Arg Ala Val Phe
  900
                       905
Phe Tyr Arg Leu Gly Glu Ile Arg Asp Arg Ser Phe Glu Gln Gln Arg
915 920 925
Tyr Arg Ala Ser Gly Leu Asn Leu Val Thr Ala Ala Ile Val Leu Trp
                 935
Asn Thr Val Tyr Leu Glu Arg Ala Thr Ser Ala Leu Arg Gly Asn Gly
945 950
                             955
Thr Ala Leu Asp Asp Thr Leu Leu Gln Tyr Leu Ser Pro Leu Gly Trp
           965
                           970
Glu His Ile Asn Leu Thr Gly Asp Tyr Leu Trp Arg Ser Ser Ala Lys
        980 985 990
Val Gly Ala Gly Lys Phe Arg Pro Leu Arg Pro Leu Pro Pro Ala
                    1000
```

<210> 8296 <211> 344 <212> PRT

<213> Enterobacter cloacae

165

<400> 8296 Gly Gln Ala Phe Ile Arg Arg Thr Ile Met Glu Asn Ile Ala Leu Ile 10 Gly Ile Asp Leu Gly Lys Asn Ser Phe His Ile His Cys Gln Asp His 25 Arg Gly Lys Ala Val Tyr Arg Lys Lys Phe Thr Arg Pro Lys Leu Ile 4.0 Glu Phe Leu Ala Thr Cys Pro Ala Thr Thr Ile Ala Met Glu Ala Cys 5.5 Gly Gly Ser His Phe Met Ala Arg Lys Leu Glu Glu Leu Gly His Phe 7.0 75 Pro Lys Leu Ile Ser Pro Gln Phe Val Arg Pro Phe Val Lys Ser Asn 85 Lys Asn Asp Phe Val Asp Ala Glu Ala Ile Cys Glu Ala Ala Ser Arg Pro Ser Met Arg Phe Val Gln Pro Arg Thr Glu Ser Gln Gln Ala Met 120 115 Arg Ala Leu His Arg Val Arg Glu Ser Leu Val Gln Asp Lys Val Lys 130 135 Thr Thr Asn Gln Met His Ala Phe Leu Leu Glu Phe Gly Ile Ser Val 150 155 Pro Arg Gly Ala Ala Val Ile Ser Arg Leu Ser Thr Leu Leu Glu Asp 170

```
Ser Ser Leu Pro Leu Tyr Leu Ser Gln Leu Leu Leu Lys Leu Gln Gln
         180
                  185
His Tyr His Tyr Leu Val Glu Gln Ile Lys Asp Leu Glu Ser Gln Leu
     195
                    200
                                205
Lys Arg Lys Leu Asp Glu Asp Glu Val Gly Gln Arg Leu Leu Ser Ile
 210
        215 220
Pro Cys Val Gly Thr Leu Thr Ala Ser Thr Ile Ser Thr Glu Ile Gly
      230 235
Asp Gly Lys Gln Tyr Ala Ser Ser Arg Asp Phe Ala Ala Ala Thr Gly
          245 250 255
Leu Val Pro Arg Gln Tyr Ser Thr Gly Gly Arg Thr Thr Leu Leu Gly
         260 265 270
Ile Ser Lys Arg Gly Asn Lys Lys Ile Arg Thr Leu Leu Val Gln Cys
     275 280 285
Ala Arg Val Phe Ile Gln Lys Leu Glu His Gln Ser Gly Lys Leu Ala
 290 295
                                    300
Asp Trp Val Arg Glu Leu Leu Cys Arg Lys Ser Asn Phe Val Val Thr
                310
                               315
Cys Ala Leu Ala Asn Lys Leu Ala Arg Ile Ala Trp Ala Leu Thr Ala
      325
                              330
Arg Gln Gln Thr Tyr Glu Ala
          340
<210> 8297
<211> 187
<212> PRT
<213> Enterobacter cloacae
<400> 8297
Arg Trp Gly Glu Arg Thr Tyr Arg Ala Arg Leu Pro Gly Ala Arg Leu
                              10
Val Thr Ala Gly Gly Leu His His Gly Arg Leu Arg Arg Val Arg Arg
          20
                           2.5
                                            30
Cys Gly Leu Ala Thr Ala Val Leu Arg Ala Arg Gly Leu Arg Gly Gly
      35
                       4.0
Tyr Arg Pro Gly Cys Pro Gly Ala Ala Val Pro Cys Ala Arg Arg Ser
                5.5
Gly Arg Arg Thr Ser Arg Ser Ala Ala Cys Arg Ala Ala Pro Val Gly
                7.0
                                 7.5
Arg Ala Ala Ala Arg Gly Val Gly Pro Ser Gly Arg Ala Thr Gly Leu
             8.5
                              90
                                               95
His Ala Ser Arg Ala Gly Ala Arg Gly Gly Ile Ala Val Asn Ala Pro
          100
                          105
                                          110
Asp Lys Leu Pro Pro Glu Thr Arg Gln Pro Val Ser Gly Tyr Leu Trp
                       120
      115
Gly Ala Leu Ala Val Leu Thr Cys Pro Cys His Leu Pro Ile Leu Ala
                    135
                                     140
   130
Ala Val Leu Ala Gly Thr Thr Ala Gly Ala Phe Leu Gly Glu His Trp
                 150
                                 155
                                                  160
145
Gly Val Ala Ala Leu Ala Leu Thr Gly Leu Phe Val Leu Ala Val Thr
             165
                              170
Arg Leu Leu Arg Ala Phe Arg Gly Gly Ser
          180
                           185
<210> 8298
<211> 291
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<212> PRT

<213> Enterobacter cloacae

<400> 8298

Gly Val Val Ala Val Asp Glu Tyr Pro Ile Ile Asp Leu Ser His Leu

Leu Pro Ala Ala Gln Gly Leu Ala Arg Leu Pro Ala Asp Glu Arg Ile Gln Arg Leu Arg Ala Asp Arg Trp Ile Gly Tyr Pro Arg Ala Val Glu 40 Ala Leu Asn Arg Leu Glu Ala Leu Tyr Ala Trp Pro Asn Lys Gln Arg Met Pro Asn Leu Leu Val Gly Pro Thr Asn Asn Gly Lys Ser Met 7.0 75 Ile Val Glu Lys Phe Arg Arg Thr His Pro Ala Ser Ser Asp Ala Asp 8.5 90 95 Gln Glu His Ile Pro Val Leu Val Val Gln Met Pro Ser Glu Pro Ser 105 110 Val Ile Arg Phe Tyr Val Ala Leu Leu Ala Ala Met Gly Ala Pro Leu 120 125 115 Arg Pro Arg Pro Arg Leu Pro Glu Met Glu Gln Leu Ala Leu Ala Leu 130 135 140 Leu Arg Lys Val Gly Val Arg Met Leu Val Ile Asp Glu Leu His Asn 150 155 Val Leu Ala Gly Asn Ser Val Asn Arg Arg Glu Phe Leu Asn Leu Leu 165 170 175 Arg Phe Leu Gly Asn Glu Leu Arg Ile Pro Leu Val Gly Val Gly Thr 180 185 Arg Asp Ala Tyr Leu Ala Ile Arg Ser Asp Asp Gln Leu Glu Asn Arg 200 205 Phe Glu Pro Met Met Leu Pro Val Trp Glu Ala Asn Asp Asp Cys Cys 215 Ser Leu Leu Ala Ser Phe Ala Ala Ser Leu Pro Leu Arg Arg Pro Ser 230 235 Pro Ile Ala Thr Leu Asp Met Ala Arg Tyr Leu Leu Thr Arg Ser Glu 250 Gly Thr Ile Gly Glu Leu Ala His Leu Leu Met Ala Ala Ala Ile Val 265 Ala Val Glu Ser Gly Glu Glu Ala Ile Asn His Arg Thr Leu Ser Met Ala Cys

290
<210> 8299
<211> 206
<212> PRT

<213> Enterobacter cloacae

<400> 8299

Leu Thr Tyr Ser Val Lys Gly Asn Arg Phe His Pro Asp Thr Phe Ala Phe Gly Gly Ile Leu Gln Gly Gln Arg Ile Gly Tyr Val Arg Val Ser 2.0 Ser Phe Asp Gln Asn Pro Glu Arg Gln Leu Glu Gly Val Gln Val Ala 40 Arg Val Phe Thr Asp Lys Ala Ser Gly Lys Asp Thr Gln Arg Pro Glu 55 Leu Glu Arg Leu Leu Ala Phe Val Arg Glu Gly Asp Thr Val Val Val 75 His Ser Met Asp Arg Leu Ala Arg Asn Leu Asp Asp Leu Arg Arg Ile 8.5 90 Val Gln Gly Leu Thr Gln Arg Gly Val Arg Met Glu Phe Val Lys Glu 100 105 Gly Leu Lys Phe Thr Gly Glu Asp Ser Pro Met Ala Asn Leu Met Leu 120 Ser Val Met Gly Ala Phe Ala Glu Phe Glu Arg Ala Leu Ile Arg Glu

4112 Arg Gln Arg Glu Gly Ile Val Leu Ala Lys Gln Arg Gly Ala Tyr Arg 150 155 Gly Arg Lys Lys Ser Leu Asn Ser Glu Gln Ile Ala Glu Leu Lys Arg 165 170 Arg Val Ala Ala Gly Asp Gln Lys Thr Leu Val Ala Arg Asp Phe Gly 180 185 Ile Ser Arg Glu Thr Leu Tyr Gln Tyr Leu Arg Glu Asp <210> 8300 <211> 145 <212> PRT <213> Enterobacter cloacae <400> 8300 Ala His Ser Gly Thr Ala Asn Phe Gln His Met Arg Val Asn His Arg 10 Arg Arg Asp Val Gly Met Ala Glu Gln Ile Leu His Gly Ser Asn Val 25 Val Thr Ala Ala Glu Gln Gly Arg Arg Glu Arg Val Ala Glu Gly Val 35 40 Arg Cys Gly Gly Leu Arg Asp Ala Cys Leu Phe Tyr Gly Thr Phe Glu 50 55 60 Gly Ala Leu Lys Gly Leu Val Ile His Val Met Ala Thr His Asp Thr 70 75 Ala Pro Trp Ile Gly Arg Met Arg Val Leu Arg Lys Asn Pro Glu Pro 85 90 Arg Pro Gly Met Pro Gly Ala Arg Ile Leu Pro Leu Lys Gly Val Gly 105 110 Lys Arg Asn Ala Ala Ala Ala Leu Gly Leu Val Leu Gln Pro Pro Cys 115 120 125 Pro Cys Thr Arg Gln Leu Leu Ala Gln Ala Gly Cys Gln Ala Leu Gly 135 <210> 8301 <211> 149 <212> PRT <213> Enterobacter cloacae <400> 8301 His Gln Gly Pro Ile Leu Gly Ala Leu Ala Leu Pro His Asp Asp Arg 7.0

Ala Val Ile Glu Ile Gln Ile Leu Asp Pro Gln Leu Gln Thr Leu Thr 20 Asp Pro His Ala Arg Ser Ile Gln Lys Leu Gly Glu Gln Thr Met Leu 35 4.0 Ala Phe Gln Lys Thr Glu Asp Ala Asn His Phe Ile Arg Gly Gln His 55 His Arg Gln Ala Pro Arg Arg Ala Arg Ser Ser Asp Leu Leu Lys Pro 70 75 Gly Gln Ile Arg Ala Gln His Leu Ala Val Glu Glu Gln Gln Gly Arg 85 90 Gln Cys Leu Thr Met Arg Gly Asp Arg Asn Leu Ala Leu Val Arg Gln 100 105 Pro Gly Gln Lys Cys Leu Asp Phe Ala Ala Ala Gln Gly Cys Arg Val 120 125 Thr His Thr Val Glu Thr Asp Glu Gly Thr Asn Pro Val Asp Ile Ser 135 140

```
Leu Phe Gly Trp
145
<210> 8302
<211> 310
<212> PRT
<213> Enterobacter cloacae
<400> 8302
Cys Val Gly Leu Cys Arg Tyr Gly Ala His Asn Cys Cys Leu Phe Ala
                                    10
Arg Pro Ile Pro Ile Val Glu Val Ala Ala Glu Ala Asp Ala Met Val
                                25
Thr Val Phe Gly Ile Leu Asn Leu Thr Glu Asp Ser Phe Phe Asp Glu
        35
                           4.0
Ser Arg Arg Leu Asp Pro Ala Gly Ala Val Thr Ala Ala Ile Glu Met
                       55
Leu Arg Val Gly Ser Asp Val Val Asp Val Gly Pro Ala Ala Ser His
                    70
                                        75
Pro Asp Ala Arg Pro Val Ser Pro Ala Asp Glu Ile Arg Arg Ile Ala
                85
                                    90
Pro Leu Leu Asp Ala Leu Ser Asp Gln Met His Arg Val Ser Ile Asp
           100
                                105
Ser Phe Gln Pro Glu Thr Gln Arg Tyr Ala Leu Lys Arg Gly Val Gly
                            120
Tyr Leu Asn Asp Ile Gln Gly Phe Pro Asp Pro Ala Leu Tyr Pro Asp
                       135
                                            140
Ile Ala Glu Ala Asp Cys Arg Leu Val Val Met His Ser Ala Gln Arg
145
                    150
                                        155
                                                            160
Asp Gly Ile Ala Thr Arg Thr Gly His Leu Arg Pro Glu Asp Ala Leu
                                    170
                165
Asp Glu Ile Val Arg Phe Phe Giu Ala Arg Val Ser Ala Leu Arg Arg
                                185
            180
                                                    190
Ser Gly Val Ala Ala Asp Arg Leu Ile Leu Asp Pro Gly Met Gly Phe
                            200
        195
                                                205
Phe Leu Ser Pro Ala Pro Glu Thr Ser Leu His Val Leu Ser Asn Leu
                       215
                                            220
Gln Lys Leu Lys Ser Ala Leu Gly Leu Pro Leu Leu Val Ser Val Ser
                    230
                                        235
Arg Lys Ser Phe Leu Gly Ala Thr Val Gly Leu Pro Val Lys Asp Leu
                245
                                    250
Gly Pro Ala Ser Leu Ala Ala Glu Leu His Ala Ile Gly Asn Gly Ala
            260
                                265
                                                    270
Asp Tyr Val Arg Thr His Ala Pro Gly Asp Leu Arg Ser Ala Ile Thr
                            280
Phe Ser Glu Thr Leu Ala Lys Phe Arg Ser Arg Asp Ala Arg Asp Arg
                        295
                                            300
   290
Gly Leu Asp His Ala
305
<210> 8303
<211> 251
<212> PRT
<213> Enterobacter cloacae
<400> 8303
Arg Met Arg Ser Arg Asn Trp Ser Arg Thr Leu Thr Glu Arg Ser Gly
                                    1.0
Gly Asn Gly Ala Val Ala Val Phe Met Ala Cys Tyr Asp Cys Phe Phe
            20
                                25
Val Gln Ser Met Pro Arg Ala Ser Lys Gln Gln Ala Arg Tyr Ala Val
```

4.0 Gly Arg Cys Leu Met Leu Trp Ser Ser Asn Asp Val Thr Gln Gln Gly 55 60 Ser Arg Pro Lys Thr Lys Leu Gly Arg Met Asp Thr Thr Gln Val Thr 70 75 Leu Ile His Lys Ile Leu Ala Ala Ala Asp Glu Arg Asn Leu Pro Leu 85 90 95 Trp Ile Gly Gly Trp Ala Ile Asp Ala Arg Leu Gly Arg Val Thr 100 105 110 Arg Lys His Asp Asp Ile Asp Leu Thr Phe Pro Gly Glu Arg Arg Gly 115 120 125 Glu Leu Glu Ala Ile Val Glu Met Leu Gly Gly Arg Val Met Glu Glu 130 135 140 Leu Asp Tyr Gly Phe Leu Ala Glu Ile Gly Asp Glu Leu Leu Asp Cys 150 155 Glu Pro Ala Trp Trp Ala Asp Glu Ala Tyr Glu Ile Ala Glu Ala Pro 165 170 175 Gln Gly Ser Cys Pro Glu Ala Ala Glu Gly Val Ile Ala Gly Arg Pro 180 185 190 Val Arg Cys Asn Ser Trp Glu Ala Ile Ile Trp Asp Tyr Phe Tyr Tyr 195 200 205 Ala Asp Glu Val Pro Pro Val Asp Trp Pro Thr Lys His Ile Glu Ser 210 215 220 Tyr Arg Leu Ala Cys Thr Ser Leu Gly Ala Glu Lys Val Glu Val Leu 225 230 235 Arg Ala Ala Phe Arg Ser Arg Tyr Ala Ala 245

<210> 8304 <211> 129 <212> PRT

<213> Enterobacter cloacae

<400> 8304

Ala Cys Ile Ile Ser Pro Thr Gln Ile Gly Arg Tyr Ile Met Lys Gly Trp Leu Phe Leu Val Ile Ala Ile Val Gly Glu Val Ile Ala Thr Ser 20 Ala Leu Lys Ser Ser Glu Gly Phe Thr Lys Leu Ala Pro Ser Ala Val 35 40 Val Ile Ile Gly Tyr Gly Ile Ala Phe Tyr Phe Leu Ser Leu Val Leu 5.5 60 Lys Ser Ile Pro Val Gly Val Ala Tyr Ala Val Trp Ser Gly Leu Gly 70 Val Val Ile Ile Thr Ala Ile Ala Trp Leu Leu His Gly Gln Lys Leu 90 95 Asp Ala Trp Gly Phe Val Gly Met Gly Leu Ile Ile Ala Ala Phe Leu 100 105 110 Leu Ala Arg Ser Pro Ser Trp Lys Ser Leu Arg Arg Pro Thr Pro Trp 115 120

<400> 8305

<210> 8305 <211> 201

<212> PRT <213> Enterobacter cloacae

Arg Thr Leu Val Arg Phe Arg Glu Gly Gly Arg Arg His Ala Gly Leu

```
Val Arg Ile Lys Leu His Tyr Glu Ala Ala Val His Thr Ala Pro Gly
                            25
Glu Arg Met Asp Ser Glu Glu Pro Pro Asn Val Arg Val Ala Cys Ser
                        40
Gly Asp Ile Asp Glu Val Val Arg Leu Met His Asp Ala Ala Ala Trp
  50
                     55
                                       60
Met Ser Ala Lys Gly Thr Pro Ala Trp Asp Val Ala Arg Ile Asp Arg
                  70
                                  75
Thr Phe Ala Glu Thr Phe Val Leu Arg Ser Glu Leu Leu Val Ala Ser
            8.5
                               90
Cys Ser Asp Gly Ile Val Gly Cys Cys Thr Leu Ser Ala Glu Asp Pro
          100
                         105 110
Glu Phe Trp Pro Asp Ala Leu Lys Gly Glu Ala Ala Tyr Leu His Lys
  115 120 125
Leu Ala Val Arg Arg Thr His Ala Gly Arg Gly Val Ser Ser Ala Leu
 130
        135 140
Ile Glu Ala Cys Arg His Ala Ala Arg Thr Gln Gly Cys Ala Lys Leu
     150
                                  155
Arg Leu Asp Cys His Pro Asn Leu Arg Gly Leu Tyr Glu Arg Leu Gly
            165 170 175
Phe Thr His Val Asp Thr Phe Asn Pro Gly Trp Asp Pro Thr Phe Ile
               185
 180
Ala Glu Arg Leu Glu Leu Glu Ile
      195
<210> 8306
<211> 137
<212> PRT
<213> Enterobacter cloacae
<400> 8306
Ser Ser Lys Gly Leu Pro Leu Ile Cys Gln Ser Ile Ser Thr Phe Ser
                               1.0
                                              1.5
Pro Ser Ser Gln Gly Arg Leu Ser Gln Ala Thr Cys Thr Arg His Arg
                            25
                                              3.0
Pro Thr Glu Thr Ala Asp Gly Ala Ser Ser Val Thr Thr Met Pro Ser
                        40
Thr Gln Arg Val Asn Thr Ser Met Ala Arg Val Arg Tyr Gly Arg Pro
                  5.5
                                       60
Ile Gly Cys Arg Ser Arg Ser Ser Thr Thr Ile Arg Ser Met Thr Val
               7.0
                                   75
                                                    8.0
Trp Ser Ile Cys Thr Cys Ser Ser Gly Ala Val Thr Ala Gly Gly Ser
             85
                               90
Pro Pro Thr Pro Cys Arg Ser Arg Ala Ala Ser Trp Pro Ser Arg Arg
                            105
          100
                                             110
Arg Met Thr Leu Arg Gly Ser Arg Leu Ala Ile Arg Lys Ala Thr Val
                         120
       115
Leu Arg Ala Gly Thr Arg Ser Phe
  130
<210> 8307
<211> 68
<212> PRT
<213> Enterobacter cloacae
<400> 8307
```

Lys Ala Ala Arg Leu Arg Phe Cys Leu Val Arg Asn Arg Phe Cys Ser 1 1 5 Ser Ser Trp Met Thr Arg Ser Thr Gly Ser Gly Lys Arg Pro Leu Pro 20 20 30 Leu Pro Pro Asp Trp Pro Gly Thr Arg Ser Val Thr Arg Pro Leu

```
40
Pro Cys Arg Ala Arg Arg Ile Arg Thr Tyr Thr Trp Arg Arg Asp Lys
                       55
Pro Ser Ala
<210> 8308
<211> 70
<212> PRT
<213> Enterobacter cloacae
<400> 8308
Ala Ala Ile Ser Ala Ala Ser Cys Pro Thr Val Ser Asp Cys Ala Asn
                              10
Gly Leu Met Ile Ser Ala Arg Arg Arg Ala Arg Ser Gln Ala Ser Ser
          20
                               25
                                                   30
Gly Arg Val Ala Thr Pro Cys Ser Gly Ile Arg Gly Val Ser Ala Ala
       35
                          40
                                          4.5
Met Leu Thr Ser Leu Trp Cys Thr Arg Val Leu Ser Ile Val Glu Ile
 50
                       55
Gly Ala Asp His Phe
<210> 8309
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 8309
Ser Ala Pro Glu Gly Ala Gln Gln Pro Arg Tyr Gly Gln Asn Glu Gln
                                   10
Ala Gly Gln Arg Glu Arg Gly Asn Thr Pro Met Leu Ala Lys Glu Gly
                               25
                                                   3.0
Thr Gly Gly Arg Pro Gly Gln His Gly Gly Glu Asn Arg Gln Met Ala
                           40
Gly Ala Gly Gln His Gly Gln Arg Thr Pro Gln Val Ala Gly Asn Gly
                       55
Leu Ala Arg Leu Gly Arg Gln Phe Val Arg Gly Val His Gly Asn Ala
                   70
                                       75
Ser Ser Cys Ala Arg Ser Ala Gly Met Glu Ala Ser Cys Ala Ser Arg
               8.5
                                   90
Trp Ala Asn Ala Ala Arg Arg Arg Ser Thr Asn Trp Arg Ser Thr Ala
           100
                               105
Ser Cys Ala Ala Ala Cys Ala Pro Ser Ala Ala Ser Ser Ala Arg His
       115
                           120
Ser Arg Ala Arg Ala Ser Arg Pro Ile Pro Ala Ser Lys Ala Ala Arg
                       135
                                           140
Thr Lys His Ser Arg Cys Lys Ala Ala Ser Ser Asn Thr Pro
                    150
<210> 8310
<211> 137
<212> PRT
<213> Enterobacter cloacae
<400> 8310
Gly Arg Met Ser Glu Ala Leu Lys Ser Leu Asn Asn Ile Arg Thr Leu
                                   1.0
Arg Ala Gln Gly Arg Glu Leu Pro Leu Glu Val Leu Glu Glu Ile Leu
           20
Glu Lys Leu Asn Val Ile Val Asp Glu Arg Arg Gln Glu Glu Ser Ser
```

<210> 8311 <211> 516 <212> PRT <213> Enterobacter cloacae

<400> 8311

Phe Met Tyr Ser Tyr Glu Asp Arg Leu Arg Ala Val Arg Leu Tyr Leu 10 Lys Leu Gly Arg Arg Met Ser Ala Thr Leu Arg Gln Leu Gly Tyr Pro Thr Lys Asn Ser Leu Lys Ala Trp Leu Ala Glu Phe Glu Arg Asn Gln 40 Asp Leu Arg Arg Gly Tyr Gln Arg Ile Lys Arg Gln Tyr Thr Asp Glu Gln Lys Gln Arg Ala Val Asp His Tyr Ile Glu Gln Gly Tyr Cys Leu 7.0 7.5 Ser His Thr Ile Arg Ser Leu Gly Tyr Pro Ser Arg Glu Ala Leu Arg 8.5 90 Ala Trp Ile Arg Asp Leu Arg Pro Glu Phe Ala Arg Thr Val Val Gly 105 100 Ser Ser Ala Pro Thr Val Ala Arg Ser Arg Leu Glu Lys Gln Gln Ala 115 120 125 Val Ile Ala Leu Asn Leu Arg Val Gly Ser Ala Lys Asp Val Ala Asp 130 135 140 Thr Val Gly Val Ser Arg Pro Thr Leu Tyr Asn Trp Gln His Arg Leu 145 150 155 160Leu Gly Lys Val Pro Leu Lys Pro Met Thr Lys Lys Lys Gly Asp Thr 165 170 175 Ser Leu Glu Gln Arg His Glu Ala Leu Leu Arg Glu Leu Ala Glu Leu 180 185 190 Glu Ser Gln Asn Gln Arg Leu Arg Met Glu Asn Ala Ile Leu Glu Lys 195 200 205 Ala Ser Glu Leu Ile Lys Lys Asp Met Gly Ile Asn Pro Leu Glu Leu 215 220 Thr Ser Arg Glu Lys Thr Lys Val Val Asp Ala Leu Arg Val Thr Phe 230 235 Pro Leu Ala Asn Leu Leu Cys Gly Leu Lys Leu Ala Arg Ser Thr Tyr 245 250 Phe Tyr Gln Arg Leu Arg Gln Thr Arg Pro Asp Lys Tyr Thr Gln Val 260 265 Arg Glu Val Ile Arg Thr Ile Phe Glu Asp Asn Tyr Arg Cys Tyr Gly 280 285 Tyr Arg Arg Ile Asp Ser Ala Leu Arg Leu Gly Gly Met Arg Val Ser 295 300 Glu Lys Val Val Arg Arg Leu Met Ala Gln Glu Arg Leu Val Val Arg 310 315 Thr Pro Arg Arg Arg Phe Ser Ala Tyr Ala Gly Asp Pro Thr Pro

```
325
                             330
Ala Val Pro Asn Leu Leu Asn Arg Asp Phe His Ala Ser Ala Pro Asn
         340
                 345
                                 350
Thr Lys Trp Leu Thr Asp Leu Thr Glu Ile His Ile Pro Ala Gly Lys
      355
           360
                           365
Val Tyr Val Ser Pro Ile Val Asp Cys Phe Asp Gly Leu Val Val Ala
  370 375 380
Trp Asn Ile Gly Thr Ser Pro Asp Ala Asn Leu Val Asn Thr Met Leu
385
     390 395 400
Asp His Ala Val Arg Thr Leu Arg Pro Gly Glu His Pro Val Ile His
          405 410 415
Ser Asp Arg Gly Ser His Tyr Arg Trp Pro Ala Trp Ile Arg Arg Thr
         420
             425 430
Glu Asn Ala Gln Leu Thr Arg Ser Met Ser Lys Lys Gly Cys Ser Pro
     435 440 445
Asp Asn Ala Ala Cys Glu Gly Phe Phe Gly Arg Leu Lys Thr Glu Leu
  450 455 460
Ile Tyr Pro Arg Asn Trp Gln His Val Thr Leu Lys Asp Leu Met Thr 465 470 475 480
Arg Ile Asp Ala Tyr Ile His Trp Tyr Asn Glu Arg Arg Ile Lys Val
          485
                            490 495
Ser Leu Gly Gly Arg Ser Pro Ile Glu Tyr Arg His Ala Val Gly Leu
                          505
Met Ser Val
      515
<210> 8312
<211> 238
<212> PRT
<213> Enterobacter cloacae
<400> 8312
Cys Thr His His Leu Asn Thr Phe Asp Gly Gly Val Ser Arg Leu His
Gly Phe Lys Ser Gln Arg Gly Ala Asp Tyr Pro Phe Gln Phe Ala Met
   20
                         25
                                          30
Ile Ala Phe Asn His Val Val Pro Val Leu Asn Leu Ser Val Phe Asn
35
                      4.0
                                      4.5
Val Arg Arg Ala Pro Ala Phe Ala Phe Glu Gln Ser Lys Arg Ala Thr
                   55
                                    60
Ile Gly Gly Arg Phe Ile Arg Val Asp Glu Ser Arg Asp Leu Pro Leu
                                75
               70
Leu His Val Val Glu Asp Phe Thr Gln Lys Pro Val Cys Ser Phe Ala
            85
                             90
Val Thr Thr Gly Gly Glu Ile Lys Ile Asp Ser Ala Ala Pro Ala Val
         100
                         105
Asp Gly Pro Val Gln Ile Arg Pro Ala Ala Ile Asp Leu His Val Gly
      115
                      120
Phe Ile His Val Pro Arg Ala Lys Ile Gly Arg Val Thr Pro Val Pro
 130
                   135
                                    140
Ala Gln Pro Phe Phe His Phe Arg Arg Ile Thr Leu Asn Pro Ala Val
145
                150
                                155
Asn Arg Gly Val Ile Asp Ile His Ser Ala Phe Ser Gln His Leu Leu
             165
                             170
Gln Leu Thr Val Thr Asp Ala Val Phe Ala Val Pro Ala Tyr Gly Pro
         180
                          185
                                          190
Gln Asn Asp Val Thr Leu Lys Met Pro Ala Phe Glu Trp Val His Val
      195
                      200
                             205
Gln Leu His Gln Gln Lys Gly Met Ile Ser Leu Ser Pro Pro Thr Ile
                 215
Cys Asn Ser Ala His Arg Arg Ser Ser Gly Cys Gly Arg
```

<212> PRT

<213> Enterobacter cloacae

230

<400> 8313

23

1.3

111

1.0

111

10

(3

3.4

5.

43

II

i de

10

Pro Ser Ile Ile Lys Glu Ile Ile Met Gly Phe Arg Phe Arg Lys Ser 10

Ile Asn Ile Ile Pro Gly Val Arg Leu Asn Leu Ser Asn Gly Ala Pro 20 25 Ser Leu Ser Val Gly Pro Arg Gly Ala Ser Val Ser Phe Gly Ser Arg

40 45

Gly Thr Tyr Ala Asn Leu Gly Leu Pro Gly Thr Gly Leu Ser Tyr Arg 55

Thr Arg Leu Asp Arg Ala Ala Arg Ser Gly Gly Gly Asn Arg Thr Ala 70 75

Thr Asp Pro Gly Leu Arg Gln Ala Leu Glu Gln Glu Ala Ala Glu Leu 85 90

Met Ser Ala Val Thr Ala Ile Arg Asn Ile His Glu Leu Thr Pro Asp

100 105 110 Pro Lys Thr Gly Ile Ser Trp Ala Glu Leu Glu Ala Val Tyr Leu His 115 120 125

Asn Arg Thr Ser Pro Phe Gln Val Pro Ala Pro Val Arg Pro Glu Lys 130 135 140

Pro Asp Tyr Leu Ala Leu Pro Glu Lys Pro Ala Glu Ser Glu Gly Ile 150 155

Ser Phe Leu Gly Lys Trp Phe Glu Ser Glu Ser Ala Lys Ala Glu Arg 165 170 175

His Ala Glu Asn Leu Arg Arg Trp Gln Gln Glu Leu Ile Asp Val Glu 180 185 190

Arg Glu Asn Thr Leu Arg Gln His Arg Tyr Gln Gln Gln Arg Thr Ala 195 200 205

Trp Ala Glu Gln Tyr Ala Asn Trp Lys Phe Glu Ala Glu Glu His Glu 210 215 220

Lys Arg Leu Ala Thr Ala Gin Ala Asp Ala Arg Gin Gin Phe Arg Thr 225 230 235

Asp Ala Ala Phe Phe Glu Ser Tyr Leu Ala Gly Val Leu Ala Glu Thr 245 250 255

Glu Trp Pro Arg Glu Thr Ile Val Ala Phe Glu Val Lys Pro Glu Leu 260 265 270

Ser Ala Val Leu Leu Asp Val Asp Leu Ala Glu Ile Glu Asp Phe Pro 280 285

Asp Lys Ile Tyr Gly Val Asn Ala Arg Gly Thr Glu Leu Thr Glu Lys 290 295 300

Ala Met Thr Gln Lys Ala Val Arg Glu Asn Tyr Ala Arg His Val His 310 315

Gly Cys Leu Phe Arg Leu Val Gly Ile Val Leu His Thr Leu Pro Phe 325 330

Asp Asn Val Ile Val Ser Gly Phe Thr Gln Arg Val Ser Lys Arg Thr 340 345 350

Gly Tyr Leu Glu Asp Glu Tyr Ile Leu Ser Cys Lys Cys Thr Arg Ser 355 360

365 Gln Met Ser Ser Val Asn Phe Ala Gly Ile Glu His Ile Asp Pro Val 370 375 380

Glu Ala Leu Gly Asp His Pro Val Ile Arg Lys Met Ser Ser Thr Phe 385 390 395 400

Ile Phe Gln Pro Ile Glu Pro Leu Thr Leu 405 410

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4120
<210> 8314
<211> 217
<212> PRT
<213> Enterobacter cloacae
<400> 8314
Gly Asp Ile Met Ser Val Ser Leu Ser Lys Gly Gln Gly Val Ser Leu
                               10
Lys Lys Asn Glu Tyr Asp Leu Ser Ser Val Thr Ile Gly Leu Gly Trp
      2.0
                            25
Asp Ile Asn Glu Glu Lys Lys Gly Phe Leu Gly Gly Ile Phe Gly Lys
    3.5
                       4.0
Lys Glu Glu Glu Tyr Asp Leu Asp Val Ile Ala Phe Leu Cys Asn Ser
 5.0
                 5.5
                                      60
Ala Gly Lys Val Thr Asp Leu Gly Asn Val Glu Asn Gly Lys Pro Thr
                 7.0
                                  75
Leu Val Asn Gly Asp Ile Ile Phe Phe Asn Ser Leu Arg His Lys Ser
            85
                   90
Gly Asn Ile Trp Leu Thr Gly Asp Asn Arg Thr Gly Ala Gly Asp Gly
         100
                           105
Asp Asp Glu Gln Ile Ile Val Arg Leu Asn Ser Leu Asp Ala Gln Tyr
 115 120 125
Glu Lys Ile Val Phe Ile Val Gln Ile Tyr Asn Gly Glu Lys Leu Gln
                  135
                                      140
Gln His Phe Gly Lys Val Gln Asn Ala Phe Ile Arg Ala Val Asp Ala
145 150 155
Arg Asn Ile Glu Met Ala Arg Phe Asp Leu Ser Gly Gly Pro Ala Phe
           165 170
Ala Ser Gln Arg Ser Met Val Phe Ala Glu Leu Ile Arg Glu Ala Thr
         180 185
Gly Trp Lys Leu Arg Ala Ile Gly Glu Pro Ser Glu Ser Asp Ser Phe
 195 200
Val Ser His Leu Arg Asn Tyr Met
   210
                  215
<210> 8315
<211> 384
<212> PRT
<213> Enterobacter cloacae
<400> 8315
Gly Val Phe Met Ser Asp Ile Leu Glu Asp Met Ile Tyr Arg Arg Thr
                              10
Leu Ser Cys Gly Thr Ile Gln Val Thr Arg Asp Gln Gly Glu Val Ser
                            25
Leu Asp Asp Leu Phe Asp Ile Ala Glu Arg Arg Asn Pro Lys Arg Ala
       35
                        40
Phe Leu Phe Val Ser Lys Val Leu Gly Arg His Ile Pro Val Pro Pro
                    55
 5.0
                                      60
Ser Val Met Arg Gln Ala Tyr Arg Gln Leu Ala Ser Gln Phe Pro Ser
                70
                                  75
Thr Leu Thr Gly Pro Val Leu Phe Ile Gly Met Ala Glu Thr Ala Val
                               90
             85
Gly Leu Gly Ala Gly Val Phe Asp Glu Val Arg His Gln His Pro Glu
          100
                           105
                                       110
Ser Val Tyr Leu Thr Ser Thr Arg His Pro Val Asp Gly Thr Leu Leu
       115
                        120
Cys Glu Phe Lys Glu Glu His Ser His Ala Thr Asp His Leu Ile Tyr
                     135
                                      140
```

Leu Pro Asp Asp Glu Glu Lys Arg Arg Arg Val Thr Asn Ala Arg Thr

155

```
Leu Val Leu Ile Asp Asp Glu Ala Thr Thr Gly Asn Thr Phe Ile Asn
            165
                             170
Leu Leu Ser Ala Leu Arg Asn Thr Gly Lys Leu Gln His Ile Glu Gln
         180
                          185
                                           190
Val Ile Ala Val Thr Leu Thr Asp Trp Ser Gly Lys Ala Leu Ser Glu
     195
                      200
                                     205
Arg Ser Thr Leu Pro Val Thr Ser Val Ser Leu Val Ser Gly Lys Trp
  210
       215
                                   220
Gly Trp Thr Pro Leu Pro Asp Ala Pro Val Pro Asp Met Pro Lys Val
      230 235
Asn Val Thr Ser Arg Gly Glu Trp Asp Ile Gln Gly Lys Gln Ser Trp
      245 250 255
Gly Arg Leu Gly Met Leu Ala Pro Ala Ala Asp Leu Gly His Glu Val
        260 265
                               270
Ser Val His Lys Gly Glu Arg Ile Leu Val Leu Gly Thr Gly Glu Phe
     275
                      280 285
Val Trp Glu Pro Phe Leu Leu Ala Glu Arg Leu Glu Ala Ala Gly Ala
 290 295 300
Gln Ala Phe Tyr Gly Ser Thr Thr Arg Ser Pro Ile Ala Val Gly Tyr
305 310 315
Ala Ile Glu Ser Ala Ile Ser Phe Thr Asp Asn Tyr Gly Leu Gly Ile
            325
                             330 335
Pro Asn Phe Val Tyr Asn Val Ala His Gln Gln Phe Asp Arg Ile Leu
         340
                          345
                                           350
Val Cys Thr Glu Thr Pro Ala Glu Ser Ile Asp Thr Gln Leu Leu Lys
355 360
                            365
Ala Leu Ala Glu Val Ala Ala Val Val Glu Ile Val Thr Tyr Glu
  370
                   375
                                    380
<210> 8316
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 8316
Arg Leu His Phe Met Leu Gln His Pro Ile Leu Ile Asn Arg Pro Ile
1 5
                             10
Val Val Thr Pro Leu Gly Thr Arg Leu Cys Arg Pro Ser Glu Val Val
         20
                          25
                                           30
Leu Asp Ile Leu Pro Asp Ala Gln Lys His Ala Phe Thr Lys Glu Asp
 3.5
                 4.0
Gly Glu Lys Val Val Asp Asp Ala Gly Lys Arg Leu Lys
  50
                   55
<210> 8317
<211> 93
<212> PRT
<213> Enterobacter cloacae
<400> 8317
Ser Ala Ser Trp Arg Gly Ala Ile Cys Leu Ser Arg Cys Arg Leu Pro
Arg Ser Ala Thr Ala Arg Gly Ala Gly Arg Gly Cys Gly Leu Ala
                          25
        20
                                          30
Asp Arg Arg Ala Ser Arg Gln Gly Lys Asn Leu Glu Ala Ala Ser Ala
      35
                       40
Gln Glu Gln Asn Gly His Gln His Arg Ile His Glu Asn Gln His Pro
                   5.5
Cys Gln Gly Gly Ala Pro Val Ser His His Gln Ala Ala Val Arg Leu
Arg Glu Ser Gln Ile Gln Gly Ala Ala Glu Lys Arg
```

<210> 8319 <211> 345

```
<210> 8318
<211> 397
<212> PRT
<213> Enterobacter cloacae
<400> 8318
Leu His Glu Glu Asn Gly Thr Ser Arg Glu Asn Ser Pro Gly Ala Asp
                      10
Trp Gly Cys Ser His Leu Arg Pro Ile Ser Ala Met Arg Ser Pro Ser
      20 25
Thr Arg Gly Asn Val Phe Trp Phe Ser Gly Pro Gly Asn Ser Ser Gly
    35 40 45
Ser Arg Ser Cys Leu Leu Asn Gly Ser Lys Leu Pro Glu His Arg His
      55 60
Phe Met Asp Arg Pro Pro Ala Pro Leu Ser Pro Leu Val Met Pro Leu
     7.0
                             7.5
Ser Pro Pro Phe Pro Leu Arg Ile Thr Thr Gly Trp Ala Ser Pro Ile
     85
                          90
Leu Ser Ile Thr Ser Pro Thr Ser Ser Leu Thr Ala Phe Leu Cys Val
        100 105 110
Leu Arg His Pro Gln Lys Val Leu Thr Arg Ser Phe Leu Lys Arg Trp
 115 120 125
Leu Arg Leu Arg Pro Ser Trp Arg Leu Leu Pro Met Asn Lys Pro Val
130 135 140
Val Leu Ser Asp Leu Asp Asp Thr Leu Phe Gln Thr Arg Arg Lys Met
145 150 155
Val Asp Glu Leu Ala Leu Glu Pro Phe Arg Thr Gly Ala Val Asp Arg
     165
                          170 175
Thr Leu Asn Pro Arg Ser Phe Met Thr Glu Glu Gln Ser Met Leu Val
        180
                       185
Asp Trp Leu Leu Glu Gln Ala Glu Leu Ile Pro Val Thr Ala Arg Gly
                    200 205
195
Thr Glu Glu Ile Ser Arg Val Arg Ile Pro Phe His Ser Trp Ala Ile
 210 215
                                220
Thr Thr His Gly Ala Val Ile Leu Thr Pro Glu Gly Lys Pro Asp Glu
              230 235
Glu Trp Lys Ala His Met Leu Gly Gln Leu Ala Pro Tyr Gln Glu Lys
           245
                          250
Leu Thr Ser Met Gln Arg Leu Ile Thr Glu Met Met Asp Ala Lys Gly
        260
                       265
Ile Asn Ala Trp Ala Arg Leu Asn Phe Glu Tyr Gly Glu Thr Ala Val
     275 280
                                   285
Tyr Met Val Met Lys His Arg Asp Ser Thr Arg Leu Asp Glu Leu Asn
                 295
                                300
Ala Ile Ala Asp Glu Ile Glu Thr Val Phe Pro Thr Glu Gly Phe Tyr
305
              310
                             315
Ile His Arg Asn Ser Asn Asn Val Ala Trp Leu Pro Thr Ala Val Glu
           325
                          330
Lys Gly Leu Ala Val Arg Trp Leu Leu Glu Lys Leu Arg Ala Glu Arg
                       345
                                      350
        340
Gly Val Phe Pro Val Ile Gly Leu Gly Asp Ser Leu Ser Asp His Arg
     355
                     360
                           365
Phe Met Lys Leu Cys Ser Trp Phe Gly Ile Pro Arg Gln Ser Gln Phe
 370
             375 380
Ala Asp Ala Ile Ser Gln Arg Ile Phe Gly Glu Asn
              390
                              395
```

<212> PRT <213> Enterobacter cloacae <400> 8319

Lys Gly Asn Ser Cys Tyr Arg Asn Gly Gly Asn Pro Arg Pro Val Ser Gly Cys Asn His Tyr Gln Glu Gly Thr Leu Met Lys Asn Arg Leu Ser 25 30 Pro Trp Asn Leu Gly Ala Thr Leu Tyr Met Pro Ala Thr Arg Glu Asp 4 0 45 Ile Ala Asp Ala Val Leu His Gly Lys Ile Pro Gly Leu Arg Ser Leu 50 55 Val Ile Cys Leu Glu Asp Ala Val Ser Glu Ala Asp Ile Pro Ile Ala 70 75 Leu Lys Asn Leu Glu His Leu Leu His Glu Leu Ser Asn Ser Met Arg 85 90 Ser Leu Gly Lys Asn Asp Trp Pro Leu Val Phe Ile Arg Pro Arg His 100 105 110 Ala Glu Met Gly Arg Trp Leu Lys Ala His Tyr Asp Leu Ser Ala Val 115 120 125 Asp Gly Phe Val Leu Pro Lys Phe Thr Leu Ser Ser Leu Ala Glu Trp 130 135 140 Trp Asp Ile Met Gly Gly Thr His Leu Cys Met Met Pro Thr Leu Glu 150 155 160 Thr Glu Asp Val Phe Asp Val Val Gln Met Arg Glu Leu Ala Thr Arg 165 170 175 Leu Val Glu His Pro Cys His Asp Arg Ile Ile Ala Leu Arg Ile Gly 180 185 190 Gly Asn Asp Leu Met Asn Val Val Ser Leu Arg Arg Pro Arg Asp Leu 195 200 205 Thr Leu Tyr Asp Ser Pro Met Gly Tyr Val Ile Lys Met Leu Val Ser 210 215 220 Val Phe Gly Pro Arg Asp Phe Ala Leu Thr Ala Pro Val Cys Glu His 230 235 Ile Asp Asp His Ala Val Met Ala Arg Glu Leu Ala Leu Asp Met Ala 245 250 255 His Gly Leu Val Gly Lys Thr Ala Ile His Pro Gly Gln Ile Glu Val 260 265 270 Ile Gln Asn Ala Leu Met Val Thr Gln Gly Glu Tyr Ser Asp Ala Leu 280 285 Arg Ile Leu Asn Ser Thr Gln Ala Val Phe Lys Ser Gln Gly Ala Met 290 295 300 Cys Glu Pro Ala Thr His Arg Arg Trp Ala Ala Gly Ile Leu Asp Arg 305 310 315 320

325 Leu Leu Thr Val Thr Gln His His 340 345

<210> 8320 <211> 167

<212> PRT <213> Enterobacter cloacae

<400> 8320

Thr Thr Asn Pro Leu Ser Arg Leu Asn Leu Thr Met Gln Leu Asn Thr 1 5 10 15 Arg Gln Ala Arg Ile Phe Lys Leu Ala Asn Leu Leu Gly Thr Gly Lys 20 25 30 30 Pro Val Ser Ala Ala Asp Ile Ile Thr Ser Leu Glu Cys Ser Glu Pro 35 40 45

Ala Arg Phe Tyr Gly Leu Gln Asn Glu Gln Ser Ala Asp Gly Ile Arg

```
Thr Leu Thr Arg Ala Leu Lvs Glu Leu Arg Glu Ser Tvr Ser Ala Glu
Ile Lys Tyr Ser Lys Ala Gly His Ser Tyr His Leu Val Asn Pro Gly
              70
                              75
Gln Leu Asp Lys Lys Thr Leu Arg Arg Met Asn Glu Ala Leu Ala Gln
          8.5
                90
Asn Ala Glu Leu Lys Thr Gly Glu Ser Thr Gly Lys Val Val Leu Asp
            105 110
        100
Lys Asp Lys Lys Thr Ala Val Ser Leu Ser Leu Arg Met Arg Ile Leu
   115 120 125
Arg Lys Ile Asp Arg Leu Ala Ala Leu Ser Gly Ser Thr Arg Ser Glu
 130 135 140
Ala Val Glu Lys Leu Ala Leu His Ser Val Asp Glu Leu Ile Lys Glu
145 150 155 160
Tyr Ser Ala Lys Lys Ser
           165
<210> 8321
<211> 249
<212> PRT
<213> Enterobacter cloacae
<400> 8321
Val Phe Asn Leu His Pro Thr Asp Val Val Pro Phe Tyr Gln Ile Asn
                         1.0
Lvs Pro Trp Pro Leu Pro Glu Thr Thr Leu Leu Phe Ara Ser Leu Lvs
        20
             25
                                     30
Lys Glu Leu His Leu Arg Arg Leu Pro Val Tyr Leu Leu Leu Asp Thr
                  40
                                  4.5
Ser Gly Ser Met His Gly Glu Pro Ile Glu Ala Val Lys Asn Gly Val
            55
                                60
Gln Thr Leu Leu Thr Thr Leu Lys Gln Asp Pro Tyr Ala Leu Glu Thr
            70 75 80
Ala His Val Ser Val Ile Thr Phe Asp Ser Ser Ala Arg Gln Ala Val
         8.5
               90 95
Pro Leu Thr Asp Leu Leu Ser Phe Gla Met Pro Ala Leu Thr Ala Ser
                     105 110
        100
Gly Thr Thr Ser Leu Gly Glu Ala Leu Ser Leu Thr Ala Ser Ser Ile
   115 120
                                  125
Ala Lys Glu Val Gln Lys Thr Thr Ala Asp Thr Lys Gly Asp Trp Arg
 130 135 140
Pro Leu Val Phe Leu Met Thr Asp Gly Ser Pro Asn Asp Asp Trp Arg
145 150 155
                                            160
Lys Gly Leu Asn Asp Phe Lys Ala Ala Arg Thr Gly Val Val Val Ala
           165 170
Cys Ala Ala Gly His Asp Ala Asp Thr Ser Val Leu Lys Glu Ile Thr
      180 185
                                      190
Glu Ile Val Val Gln Leu Asp Thr Ala Asp Ser Ser Thr Ile Lys Ala
     195
                    200
                         205
Phe Phe Lys Trp Val Ser Ala Ser Ile Ser Val Gly Ser Gln Lys Val
               215
Glu Ser Ser Lys Lys Glu Val Ile Gly Leu Glu Asp Leu Pro Pro Pro
              230
                         235
                                            240
Pro Pro Glu Val Asn Val Val Leu
            245
```

<210> 8322

<211> 229 <212> PRT

<213> Enterobacter cloacae

```
<400> 8322
Ala Phe Arg Ile Arg Phe Val Cys Leu Ala Pro Glu Glu Leu His Val
                              1.0
Met Arg Arg Leu Pro Val Tyr Leu Val Ile Asp Thr Ser Gly Ser Met
                           25
Arg Gly Glu Ser Ile His Ser Val Asn Val Gly Ile Gln Ala Met Leu
      35
                 4.0
                                      45
Ser Ala Leu Arg Gln Asp Pro Tyr Ala Leu Glu Ser Val His Ile Ser
        55
                           60
Ile Ile Thr Tyr Asp Asn Glu Ala Arg Glu Phe Ile Pro Leu Thr Pro
                70
                              75
Leu Glu Asp Phe Gln Phe Ser Asp Ile Val Val Pro Ser Ala Gly Gly
             8.5
                            90
Thr Phe Thr Gly Ala Ala Leu Glu Cys Leu Met Gln Cys Val Glu Arg
              105 110
Asp Val Arg Arg Ser Asp Gly Asp Thr Lys Gly Asp Trp Arg Pro Leu
                       120
      115
Val Phe Leu Met Thr Asp Gly Thr Pro Ser Asp Ala Leu Ala Tyr Gly
                   135
                                    140
Glu Ala Val Lys Ala Ile Arg Gly Arg Gly Phe Gly Ser Ile Ile Ala
                150
                                  155
Cys Ala Val Gly Pro Lys Ala Gly His Glu His Leu Lys Gln Leu Thr
            165
                              170
                                               175
Asp Lys Val Val Ser Leu Glu Thr Leu Asp Ser Thr Ala Phe Ala Gly
         180
              185
Phe Phe Lys Trp Val Ser Ala Ser Val Ser Ser Gly Ser Thr Ser Ala
195
                       200
Gly Ile Asn Asn Gly Thr Asp Thr Leu Pro Pro Pro Pro Pro Glu Ile
 210
                    215
Gln Leu Val Leu
225
<210> 8323
```

<211> 375 <212> PRT <213> Enterobacter cloacae

<400> 8323 Gln Thr Glu Arg Cys Cys Phe Arg Ala Ala Pro Phe Cys Thr Ala Thr 10 Phe Ser Ala Gly Arg Thr Ser Arg Thr Arg Lys Ile Met Arg Arg Leu 20 25 3.0 Pro Val Phe Phe Val Leu Asp Cys Ser Glu Ser Met Ile Gly Glu Asn 40 Leu Lys Lys Met Thr Asp Gly Leu Gln Met Ile Val Gly Asp Leu Arg Lys Asp Pro His Ala Leu Glu Thr Ala Trp Val Ser Val Ile Ala Phe 70 75 Ala Gly Val Ala Arg Thr Ile Val Pro Leu His Glu Ile Ala Ser Phe 85 90 Tyr Pro Pro Arg Leu Pro Val Gly Gly Gly Thr Ser Leu Gly Ala Ala 100 105 110 Leu Arg Glu Leu Thr Val Gln Ile Asp Thr Gln Val Arg Lys Thr Thr 115 125 His Glu Ala Lys Gly Asp Trp Lys Pro Val Val Tyr Leu Leu Thr Asp 135 140 Gly Arg Pro Thr Asp Asp Thr Thr Ala Glu Val Lys Arg Trp Lys Asp 150 155 His Tyr Ala Ser Lys Val Asn Leu Ile Ala Val Gly Leu Gly Pro Ser 165 170 Ala Asp Leu Asn Ile Leu Arg Gln Leu Thr Glu Asn Val Met Leu Phe

```
180
                          185
Thr Glu Ser Gln Glu Gly Asp Phe Thr Arg Phe Ile Lys Trp Ile Thr
 195
           200
                                205
Ala Ser Val Thr Ala His Ser Arg Ser Val Gly Asp Asp Lys Gln Pro
 210 215 220
Glu Leu Ser Gln Thr Glu Tyr Ile Val Arg Leu Ala Lys Asp Glu Pro
225 230 235
Val Lys Ala Tyr Asp Glu Asn Cys Val Thr Leu Thr Gly Arg Cys Ser
       245 250 255
Lys Thr Arg Arg Pro Tyr Leu Met Lys Tyr Glu Arg Pro Pro Ala Arg 260 265 270
Val Ser Gly Leu Asp Phe Ser Leu Asn Leu Asn Ser Phe Asn Ile Ala
      275 280 285
Gly Cys Tyr Pro Ile Asp Glu Asp Tyr Phe Ala Trp Ser Asp Ala Thr
 290 295
                                    300
Ala Thr Gly Leu Gln Val Asn Thr Ser Glu Leu His Gly Val Pro Gly
305 310 315
Cys Pro His Cys Gly Asn Ala Ser Ala Phe Ala Leu Cys Ser Cys Gly
           325 330 335
Lys Leu Leu Cys Ile Asp Gly Pro Asp Asp Val Ile Cys Pro Trp Cys
        340 345
Glu Thr Gly Leu Ser Phe Ser Asn Asp Gly Gly Asn Thr Asn Phe Asp
                       360
Val Asn Arg Gly Arg Gly
   370
<210> 8324
<211> 530
<212> PRT
<213> Enterobacter cloacae
<400> 8324
Ala Thr Gly Leu Thr Phe Ser Pro Gln Gly Thr Met Met Thr Ala Leu
                             1.0
Leu Arg Cys Cys Gly Lys Gly Tyr Ala Phe Ser Val Ile Asn Met Ala
 20
                          25
                                           3.0
Asn Ile Val Thr Cys Lys Thr Lys Asp Gly Glu Thr Val Gln Tyr Val
                    40
35
Asp Glu Val Ile Gly Ser Gly Ser Met Lys Asp Val Tyr Phe Ser Pro
                 55
                                   60
Asp Lys Ser Tyr Val Val Ala Phe Tyr His Lys Pro Gln Asn Glu Gln
               70
                                 75
Ala Arg Asp Arg Ile Asp Met Ile Thr Gly Arg Tyr Arg Gln Asn Ile
            85
                             90
Phe Gly Gln Ser Gly Gly Glu Tyr Trp Lys Asp Leu Phe Cys Trp Pro
         1.00
                          105
Thr His Val Val Glu His Gly His Lys Ile Gly Ile Val Val Pro Thr
      115
                       120
Tyr Lys Ser Tyr Phe Phe Phe Lys Tyr Gly Ser Lys Asn Asp Asp Phe
          135
  130
                                    140
Leu Gly Ile Lys Gly Arg Glu Lys Glu Gly Lys Trp Phe Ala Ser Ala
145
                150
                                155
Ser Asn Gln Asn Lys Phe Leu Asp Pro Arg Glu Arg Gly Asn Thr Leu
            165 170 175
Thr Tyr Leu Lys Val Cys Leu Leu Leu Thr Arg Ala Val Arg Arg Met
         180
                 185
                                          190
His Ala Ala Gly Leu Cys His Ser Asp Leu Ser Tyr Lys Asn Val Leu
      195
                 200
                                      205
Ile Asp Pro Glu Met Gly His Ala Cys Ile Ile Asp Val Asp Gly Leu
  210
                   215
Val Val Pro Gly Lys Tyr Pro Pro Asp Val Val Gly Thr Pro Asp Phe
```

```
230
                             235
Ile Ala Pro Glu Val Val Lys Thr Ser His Leu Ser Lys Glu Asp Pro
         245
                     250
Asn Arg Val Leu Pro Ser Ile Thr Thr Asp Arg His Ala Leu Ser Val
        260
             265 270
Leu Ile Tyr Met Tyr Leu Phe Phe Arg His Pro Leu Arg Gly Gly Lys
     275 280 285
Ile His Asp Met Ser Asp Glu Val Arg Asp Glu Thr Leu Ser Met Gly
 290 295 300
Glu Lys Ala Leu Phe Ile Glu His Pro Thr Asp Lys Ser Asn Ala Val
    310 315
Lys Val Ser Gln Leu Ser Ser Phe Ser Leu Pro Trp AIa Asp Pro Glu
        325 330 335
Lys Ile Pro Tyr Thr Ile Met Gly Pro Tyr Leu Thr Pro Leu Phe Glu
       340 345 350
Arg Ala Phe Ile Asp Gly Leu His Asp Ala Thr Lys Arg Pro Thr Ala
    355 360 365
Asp Glu Trp Glu Ser Ala Leu Val Lys Thr Val Asp Leu Ile Gln Pro
 370 375
Cys Gln Asn Lys Ala Cys Glu Gln Lys Trp Tyr Val Phe Ser Gly Lys
385 390 395 400
Thr Lys Pro Val Cys Pro Tyr Cys Gly Thr Pro Tyr Lys Gly Lys Leu
       405 410
Pro Val Leu Asn Leu Tyr Ser Ser Arg Lys Glu Gly Ser Tyr Arg Pro
                          430
      420 425
Asp Asp His Arg Leu Met Val Trp Ser GIy Gln Ser Ile Tyr Ala Trp
435 440 445
His Val Asn Arg Leu Ile Ala Pro Asn Glu Arg Thr Thr Asp Ala Gln
450 455
                               460
Arg Lys Arg Val Gly Tyr Phe Val Phe His Asn Asp Gln Trp Trp Leu
465 470
                  475
Val Asn Glu Gly Ile Asn Arg Leu Met Ser Leu Pro Asp Lys Arg Gln
          485 490 495
Ile Ala Ile Gly Glu Lys Ile Glu Leu Thr Asn Asn Ala Gln Phe Val
        500
            505 510
Leu Ser Lys Glu Glu Gly Gly Arg Leu Val Val Val Gln Leu Val Glu
```

Asn 530

<210> 8325 <211> 342

<211> 342 <212> PRT

<213> Enterobacter cloacae

<400> 8325

Tyr Glu Ile Ile Ile Phe Ile Arg Ser Ala Ser Gln Arg Asp Ile Met 10 Ser His Gln Leu Thr Phe Ala Asp Ser Glu Phe Ser Thr Lys Arg Arg 20 25 Gln Thr Arg Lys Glu Ile Phe Leu Ser Arg Met Glu Gln Ile Leu Pro 35 40 Trp Gln Asn Met Thr Ala Val Ile Glu Pro Phe Tyr Pro Lys Ala Gly 50 55 60 Asn Gly Arg Arg Pro Tyr Pro Leu Glu Thr Met Leu Arg Ile His Cys 70 75 Met GIn His Trp Tyr Asn Leu Ser Asp Gly Ala Met Glu Asp Ala Leu 8.5 90 Tyr Glu Ile Ala Ser Met Arg Leu Phe Ala Arg Leu Ser Leu Asp Ser 100 105 Ala Leu Pro Asp Arg Thr Thr Ile Met Asn Phe Arg His Leu Leu Glu

```
Gln His Gln Leu Ala Arg Gln Leu Phe Lys Thr Ile Asn Arg Trp Leu
 130
         135
                              140
Ala Glu Ala Gly Val Ile Met Thr Gln Gly Thr Leu Val Asp Ala Thr
     150 155
Ile Ile Glu Ala Pro Ser Ser Thr Lys Asn Lys Glu Gln Gln Arg Asp
      165
              170
                             175
Pro Glu Met His Gln Thr Lys Lys Gly Asn Gln Trp His Phe Gly Met
     180 185 190
Lys Ala His Ile Gly Val Asp Ala Lys Ser Gly Leu Thr His Ser Leu
 195 200 205
Val Thr Thr Ala Ala Asn Glu His Asp Leu Asn Gln Leu Gly Asn Leu
210 215 220
Leu His Gly Glu Glu Gln Phe Val Ser Ala Asp Ala Gly Tyr Gln Gly
225 230 235
Ala Pro Gln Arg Glu Glu Leu Ala Glu Val Asp Val Asp Trp Leu Ile
      245 250 255
Ala Glu Arg Pro Gly Lys Val Lys Thr Leu Lys Gln His Pro Arg Lys
  260 265 270
Asn Lys Thr Ala Ile Asn Ile Glu Tyr Met Lys Thr Ser Ile Arg Ala
275 280 285
Lys Val Glu His Pro Phe Arg Ile Ile Lys Arg Gln Phe Gly Phe Val
290 295
Lys Ala Arg Tyr Lys Gly Leu Leu Lys Asn Asp Asn Gln Leu Ala Met
305 310 315 320
Leu Phe Thr Leu Ala Asn Leu Phe Arg Val Asp Gln Met Ile Arg Gln
     325
                        330
Trp Glu Arg Ser Gln
        340
```

<210> 8326

<211> 412 <212> PRT

<213> Enterobacter cloacae

<400> 8326 Arg Leu Val Gly Ile Leu Pro Pro Ile Arg Cys Leu Cys Asn Ser Ser 10 Ala Arg Arg Pro Val Asp Asp Thr Ala Gly Leu Cys Lys Ser Leu Pro 20 25 30 Gly Tyr Ser Phe Leu Phe Phe Val Arg Tyr Thr Met Ser Lys Leu Phe 35 40 Thr Pro Tyr Asn Leu Ser Gly Leu Ala Leu Lys Asn Arg Val Val Met 50 55 60 Ala Pro Met Thr Arg Thr Arg Thr Met Asn Asp Val Pro Asp Glu Val 7.0 75 Val Ala Leu Tyr Tyr Ala Gln Arg Ala Ser Ala Gly Leu Leu Ile Thr 85 90 Glu Gly Met Pro Val Ser Glu Glu Gly Arg Gly Tyr Leu Tyr Thr Pro 100 105 110 Gly Ile Tyr Asn Asp Glu His Val Gln Gly Trp Arg Lys Val Thr Gln 115 120 125 Ala Val His Ala Lys Gly Gly Cys Ile Phe Ala Gln Leu Trp His Val 130 135 140 Gly Arg Met Ser His Val Ser Leu Gln Pro Gly His Ile Ala Pro Val 145 150 155 160 Ser Ala Gly Thr Val Gln Ala Val Asn Thr Thr Val Phe Ala Leu Thr 165 170 175 Glu Ser Gly Glu Pro Gly Pro Val Val Pro Ser Gln Pro Arq Ala Leu 190 180 185 Glu Thr His Glu Val Lys Arg Ile Thr Ala Asp Phe Val His Ser Ala

```
195
                      200
Arg Leu Ala Met Glu Ala Gly Phe Asp Gly Val Glu Ile Met Ala Ala
 210
            215
                          220
Asn Gly Phe Ile Phe Asp Gln Phe Leu Ser Ser Glu Leu Asn Thr Arg
225 230 235
Thr Asp Glu Tyr Gly Gly Ser Val Glu Asn Arg Gln Arg Phe Leu Leu
         245 250 255
Glu Thr Ile Asp Ala Val Ala Glu Ala Val Gly Asn Ser His Val Ala
      260 265 270
Val Arg Leu Ser Pro Phe Gly Arg Ile Tyr Asp Leu Ala Pro Tyr Glu
     275 280 285
Gly Glu Glu Gln Thr Trp Ser Ala Ile Thr Asp Ala Leu Gly Gln Arg
 290 295 300
Glu Leu Ala Tyr Val His Leu Tyr Tyr Gln Pro Val Tyr Thr Lys Ala
305 310 315
Pro Leu Pro Glu Gly Phe Arg Arg Phe Arg Asn Thr Phe Lys Gly
           325 330
Thr Ile Ile Ala Ala Gly Gly Phe Thr Arg Asp Ile Ala Glu Gln Ala
         340 345 350
Leu Glu Asp Asp Glu Leu Asp Leu Val Ala Phe Gly Val Pro Tyr Ile
355 360 365
Ala Asn Pro Asp Leu Val Glu Arg Met Gln Asn Gly Trp Pro Leu Ala
                375 380
Glu Ser Asp Arg Ala Thr Tyr Tyr Gly Val Ser Gly Ser Pro Glu Lys
385 390
                               395
Gly Tyr Thr Asp Tyr Pro Val Trp Gln Ala Gln
            405
<210> 8327
<211> 140
<212> PRT
<213> Enterobacter cloacae
<400> 8327
Trp Thr Leu Ser Met Ser Asn Thr Leu Gln Pro Arg Arg Ala Arg Ala
                            10
Ser Tyr Ser Met Asp Phe Lys Leu Ala Leu Val Glu Lys Ser Tyr Gln
                         25
Pro Gly Ala Cys Val Ala Arg Leu Ala Arg Asp Asn Gly Ile Asn Asp
      35
                      40
Asn Leu Leu Phe Thr Trp Arg Gln Arg Tyr Arg His Leu Leu Pro Asp
                55
                         60
Glu Ile Gln Arg Ser Ile Arg Glu Gln Asp Ser Val Ile Pro Val Val
               70
                                75
Leu Pro Asp Met Ala Leu Ser His His Ala Glu Pro His Tyr Glu Pro
            85
                            90
Ala Ala Pro Ala Cys Arg Glu Ala Met Thr Cys Glu Val Thr Val Gly
         100
                         105
Gly Ala Ser Leu Arg Leu Ser Gly Asp Leu Ser Pro Ala Leu Leu Lys
     115 120
Thr Leu Ile Arg Glu Leu Thr Gly Arg Ser Arg
                   135
                                   1.40
<210> 8328
<211> 262
<212> PRT
<213> Enterobacter cloacae
<400> 8328
Trp Ser Gln Lys Met Asn Thr Phe Phe Lys Gly Lys Lys Leu Leu Val
                             10
```

```
Val Gly Gly Thr Ser Gly Met Gly Leu Ala Val Ala Arg Met Val Leu
                          25
Glu Ala Gly Gly Ser Val Val Leu Thr Gly Asn Lys Lys Asp Lys Ala
      35
                       40
                                        4.5
Glu Ala Val Gln Lys Glu Leu Ser Pro Leu Gly Pro Val Ala Val Ile
                  55
                                    60
Ala Ala Asn Leu Met Thr Glu Glu Gly Met Glu Thr Ile Arg Gln Glu
                70
                                75
Ile Asn Ala His His Arg Asp Ile Ser Leu Met Val Asn Ala Ala Gly
          85
                             90
Ile Phe Met Pro Lys Gly Phe Thr Glu His Ser Phe Ala Asp Tyr Asp
         100 105 110
Met Tyr Leu Ser Leu Asn Arg Ala Thr Phe Phe Ile Thr Gln Asp Val
     115 120 125
Val Lys Asn Met Leu Ala Ala Lys Leu Glu Gly Ser Ile Val Asn Val
                   135
                        140
Gly Ser Ile Gly Ala Gln Ala Ala Leu Gly Asp Ser Pro Ala Ser Ala
               150 155
Tyr Ser Met Ala Lys Ala Gly Leu His Ala Leu Thr Arg Asn Leu Ala
                             170
             165
                                            175
Ile Glu Leu Ala Ser Ala Gly Ile Arg Val Asn Ala Val Ser Pro Gly
        180
                          185
                                          190
Ile Val His Thr Pro Ile Tyr Glu Gly Phe Met Asp Lys Ala Asp Ile
      195
                      200
                                       205
Ala Asp Ala Met Lys Ser Leu Ser Asp Phe His Pro Leu Gly Arg Val
 210
                   215
                                    220
Gly Thr Ala Glu Asp Val Ala Asn Thr Ile Leu Phe Leu Leu Ser Asp
               230
                                235
                                     240
Lys Thr Ser Trp Val Thr Gly Ala Ile Trp Asp Val Asp Ala Gly Ile
             245
                             250
Met Ala Val Arg Arg
          260
```

<210> 8329 <211> 100 <212> PRT <213> Enterobacter cloacae

<400> 8329 Ala Val Gly Gln Ala Thr Leu Gly Ile Asp Thr Asn Val Gly Leu His Ala Lys Val Pro Leu Ile Ala Phe Leu Gly Leu Met His Leu Arg Ile 20 25 Ala Leu Leu Phe Val Leu Gly Arg Ala Gly Cys Leu Asn Asp Gly 40 3.5 45 Gly Ile His Gln Ser Ala Leu Gly His Asn Asp Ala Cys Phe Gly Gln 55 50 Pro Ala Ile Asp Gly Leu Glu Gln Leu Thr Gly Gln Leu Met Leu Leu 70 Glu Gln Val Ala Glu Ile His Asp Gly Gly Ala Ile Arg Gln Gly Ala 90 85 95 Ile Gln Gly

100

<210> 8330 <211> 128 <212> PRT

<213> Enterobacter cloacae

<400> 8330

Ser Gly Lys Gln Ala His Gly Gly Asp Phe Val Gln Gly Ile Phe His

```
Gly Thr Val Ala Gln Val Val Pro Met Leu His Ala Val Asn Thr Gln
          20
                            25
His Gly Leu Gln Arg Ile Gly Pro Ser Ala Ile Ala Arg Leu Gly Ile
                         40
Lys Arg Leu Asp Asp Ser Gly His Ile Leu Pro Trp Gln Asn Leu Leu
              5.5
                                60
His Ala Gly Glu Glu Asn Leu Phe Ser Gly Leu Thr Ala Leu Ser Ala
                             75
            7.0
Glu Phe Thr Ile Gly Glu Gly Glu Leu Met Ala His Asp Val Pro Leu
           8.5
                   90
Gly Cys Ala Pro Asp Glu Tyr Asp Asp Leu Ile Ser Gly Thr Cys Ser
        100 105 110
His Leu Pro Leu Tvr Arg His His Ser Phe Leu His Met Thr His
<210> 8331
<211> 237
<212> PRT
<213> Enterobacter cloacae
<400> 8331
Gly Ile Ile Met Gln Thr Leu Lys Pro Thr Leu Thr Ile Asp Ile Trp
                                10
Ser Asp Leu Val Cys Pro Trp Cys Trp Ile Ala Lys Lys Arg Phe Glu
                             25
                                               3.0
Gin Gly Leu Asn Arg Phe Glu Pne Arg Asp Gln Val Val Ile Arg His
35
                         4.0
His Ser Tyr Arg Leu Ala Gly Gly Thr Pro Ala Met Pro Phe Lys Asp
           5.5
                                       60
Ala Ile Val Lys Lys Leu Gly Ser Gln His Ser Ala Glu Leu Met Met
               70
                                    75
Asn Gln Val Gly Thr Ala Gly Lys Ser Glu Cys Leu Ile Tyr Asn Phe
             85
                                 90
Asp Gly Met Met Phe Gly Asp Thr Glu Asp Ala His Thr Leu Leu Val
          100 ,
                             105
                                               110
Ala Ala Arg Lys Ala Gly Ile Ala Asp Ala Val Glu Glu Arg Phe Tyr
      115
                         120
                                            125
His Gly Ser Ile Thr Glu Gly Arg Ser Leu Phe Asp Arg Gln Gln Leu
  130
                     135
                                        140
Val Ala Met Ala Val Glu Ala Gly Met Pro Lys Ala Asp Ala Glu Ala
                 150
                                    155
                                                       160
Ala Leu Glu Asn Asp Asp Phe Arg Ala Thr Val Ser Asp Asp Glu Ala
              165
                                170
                                                  175
His Ala Gln Ser Ile Gly Leu Ser Gly Val Pro Val Phe Val Met Asn
           180
                             185
                                              190
Glu Lys Tyr Ala Ile Ser Gly Ala Gln Ala Ala Asp Asn Phe Leu Asn
      195
                         200
                                           205
Ala Leu Arq Gln Val Trp Asp Glu Gln Gln Thr Glu Phe Ser Ala Thr
                    215
Ala Gly Gln Thr Cys Gly Thr Asp Gly Cys Ser Ile
                 230
<210> 8332
<211> 161
<212> PRT
<213> Enterobacter cloacae
<400> 8332
Thr Arg Arg Ser Ser Leu Pro Arg Gly His Asp Met Arg Gly Asp Cys
```

Arg Arg Cys Gln Pro Ala Ser Val Arg Gly Phe Ile Thr Cys Thr Ser 20 25 Glu Asn Ala Asp Pro Arg Ala Asp Arg Glu Glu Pro Met Ile Pro Leu Pro Ser Gly Thr Arg Ile Trp Leu Val Ala Gly Val Thr Asp Met Arg 55 60 Lys Ser Phe Asn Gly Leu Gly Glu Leu Val Gln His Val Leu Asp Asp 75 Asn Pro Phe Ser Gly His Leu Phe Ile Phe Arg Gly Arg Lys Gly Asp 85 90 Thr Val Arg Ile Leu Trp Ala Asp Ala Asp Gly Leu Cys Leu Phe Thr 100 105 110 Lys Arg Leu Glu Glu Gly Gln Phe Val Trp Pro Ala Val Arg Asp Gly 115 120 125 Lys Ile Ala Ile Thr Arg Ser Gln Leu Ala Met Leu Leu Asp Lys Leu 130 135 140 Asp Trp Arg Gln Pro Lys Thr Ala Arg Leu Asn Ser Leu Thr Met Leu 150 155

<210> 8333 <211> 541 <212> PRT

<213> Enterobacter cloacae

<400> 8333 Lys Ala His Asp Arg Ile Ile Asn Gly Val Met Ser Gln Asp Tyr Leu 10 Ala Arg Ile Ala Ala Leu Glu Asp Ala Leu Arg Gln Lys Asp Ser Gln 20 25 Leu Ser Leu Val Ala Glu Thr Glu Ser Phe Leu Arg Ser Ala Leu Ala 35 40 45 Arg Ala Glu Glu Lys Ile Glu Asn Glu Glu Arg Glu Ile Glu Tyr Leu 5.5 Arg Ala Gln Ile Glu Lys Leu Arg Arg Met Leu Phe Gly Thr Arg Ser 70 75 Glu Lys Leu Arg Arg Gln Val Glu Glu Ala Glu Ala Leu Leu Lys Gln 85 90 95 Gln Glu Gln Ger Asp Arg Tyr Asn Gly Arg Asp Asn Asp Gln Gln 100 105 110 Val Pro Arg Gln Leu Arg Gln Ser Arg His Arg Arg Pro Leu Pro Glu 115 120 125 His Leu Pro Arg Glu Ile Asn Arg Leu Glu Pro Ala Glu Thr Ser Cys 130 135 140 Pro Gly Cys Gly Ser Asp Met Ala Tyr Leu Ser Glu Val Ser Ala Glu 145 150 155 160 Gln Leu Glu Leu Val Ser Ser Ala Leu Lys Val Ile Arg Thr Val Arg 165 170 175 Val Lys Lys Ala Cys Thr Arg Cys Asp Cys Val Val Glu Ala Pro Ala 180 185 190 Pro Ser Arg Pro Ile Asp Arg Gly Ile Ala Gly Pro Gly Leu Leu Ala 200 205 195 Arg Val Leu Thr Ala Lys Tyr Cys Glu His Leu Pro Leu Tyr Arg Gln 210 220 Cys Glu Ile Phe Ala Arg Gln Gly Val Asp Leu Ser Arg Ala Leu Leu 230 235 Ser Asn Trp Val Asp Ala Cys Cys Arg Leu Met Ala Pro Leu Asp Glu 245 250 255 Ala Leu Tyr His Tyr Val Met Asp Cys Arg Lys Leu His Thr Asp Asp 265

```
Thr Pro Val Pro Val Leu Ala Pro Gly Arg Lys Lys Thr Lys Thr Gly
 275
                  280
Arg Ile Trp Thr Tyr Val Arg Asp Asn Arg Ser Ala Gly Ser Ser Asp
                                    300
 290
                  295
Pro Pro Ala Ala Trp Phe Ala Phe Ser Pro Asp Arg Gln Gly Lys His
305
     310 315
Pro Gln Gln His Leu Arg His Tyr His Gly Val Leu Gln Ala Asp Ala
            325 330
Phe Ala Gly Tyr Asp Arg Leu Phe Ser Ala Glu Arg Glu Gly Gly Pro
          340 345
                                           350
Leu Thr Glu Ala Ala Cys Trp Ala His Ala Arg Arg Lys Ile His Asp
   355 360 365
Val Tyr Ile Ser Thr Arg Thr Ala Thr Ala Glu Glu Ala Leu Lys Arg
 370 375
                                    380
Ile Ser Glu Leu Tyr Ala Ile Glu Glu Glu Ile Arg Gly Leu Pro Ala
                390 395
Ser Gln Arg Leu Ala Ala Arg Arg Ser Arg Ser Lys Pro Leu Leu Ile
            405 410
Ser Leu His Asp Trp Leu Val Glu Lys Arg Ala Thr Leu Ser Lys Lys
         420 425
                                           430
Ser Arg Leu Gly Glu Ala Phe Ala Tyr Ala Leu Asn Gln Trp Asp Ala
     435 440
Leu Cys Tyr Tyr Cys Asp Asp Gly Leu Ala Glu Pro Asp Asn Asn Ala
 450
                   455
                                    460
Ala Glu Arg Ala Leu Arg Ala Val Cys Leu Gly Lys Lys Asn Tyr Ile
                470
                                 475
Phe Phe Gly Ser Asp His Gly Gly Glu Arg Gly Ala Leu Leu Tyr Gly
             485
                             490 495
Leu Ile Gly Thr Cys Arg Leu Asn Gly Ile Asp Pro Glu Gly Tyr Leu
          500
                505 510
Arg His Ile Leu Ser Val Leu Pro Glu Trp Pro Ile Asn Lys Val Ala
 515 520
Glu Leu Leu Pro Trp Asn Val Asp Leu Thr Asn Lys
  530
                   535
<210> 8334
<211> 276
<212> PRT
<213> Enterobacter cloacae
<400> 8334
Thr Met Gln Gln Leu Gln Asn Val Ile Glu Ser Ala Phe Glu Arg Arg
                              10
Ala Asp Ile Thr Pro Ala Asn Val Asp Thr Val Thr Arg Glu Ala Val
                          25
Asn Gln Val Ile Ser Leu Leu Asp Ser Gly Ala Leu Arg Val Ala Glu
      35
                       40
Lys Ile Asp Gly Gln Trp Val Tnr His Gln Trp Leu Lys Lys Ala Val
                   55
Leu Leu Ser Phe Arg Ile Asn Asp Asn Gln Val Ile Asp Gly Ala Glu
                70
                                 75
Ser Arg Tyr Phe Asp Lys Val Pro Met Lys Phe Ala Asp Tyr Asp Glu
             85
                              90
Ala Arg Phe Gln Lys Glu Gly Phe Arg Val Val Pro Pro Ala Ala Val
                        105
Arg Gln Gly Ala Phe Ile Ala Arg Asn Thr Val Leu Met Pro Ser Tyr
    115
                    120
                                        125
Val Asn Ile Gly Ala Tyr Val Asp Glu Gly Thr Met Val Asp Thr Trp
                   135
Ala Thr Val Gly Ser Cys Ala Gln Ile Gly Lys Asn Val His Leu Ser
                 150
                                 155
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Gly Gly Val Gly Ile Gly Gly Val Leu Glu Pro Leu Gln Ala Asn Pro 170 165 Thr Ile Ile Glu Asp Asn Cys Phe Ile Gly Ala Arg Ser Glu Val Val 180 185 190 Glu Gly Val Ile Val Glu Glu Gly Ser Val Ile Ser Met Gly Val Tyr 200 205 195 Ile Gly Gln Ser Thr Arg Ile Tyr Asp Arg Glu Thr Gly Glu Ile His 210 215 220 Tyr Gly Arg Val Pro Ala Gly Ser Val Val Val Ser Gly Asn Leu Pro 230 235 Ser Lys Asp Gly Lys Tyr Ser Leu Tyr Cys Ala Val Ile Val Lys Lys 245 250 Val Asp Ala Lys Thr Arg Gly Lys Val Gly Ile Asn Glu Leu Leu Arg 265 Thr Ile Asp 275 <210> 8335 <211> 141 <212> PRT <213> Enterobacter cloacae <400> 8335 Leu Phe Ile Gly Tyr Val Glu Ile Lys Gly Thr Ala Met Tyr Asp Asn Leu Lys Ser Leu Gly Ile Thr Asn Pro Asp Glu Ile Asp Arg Tyr Ser 20 25 30 Leu Arg Gln Glu Ala Asn Asn Asp Ile Leu Lys Ile Tyr Phe His Lys 35 40 45 Asp Lys Gly Glu Phe Phe Ala Lys Ser Val Lys Phe Lys Tyr Pro Arg 50 55 Gln Arg Lys Thr Val Val Ala Asp Gly Ile Gly Gln Gly Tyr Lys Glu 7.0 75 Val Gln Glu Ile Ser Pro Asn Leu Arg Tyr Val Ile Asp Glu Leu Asp 85 90 Gln Ile Cys Gln Arg Asp Arg Ser Glu Val Asp Leu Lys Arg Lys Ile 100 105 110 Leu Asp Asp Leu Arg His Leu Glu Ser Val Val Thr Asn Lys Ile Ser 120 Glu Ile Glu Ala Asp Leu Glu Lys Leu Thr Arg Lys 135 130 <210> 8336 <211> 914 <212> PRT <213> Enterobacter cloacae <400> 8336 Val Ile Arg Ser Arg Arg Met Pro Ala Phe Leu Met Ala Ile Ala Phe Ser Tyr Gly Trp Arg Thr Met Ser Asn Leu Leu Pro Glu Gln Tyr Ala 20 25 Asn Thr Ala Leu Pro Thr Leu Pro Asp Gln Pro Asp Asn Pro Gly Val 40 4.5 Trp Pro Pro His Glu Leu Thr Cys Ala His Ile Lys Ala His Met Glu 5.5 Val Phe His Arg Trp Leu Gly Ser Ala Phe Asp Ala Gly Val Ser Ala 7.0 7.5 Glu Gln Leu Ile Glu Ala Arg Thr Glu Phe Ile Asp Gln Leu Leu Gln 90

Arg Leu Trp Ile Asp Tyr Gly Phe Gly Gln Val Ser Asp Val Ala Leu

```
100
                      105
                                    110
Val Ala Val Gly Gly Tyr Gly Arg Gly Glu Leu His Pro Leu Ser Asp
   115
            120
                        125
Ile Asp Leu Leu Ile Leu Ser Arg Lys Lys Leu Pro Asp Asp Arg Ala
      135 140
Gln Lys Ile Gly Glu Leu Leu Thr Leu Leu Trp Asp Val Lys Leu Glu
145 150 155 160
Val Gly His Ser Val Arg Thr Leu Glu Glu Cys Leu Leu Glu Gly Leu
      165 170 175
Ser Asp Leu Thr Val Ala Thr Asn Leu Ile Glu Thr Arg Leu Leu Ile
    180 185 190
Gly Asp Val Ala Leu Phe Leu Glu Leu Gln Lys His Ile Phe Ser Asp
    195 200 205
Gly Phe Trp Pro Ser Glu Lys Phe Phe Ala Ala Lys Val Glu Glu Gln 210 215 220
Asn Gln Arg His Gln Arg Tyr His Gly Thr Ser Tyr Asn Leu Glu Pro
225 230 235 240
Asp Ile Lys Ser Ser Pro Gly Gly Leu Arg Asp Ile His Thr Leu Gln
        245 250 255
Trp Val Ala Arg Arg His Phe Gly Ala Thr Ser Leu Asp Glu Met Val
       260 265 270
Gly Phe Gly Phe Leu Thr Glu Ala Glu Arg Asn Glu Leu Asn Glu Cys
 275 280 285
Leu His Leu Leu Trp Arg Ile Arg Phe Ala Leu His Leu Glu Val Thr
290 295 300
Arg Tyr Asp Asn Arg Leu Leu Phe Asp Arg Gln Leu Ser Val Ala Gln
305 310 315
Arg Leu Asn Tyr Gln Gly Glu Gly Asn Glu Pro Val Glu Gln Met Met
         325
              330 335
Lys Asp Phe Phe Arg Val Thr Arg Arg Val Ser Glu Leu Asn Gln Met
                      345
                          350
Leu Leu Gln Leu Phe Asp Glu Ala Ile Leu Ala Leu Thr Ala Asp Glu
355 360
                       365
Lys Pro Arg Pro Ile Asp Asp Giu Phe Gln Leu Arg Gly Thr Leu Ile
 370 375 380
Asp Leu Arg Asp Glu Thr Leu Phe Ile Arg Glu Pro Glu Ala Ile Leu
385 390
                            395
Arg Met Phe Tyr Thr Met Val Arg Asn Ser Thr Ile Thr Gly Ile Tyr
          405
              410
                                       415
Ser Thr Thr Leu Arg His Leu Arg His Ala Arg Arg His Leu Lys Gln
       420 425 430
Pro Leu Cys Tyr Ile Pro Glu Ala Arg Ser Leu Phe Leu Arg Met Leu
                       445
435 440
Arg His Pro Gly Ala Val Ser Arg Gly Leu Leu Pro Met His Arg His
              455 460
Ser Val Leu Trp Ala Tyr Met Pro Gln Trp Ser His Ile Val Gly Gln
465 470 475
Met Gln Phe Asp Leu Phe His Ala Tyr Thr Val Asp Glu His Thr Ile
          485
                         490
Arg Val Met Leu Lys Leu Glu Ser Phe Ala Lys Glu Glu Thr Arg Ser
      500 505 510
Arg His Pro Leu Cys Val Asp Leu Trp Pro Arg Leu Ala His Pro Glu
     515
                   520
Leu Ile Leu Ile Ala Ala Leu Phe His Asp Ile Ala Lys Gly Arg Gly
      535
Gly Asp His Ser Val Leu Gly Ala Gln Asp Val Leu Lys Phe Ala Glu
     550
                            555
Leu His Gly Leu Asn Ser Arg Glu Thr Gln Leu Ile Ala Trp Leu Val
          565 570
Arg His His Leu Leu Met Ser Val Thr Ala Gln Arg Arg Asp Ile Gln
                      585
                                    590
```

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Asp Pro Glu Val Ile Lys Gln Phe Ala Glu Glu Val Gln Thr Glu Asn
 595
                   600
Arg Leu Arg Tyr Leu Val Cys Leu Thr Val Ala Asp Ile Cys Ala Thr
                 615
Asn Glu Thr Leu Trp Asn Ser Trp Lys Gln Ser Leu Leu Arg Glu Leu
              630
                             635
Tyr Phe Ala Thr Glu Lys Gln Leu Arg Arg Gly Met Gln Asn Thr Pro
           645
                          650
Asp Met Arg Glu Arg Val Arg His His Gln Leu Gln Ala Leu Ala Leu
                       665
Leu Arg Met Asp Asn Ile Asn Glu Glu Ala Leu His Gln Ile Trp Ala
     675 680 685
Arg Cys Arg Ala Asn Tyr Phe Val Arg His Ser Pro Asn Gln Leu Ala
      695
                                700
Trp His Val Arg His Leu Leu Lys His Asp Leu Thr Lys Pro Met Ile
   710
705
                             715
Leu Leu Ser Pro Gln Ala Thr Arg Gly Gly Thr Glu Ile Phe Ile Trp
           725 730 735
Ser Pro Asp Arg Pro Tyr Leu Phe Ala Ala Val Cys Ala Glu Leu Asp
        740 745 750
Arg Arg Asn Leu Ser Val His Asp Ala Gln Ile Phe Thr Thr Arg Asp
755 760 765
Gly Met Ala Met Asp Thr Phe Ile Val Leu Glu Pro Asp Gly Ser Pro
770 775
                                780
Leu Ser Ser Asp Arg His Glu Gly Ile Arg Phe Gly Leu Glu Gln Ala
785 790
                            795
Ile Thr Gln Arg Ser Trp Gln Pro Pro Gln Pro Arg Arg Gln Ala Ala
    805 810 815
Lys Leu Arg His Phe Thr Val Asp Thr Glu Val Asn Phe Leu Pro Thr
        820 825
                                     830
His Thr Asp Arg Lys Ser Phe Leu Glu Leu Ile Ala Leu Asp Gln Pro
835
                   840
Gly Leu Leu Ala Arg Val Gly Gln Val Phe Ala Asp Leu Gly Ile Ser
850 855
                                860
Leu His Gly Ala Arg Ile Thr Thr Ile Gly Glu Arg Val Glu Asp Leu
             870
                            875
Phe Ile Ile Ala Thr Ala Asp Arg Arg Ala Leu Asn Asn Asp Leu Gln
     885 890 895
Leu Glu Val Gln Gln Arg Leu Thr Ala Ala Leu Asn Pro Asn Asp Lys
                       905
```

```
<210> 8337
<211> 249
<212> PRT
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Gly

<213> Enterobacter cloacae

<400> 8337 Pro His Asp Arg Leu Cys Ile Leu Thr Arg His Ile Ala Ser Lys Ser 10 Met Lys Ile Gly Ile Ile Gly Ala Met Glu Glu Glu Val Thr Leu Leu Arg Asp Lys Ile Glu Asn Arg Gln Thr Leu Ser Leu Gly Gly Cys Glu 35 4.0 45 Ile Tyr Thr Gly Gln Leu Asn Gly Val Asp Val Ala Leu Leu Lys Ser 5.0 55 Gly Ile Gly Lys Val Ala Ala Ala Leu Gly Ala Thr Leu Leu Leu Glu 7.0 7.5 Arg Cys Lys Pro Asp Val Ile Ile Asn Thr Gly Ser Ala Gly Gly Leu 95 85 9.0

```
Ala Pro Thr Leu Lys Val Gly Asp Ile Val Val Ser Asp Glu Ala Arg
                      105
Tyr His Asp Ala Asp Val Thr Ala Phe Gly Tyr Glu Tyr Gly Gln Leu
     115
                    120
Pro Gly Cys Pro Ala Gly Phe Lys Ala Asp Asp Lys Leu Ile Ala Ala
      135
                     140
Ala Glu Ser Cys Ile Asn Glu Leu Asn Leu Asn Ala Val Arg Gly Leu
   150 155
145
Ile Val Ser Gly Asp Ala Phe Ile Asn Gly Ser Val Gly Leu Ala Lys
      165 170 175
Ile Arg His Asn Phe Pro Gln Ala Val Ala Val Glu Met Glu Ala Thr
     180 185 190
Ala Ile Ala His Val Cys His Asn Phe Ser Val Pro Phe Val Val Val
 195 200 205
Arg Ala Ile Ser Asp Val Ala Asp Gln Gln Ser His Ile Ser Phe Asp
210 215 220
Glu Phe Leu Ala Val Ala Ala Lys Gln Ser Thr Val Met Val Glu Thr
225 230 235
Leu Val Gln Lys Leu Ala Arg Gly
          245
```

<210> 8338 <211> 241 <212> PRT

<213> Enterobacter cloacae

<400> 8338 Thr Arg Gln Pro Ala Tyr Tyr Pro Arg Arg Lys Thr Thr Leu Arg Arg 10 Thr Gly Arg Glu Ser Leu Lys Gln Ile Asn Thr Pro Phe Glu Asp Leu 2.5 Thr Met Leu Val Tyr Trp Leu Asp Ile Leu Gly Thr Ala Val Phe Ala 4.0 Ile Ser Gly Val Leu Leu Ala Gly Lys Leu Arg Met Asp Pro Phe Gly 5.5 Val Leu Val Leu Gly Val Val Thr Ala Val Gly Gly Thr Ile Arg 70 75 Asp Met Ala Leu Ala Asn Gly Pro Val Phe Trp Val Lys Asp Pro Thr 8.5 90 95 Asp Leu Val Val Ala Met Val Thr Cys Leu Leu Thr Ile Val Leu Val 100 105 110 Arg Gln Pro Arg Arg Leu Pro Lys Trp Ile Leu Pro Val Leu Asp Ala 115 120 125 Val Gly Leu Ala Val Phe Val Gly Ile Gly Val Asn Lys Ala Phe Ile 135 140 Ala Gly Thr Gly Pro Leu Val Ala Ile Cys Met Gly Val Leu Thr Gly 145 150 155 160 Val Gly Gly Ile Ile Arg Asp Ile Leu Ala Arg Glu Val Pro Met 165 170 Ile Leu Arg Thr Glu Ile Tyr Ala Thr Ala Cys Ile Ile Gly Gly Ile 180 185 190 Val His Ala Thr Ala Tyr Tyr Thr Phe Ala Val Pro Leu Glu Asn Ala 205 200 195 Ala Met Leu Gly Met Val Val Thr Leu Val Ile Arg Leu Ala Ala Ile 215 220 Arg Trp His Leu Lys Leu Pro Thr Phe Ala Leu Asp Glu Asn Ser Arg 230 235

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<212> PRT
<213> Enterobacter cloacae
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Tyr Cys Arg Lys Asn Arg His Arg Trp Thr Asp Tyr Met Ala Ile Ser
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Ile Lys Thr Pro Glu Glu Ile Glu Lys Met Arg Val Ala Gly Arg Leu
        20
                           25
Ala Ala Asp Val Leu Glu Met Ile Glu Pro Phe Val Lys Pro Gly Val
      35
              40 45
Ser Thr Gly Glu Leu Asp Arg Ile Cys Asn Asp Tyr Ile Val Asn Glu
                    5.5
Gln His Ala Ile Ser Ala Cys Leu Gly Tyr His Gly Phe Pro Lys Ser
                 70
                                 75
Val Cys Ile Ser Ile Asn Glu Val Val Cys His Gly Ile Pro Asp Asp
                   90
             85
Glu Lys Leu Leu Lys Asp Gly Asp Ile Val Asn Ile Asp Val Thr Val
         100
                          105 110
Ile Lys Asp Asp Tyr His Gly Asp Thr Ser Lys Met Phe Ile Val Gly
                         120 125
Lys Pro Thr Ile Leu Gly Glu Arg Leu Cys Lys Val Thr Gln Glu Ser
                           140
                    135
Leu Tyr Leu Ala Leu Lys Met Val Lys Pro Gly Ile Arg Leu Arg Thr
                150
                                   155
Ile Gly Ala Ala Ile Gln Lys Phe Val Glu Ala Glu Gly Phe Ser Val
              165
                               170
Val Arg Glu Tyr Cys Gly His Gly Ile Gly Arg Val Phe His Glu Glu
          180
                            185
                                               190
Pro Gln Val Leu His Tyr Asp Ala Asp Asp Gly Gly Val Val Leu Gln
       195
                        200
                                           205
Lys Gly Met Thr Phe Thr Ile Glu Pro Met Val Asn Ala Gly Asp Tyr
                    215
                                       220
210
Arg Ile Arg Thr Met Lys Asp Gly Trp Thr Val Lys Thr Lys Asp Arg
                  230
                                    235
Ser Leu Ser Ala Gln Tyr Glu His Thr Ile Val Val Thr Asp Asn Gly
              245
                                250
Cys Glu Ile Met Thr Leu Arg Lys Asp Asp Thr Ile Pro Ala Ile Leu
          260
                            265
Thr Asn Ile Glu
      275
<210> 8340
<211> 280
<212> PRT
<213> Enterobacter cloacae
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Trp Trp Lys Pro Trp Cys Arg Asn Trp Arg Val Gly Lys Val Ser Phe
Arg Ala Leu Val Ala Leu Leu Leu Phe Ala Pro Ala Trp Leu Ile Ala
          20
Ala Pro Arg Val Ile Thr Leu Ser Pro Ala Asn Thr Glu Leu Ala Phe
                        40
                                         4.5
Ala Ala Gly Ile Thr Pro Val Ala Val Ser Ser Phe Ser Asp Tyr Pro
  50
                     55
                                       60
Pro Gln Ala Ala Gln Ile Glu Gln Val Ala Thr Trp Gln Gly Met Asn
Leu Glu Arg Ile Val Ala Leu Lys Pro Asp Leu Val Leu Ala Trp Arg
                               90
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Gly Gly Asn Ala Glu Arg Gln Val Asn Gln Leu Ser Ser Leu Gly Ile

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100
                          105
Thr Val Lys Trp Val Asp Ala Val Ser Ile Glu Gln Val Ser Gln Thr
     115
                120
                              125
Leu Arg Asp Leu Ala Pro Phe Ser Pro Thr Pro Gln Arg Ala Gly Gln
          135 140
Ala Ala Gln Gln Met Leu Asn Asp Tyr Ala Ala Leu Lys Ala Arg Tyr
       150 155
Gly Thr Gln Pro Lys Gln Arg Val Phe Leu Gln Phe Gly Ser Gln Pro
         165 170 175
Leu Phe Thr Thr Gly Lys Gly Ser Ile Gln Asn Gln Val Leu Glu Thr
       180 185 190
Cys Gly Glu Asn Ile Phe Ala Glu Ser Arg Val Pro Trp Pro Gln
     195 200 205
Val Ser Arg Glu Gln Val Leu Ala Arg Gln Pro Gln Ala Ile Val Val
 210 215 220
Val Gly Asn Ala Ser Glu Ile Pro Lys Ile Glu Gln Phe Trp His Arg
225 230 235
Gln Leu Lys Ile Pro Val Ile Ala Leu Asn Ser Asp Trp Phe Glu Arg
        245 250 255
Ala Ser Pro Arg Ile Ile Leu Ala Ala Lys Gln Leu Cys Ala Glu Leu
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                         265
Ala Glu Ser His Ser Asn Arg
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Phe Ser Ser Gly Ala Pro Gly Gly Ile Phe Ala Pro Met Leu Ala Leu
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Gly Thr Leu Leu Gly Thr Ala Phe Gly Met Ala Ala Ala Val Gly Phe
                 25
      20
                                          30
Pro Ala Tyr His Leu Asp Ala Gly Thr Phe Ala Val Ala Gly Met Gly
                     40
                                      4.5
Ala Leu Leu Ala Ala Ser Leu Arg Ala Pro Leu Thr Gly Ile Val Leu
               5.5
                                  60
Val Leu Glu Met Thr Asp Asn Tyr Gln Leu Ile Leu Pro Met Ile Ile
               70
                               75
Thr Cys Leu Gly Ala Thr Leu Leu Ala Gln Phe Leu Gly Gly Lys Pro
                            90
Leu Tyr Ser Thr Ile Leu Ala Arg Thr Leu Ala Lys Gln Glu Ala Glu
       100
                         105
Gln Ala Leu Lys Gln Asn Thr
     115
<210> 8342
<211> 515
<212> PRT
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Gly Glu Thr His Ser His Ala Gly Glu His Met Ala Pro Ile Asp Phe
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Arg Thr Lys Ile Asn Trp His Arg Arg Phe Arg Ser Pro Gln Gly Asp
         20
Lys Ser Glu His Glu Ile Leu Arg Ile Phe Glu Ser Asp Arg Gly Arg
   35
                    40
                                      45
Ile Ile Asn Ser Pro Ala Ile Arg Arg Leu Gln Gln Lys Thr Gln Val
                   55
```

Phe Pro Leu Glu Arg Asn Ala Ala Val Arg Thr Arg Leu Thr His Ser Met Glu Val Gln Gln Val Gly Arg Tyr Ile Ala Lys Glu Ile Leu Ser 8.5 90 Arg Leu Lys Glu Gln Arg Leu Leu Glu Thr Tyr Gly Leu Asp Glu Leu 100 105 110 Thr Gly Pro Phe Glu Ser Ile Val Glu Met Ala Cys Leu Met His Asp 115 120 125 Ile Gly Asn Pro Pro Phe Gly His Phe Gly Glu Ala Ala Ile Asn Asp 135 140 Trp Phe Lys Gln Arg Leu Phe Pro Ser Asp Ala Ile Ser Gln Pro Leu 145 150 155 160 Ser Asp Asp Arg Cys Val Val Arg Asp Leu Ser Leu Arg Glu Gly Glu 165 170 175 Asp Ser Leu Asn Asp Leu Arg Arg Lys Val Arg Gln Asp Leu Cys His 185 190 180 Phe Glu Gly Asn Ala Gln Gly Ile Arg Leu Val His Ser Leu Met Arg 195 200 205 Met Asn Leu Thr Trp Ala Gln Val Gly Cys Ile Leu Lys Tyr Thr Arg 210 215 220 Pro Ala Trp Trp Thr Gly Glu Thr Pro Ala Thr His Ser Tyr Leu Met 225 230 235 Lys Lys Pro Gly Tyr Tyr Leu Ser Glu Glu Ala Tyr Ile Ala Arg Leu 245 250 255 Arg Lys Glu Leu Ser Leu Thr Pro Asn Gly Arg Phe Pro Leu Thr Trp 260 265 Ile Met Glu Ala Ala Asp Asp Ile Ser Tyr Cys Val Ala Asp Leu Glu 280 285 Asp Ala Val Glu Lys Arg Ile Phe Ser Val Glu Glu Leu Tyr Gln His 290 295 300 Leu His Asp Ala Trp Gly Glu His Glu Lys Gly Ser Leu Phe Ala Gln 305 310 315 Val Val Glu Asn Ala Trp Asp Lys Ser Arg Ser Asn Ser Leu Ser Arg 325 330 335 Ser Thr Glu Asp Gln Phe Phe Met Tyr Leu Arg Val Asn Thr Leu Asn 340 345 350 Lys Leu Val Pro Tyr Ala Ala Ala Arg Phe Ile Asp Asn Leu Pro Met 355 360 365 Ile Phe Ser Gly Glu Phe Asn His Ala Leu Leu Glu Asp Glu Ser Ser 370 375 380 Phe Ser Gln Leu Leu Glu Leu Tyr Lys Asn Val Ala Val Arg His Val 385 390 395 Phe Ser His Pro Asp Val Glu Gln Leu Glu Leu Gln Gly Tyr Arg Val 405 410 415 Ile Ser Gly Leu Leu Glu Ile Tyr Gly Pro Leu Leu Gln Leu Thr Val 420 425 430 Asp Glu Phe Cys Glu Leu Val Glu Asn Glu Arg Val Arg Arg Leu Pro 435 440 445 Ile Glu Ser Arg Leu Tyr Gln Lys Leu Ser Thr Arg His Arg Leu Ala 455 460 Tyr Ile Glu Ala Val Ser Lys Ile Asp Arg His Ser Ser Gln Trp Pro 465 470 475 Val Met Glu Tyr Tyr Tyr Arg Cys Arg Leu Ile Gln Asp Tyr Ile Ser 485 490 495 Gly Met Thr Asp Leu Tyr Ala Trp Asp Glu Tyr Arg Lys Leu Met Ala 500 505 Val Glu

515

<210> 8343 <211> 497 <212> PRT

<213> Enterobacter cloacae <400> 8343 Asn Glu Ser Glu Leu His Ser Asn Phe Ala Leu Ser Gly Lys Ser Arg 10 Leu Arg Asn Met Lys Lys Thr Thr Leu Ala Met Ser Ala Leu Ala Leu 20 25 Ser Leu Gly Leu Ala Leu Ser Pro Leu Ala Thr Ala Ala Glu Thr Ala 40 45 Ser Ser Ala Ala Thr Ala Gln Gln Met Pro Ser Leu Ala Pro Met Leu 50 55 Glu Lys Val Met Pro Ser Val Val Ser Ile Asn Val Glu Gly Ser Thr 70 75 Thr Val Asn Thr Pro Arg Met Pro Arg Asn Phe Gln Gln Phe Phe Gly 85 90 95 Asp Asn Ser Pro Phe Cys Gln Asp Gly Ser Pro Phe Gln Ser Ser Pro 100 105 110 Phe Cys Gln Gly Gly Gly Ala Gly Asp Asp Gly Met Gly Gly Gln 115 120 125 Gln Gln Lys Phe Met Ala Leu Gly Ser Gly Val Ile Ile Asp Ala Ala 135 140 Lys Gly Tyr Val Val Thr Asn Asn His Val Val Asp Asn Ala Asn Thr 155 150 Ile Lys Val Gln Met Ser Asp Gly Arg Lys Phe Asp Ala Lys Val Val 165 170 175 Gly Lys Asp Pro Arg Ser Asp Ile Ala Leu Ile Gln Ile Gln Asp Pro 185 190 180 Lys Asn Leu Thr Ala Ile Lys Leu Ala Asp Ser Asp Ala Leu Arg Val 200 195 Gly Asp Tyr Thr Val Ala Ile Gly Asn Pro Phe Gly Leu Gly Glu Thr 215 210 220 Val Thr Ser Gly Ile Val Ser Ala Leu Gly Arg Ile Gly Leu Asn Ala 230 235 Glu Asn Tyr Glu Asn Phe Ile Gln Thr Asp Ala Ala Ile Asn Arg Gly 245 250 255 Asn Ser Gly Gly Ala Leu Val Asn Leu Asn Gly Glu Leu Ile Gly Ile 260 265 Asn Thr Ala Ile Leu Ala Pro Asp Gly Gly Asn Ile Gly Ile Gly Phe 280 285 Ala Ile Pro Ser Asn Met Val Lys Asn Leu Thr Ala Gln Met Val Gln 295 300 Tyr Gly Gln Val Lys Arg Gly Glu Leu Gly Ile Met Gly Thr Glu Leu 310 315 Asn Ser Glu Leu Ala Lys Ala Met Lys Val Asp Ala Gln Arg Gly Ala 325 335 330 Phe Val Ser Gln Val Met Pro Asn Ser Ser Ala Ala Lys Ala Gly Ile 340 345 350 Lys Ala Gly Asp Val Ile Thr Ser Leu Asn Gly Lys Pro Ile Ser Ser 360 Phe Ala Ala Leu Arg Ala Glu Val Gly Ser Met Pro Ile Gly Ser Lys 375 380 Val Thr Leu Gly Leu Leu Arg Glu Gly Lys Pro Val Asn Val Ser Leu 390 395 Glu Leu Gln Gln Ser Ser Gln Asn Gln Val Asp Ser Ser Thr Ile Phe 405 410 415 Ser Gly Ile Glu Gly Ala Glu Met Ser Asn Lys Gly Ala Asp Lys Gly 420 425 430 Val Val Val Asn Asn Val Lys Ala Asn Ser Pro Ala Ala Arg Ile Gly

440 Leu Lys Lys Gly Asp Val IIe Met Gly Ala Asn Gln Gln Pro Val Lys

455 Asn Ile Ala Glu Leu Arg Lys Ile Leu Asp Ser Lys Pro Ser Val Leu 465 470 475 Ala Leu Asn Ile Gln Arg Gly Asp Thr Ser Ile Tyr Leu Leu Met Gln 485 490

<210> 8344 <211> 216 <212> PRT <213> Enterobacter cloacae

<400> 8344

Gln Ser Gln Glu Arg Asn Met Ala Thr Asn Ala Lys Pro Val Tyr Lys 10 Arg Ile Leu Leu Lys Leu Ser Gly Glu Ala Leu Gln Gly Ser Glu Gly Phe Gly Ile Asp Ala Ser Ile Leu Asp Arg Met Ala Gln Glu Ile Lys 40

Glu Leu Val Glu Leu Gly Ile Gln Val Gly Val Val Ile Gly Gly 50 55 60 Asn Leu Phe Arg Gly Ala Gly Leu Ala Lys Ala Gly Met Asn Arg Val 7.5

65 70 Val Gly Asp His Met Gly Met Leu Ala Thr Val Met Asn Gly Leu Ala 90 8.5 Met Arg Asp Ala Leu His Arg Ala Tyr Val Asn Ala Arg Leu Met Ser

100 105 110 Ala Asn Pro Leu Asn Gly Val Cys Asp Asn Tyr Ser Trp Ala Glu Ala 115 120 125

Ile Ser Leu Leu Arg Asn Asn Arg Val Val Ile Leu Ser Ala Gly Thr 130 135 140

Gly Asn Pro Phe Phe Thr Thr Asp Ser Ala Ala Cys Leu Ala Arg Tyr 145 150 155 160 Arg Asn Arg Ser Arg Cys Gly Ala Glu Ser Asp Gln Ser Arg Trp Arg

165 170 175 Val Tyr Cys Arg Pro Gly Lys Arg Ser Phe Ser Asp His Val Arg Ser 180 185 190

Ala Glu Leu Gln Arg Ser Ala Gly Lys Arg Ala Lys Ser Asp Gly Ser 195 200 Cys Arg Leu Tyr Ala Gly Ser

210

<210> 8345 <211> 194 <212> PRT

<213> Enterobacter cloacae

<400> 8345

Asp Lys Phe Ser Arg Ile Arg Asn Val Ile Asn Asp Ile Arg Lys Asp 10 Ala Glu Val Arg Met Asp Lys Cys Val Glu Ala Phe Lys Asn Gln Ile 20 25 Ser Lys Ile Arg Thr Gly Arg Ala Ser Pro Ser Leu Leu Asp Gly Ile 40 Ile Val Glu Tyr Tyr Gly Thr Pro Thr Pro Leu Arg Gln Leu Ala Ser 55 Val Thr Val Glu Asp Thr Arg Thr Leu Lys Ile Asn Val Phe Asp Arg

Ser Met Ser Pro Ala Val Glu Lys Ala Ile Met Ala Ser Asp Leu Gly

90

Leu Asn Pro Ser Ser Ala Gly Ala Asp Ile Arg Val Pro Leu Pro Pro 100 105 Leu Thr Glu Glu Arg Arg Lys Asp Leu Ile Lys Val Val Arg Gly Glu 115 120 125 Ala Glu Gln Gly Arg Val Ser Val Arg Asn Val Arg Arg Asp Ala Asn 135 140 Asp Lys Val Lys Ala Leu Leu Lys Glu Lys Glu Ile Ser Glu Asp Asp 150 155 160 Asp Arg Arg Ser Gln Asp Asp Ile Gln Lys Met Thr Asp Ala Ala Ile 165 170 175 Lys Lys Ile Asp Ala Ala Leu Ala Glu Lys Glu Ala Glu Leu Met Gln 180 185 Phe

<210> 8346 <211> 476 <212> PRT <213> Enterobacter cloacae

<400> 8346 Gln Pro Tyr Arg Gly Cys Ser Cys Ile Cys Leu Pro Ala Phe Thr Gly 10 Val Trp Asp Asp Ile Thr Glu Gly Phe Met Leu Ser Ile Leu Trp Asn 20 25 30 Leu Ala Ala Phe Ile Val Ala Leu Gly Val Leu Ile Thr Val His Glu 4.0 Phe Gly His Phe Trp Val Ala Arg Arg Cys Gly Val Arg Val Glu Arg 5.0 5.5 60 Phe Ser Ile Gly Phe Gly Lys Ser Leu Trp Lys Arg Thr Asp Lys His 70 75 Gly Thr Glu Phe Val Ile Ala Leu Ile Pro Leu Gly Gly Tyr Val Lys 90 95 8.5 Met Leu Asp Glu Arg Val Glu Pro Val Ala Pro Glu Leu Arg His Arg 100 105 Ala Phe Asn Asn Lys Thr Val Gly Gln Arg Ala Ala Ile Ile Ala Ala 115 120 125 Gly Pro Val Ala Asn Phe Ile Phe Ala Ile Phe Ala Tyr Trp Leu Val 135 130 140 Phe Ile Ile Gly Val Pro Gly Val Arg Pro Val Val Gly Glu Ile Thr 145 150 155 160 Thr Gly Ser Ile Ala Ala Thr Ala Gln Ile Thr Pro Gly Met Glu Leu 175 170 165 Lys Ala Ile Asp Gly Ile Glu Thr Pro Asp Trp Asp Ala Val Arg Leu 180 185 190 Gln Leu Val Ala Lys Ile Gly Asp Glu Gln Thr Thr Val Ser Val Ser 200 Pro Phe Gly Ser Asp Gln Arg Gln Glu Lys Val Leu Asp Leu Arg His 215 Trp Arg Phe Glu Pro Asp Lys Glu Asp Pro Val Ala Ala Leu Gly Ile 230 225 235 240 Arg Pro Arg Gly Ala Gln Ile Glu Pro Val Leu Ala Glu Val Gln Ala 245 250 Lys Ser Ala Ala Ser Lys Ala Gly Leu Gln Ala Gly Asp Arg Ile Val 265 270 Lys Val Asp Gly Gln Pro Leu Thr Gln Trp Met Thr Phe Val Thr Leu 275 280 285 Val Arg Asp Asn Pro Gly Lys Pro Leu Ala Leu Glu Val Glu Arg Gln 295 300 Gly Ser Ser Leu Ser Leu Thr Leu Thr Pro Asp Thr Lys Ser Gly Gly 310 315

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Gly Lys Ala Glu Gly Phe Ala Gly Val Val Pro Lys Val Ile Pro Leu
             325
Pro Asp Glu Tyr Lys Thr Ile Arg Gln Tyr Gly Pro Phe Ser Ala Ile
          340
                           345
Val Glu Ala Thr Asp Lys Thr Trp Gln Leu Met Lys Leu Thr Val Asn
                       360
                              365
Met Leu Gly Lys Leu Ile Thr Gly Asp Val Lys Leu Asn Asn Leu Ser
                    375
                         380
Gly Pro Ile Ser Ile Ala Gln Gly Ala Gly Met Ser Ala Glu Phe Gly
385
      390 395 400
Val Ile Tyr Tyr Leu Met Phe Leu Ala Leu Ile Ser Val Asn Leu Gly
            405 410 415
Ile Ile Asn Leu Phe Pro Leu Pro Val Leu Asp Gly Gly His Leu Leu
        420 425 430
Phe Leu Ala Ile Glu Lys Leu Lys Gly Gly Pro Val Ser Glu Arg Val
     435 440
                             445
Gln Asp Phe Ser Tyr Arg Ile Gly Ser Ile Leu Leu Val Leu Leu Met
 450 455 460
Gly Leu Ala Leu Phe Asn Asp Phe Ser Arg Leu
465 470
<210> 8347
<211> 195
<212> PRT
<213> Enterobacter cloacae
<400> 8347
Ala Gln Asn Arg Ser Thr Arg Leu Ser Val His Pro Phe Asn Ala Lys
                        10
Phe Pro Gly Leu Ser Ala Leu Phe Ile Asn Arg Gln Ala Val Leu Leu
                    25
Leu Leu Ser Thr Phe Asp Arg Lys Ser Ile Leu Thr Thr Tyr Thr
 3.5
                      4.0
His Thr Leu His Ile Glu Glu Ile Leu Glu Leu Leu Pro His Arg Tyr
                    55
                              60
Pro Phe Leu Leu Val Asp Arg Val Leu Asp Phe Glu Glu Gly Arg Phe
                70
                                 75
Leu Arg Ala Val Lys Asn Val Ser Val Asn Glu Pro Phe Phe Gln Gly
             8.5
                              90
His Phe Pro Gly Lys Pro Ile Phe Pro Gly Val Leu Ile Leu Glu Ala
          100
                          105
                                            110
Met Ala Gln Ala Thr Gly Ile Leu Ala Phe Lys Ser Val Gly Lys Leu
      115
                       120
                                         125
Glu Pro Gly Glu Leu Tyr Tyr Phe Ala Gly Ile Asp Glu Ala Arg Phe
                    135
                                     140
Lys Arg Pro Val Val Pro Gly Asp Gln Met Ile Met Glu Val Thr Phe
                150
                                  155
145
                                                   160
Glu Lys Thr Arg Arg Gly Leu Thr Arg Phe Lys Gly Val Ala Met Val
             165
                              170
                                               175
Asp Gly Lys Val Val Cys Glu Ala Thr Met Met Cys Ala Arg Ser Arg
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                           185
                                            190
Glu Ala
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<210> 8348
<211> 264
<212> PRT
<213> Enterobacter cloacae
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Tyr Val Ile Asp Lys Ser Ala Phe Ile His Pro Thr Ala Ile Val Glu

10 Thr Gly Ala Ile Ile Gly Ala Asn Val His Ile Gly Pro Phe Cys Ile 20 25 Val Gly Pro His Val Glu Ile Gly Glu Gly Thr Val Leu Lys Ser His 3.5 4.0 Val Val Val Asn Gly His Thr Thr Ile Gly Cys Asn Asn Glu Ile Tyr 55 Gln Phe Ala Ser Ile Gly Glu Val Asn Gln Asp Leu Lys Tyr Ala Gly 70 75 Glu Pro Thr Arg Val Glu Ile Gly Asp Arg Asn Arg Ile Arg Glu Ser 8.5 90 Val Thr Ile His Arg Gly Thr Thr Gln Gly Gly Gly Leu Thr Lys Val 100 105 Gly Ser Asp Asn Leu Phe Met Val Asn Ala His Ile Ala His Asp Cys 120 115 Thr Val Gly Ser Arg Cys Ile Leu Ala Asn Asn Ala Thr Leu Ala Gly 135 140 His Val Ser Val Asp Asp Phe Ala Ile Ile Gly Gly Met Thr Ala Val 150 155 His Gln Phe Cys Ile Ile Gly Ala His Val Met Val Gly Gly Cys Ser 165 170 Gly Val Ala Gln Asp Val Pro Pro Phe Val Ile Ala Gln Gly Asn His 180 185 190 Ala Thr Pro Phe Gly Val Asn Ile Glu Gly Leu Lys Arg Arg Gly Phe 195 200 205 Ser Arg Glu Ala Ile Thr Ala Ile Arg Asn Ala Tyr Lys Leu Leu Tyr 215 220 Arg Ser Gly Lys Thr Leu Glu Glu Ala Lys Pro Glu Ile Ala Glu Leu 230 225 235 Ala Asn Lys His Pro Glu Val Lys Thr Phe Met Glu Phe Phe Glu Arg 250 245 Ser Thr Arg Gly Leu Ile Arg 260

<210> 8349 <211> 1167 <212> PRT

<213> Enterobacter cloacae

<400> 8349 Val Thr Arg Asp Leu Lys Met Ala Glu Pro Arg Phe Val His Leu Arg Val His Ser Asp Tyr Ser Met Ile Asp Gly Leu Ala Lys Thr Gly Pro Leu Val Lys Lys Ala Ala Ser Leu Gly Met Pro Ala Leu Ala Ile Thr 35 40 Asp Phe Thr Asn Leu Cys Gly Leu Val Lys Phe Tyr Gly Thr Ala His 55 Gly Ala Gly Leu Lys Pro Ile Val Gly Ala Asp Phe His Val Gln Ser 7.0 75 Asp Leu Leu Gly Asp Glu Met Thr Gln Ile Ser Val Leu Ala Met Asn 90 Asn Thr Gly Tyr Gln Asn Leu Thr Leu Leu Ile Ser Lys Ala Tyr Gln 100 105 Arg Gly Tyr Gly Ala Leu Gly Pro Trp Ile Asp Arg Asp Trp Leu Ala 115 120 Glu Leu Asn Glu Gly Leu Leu Leu Ile Ser Gly Gly Arg Met Gly Asp 135 140 Val Gly Lys Cys Leu Leu Arg Gly Asn Asn Ala Leu Val Asp Gln Cys 150 155 Val Ser Phe Tyr Glu Glu Tyr Phe Pro Asp Arg Tyr Tyr Leu Glu Leu

165 170 Ile Arg Thr Gly Arg Ala Asp Glu Glu Ser Tyr Leu His Ala Ala Val 180 185 190 Ala Leu Ala Glu Ala Arg Gly Leu Pro Val Val Ala Thr Asn Asp Val 195 200 205 Arg Phe Leu Glu Ala Gly Asp Phe Asp Ala His Glu Ile Arg Val Ala 210 215 220 Ile His Asp Gly Phe Thr Leu Asp Asp Pro Lys Arg Pro Arg Asn Tyr 225 230 235 240 Ser Ser Gln Gln Tyr Met Arg Ser Glu Glu Glu Met Cys Glu Leu Phe 245 250 255 Ser Asp Ile Pro Glu Ala Leu Glu Asn Ser Val Glu Ile Ala Lys Arg 260 265 270 Cys Asn Val Thr Val Arg Leu Gly Glu Tyr Phe Leu Pro Gln Phe Pro 275 280 285 Thr Gly Asp Met Thr Thr Glu Asp Phe Leu Val Met Lys Ser Lys Glu 300 290 295 Gly Leu Glu Glu Arg Leu Glu Phe Leu Phe Pro Asp Glu Ala Val Arg 305 310 315 Lys Glu Lys Arg Pro Glu Tyr Asp Glu Arg Leu Asp Ile Glu Leu Gln 325 330 Val Ile Asn Gln Met Gly Phe Pro Gly Tyr Phe Leu Ile Val Met Glu 340 345 350 Phe Ile Gln Trp Ser Lys Asp Asn Gly Val Pro Val Gly Pro Gly Arg 355 360 365 Gly Ser Gly Ala Gly Ser Leu Val Ala Tyr Ala Leu Lys Ile Thr Asp 370 375 380 Leu Asp Pro Leu Glu Phe Asp Leu Leu Phe Glu Arg Phe Leu Asn Pro 390 395 Glu Arg Val Ser Met Pro Asp Phe Asp Val Asp Phe Cys Met Glu Lys 405 410 Arg Asp Gln Val Ile Glu His Val Ala Asp Met Tyr Gly Arg Asp Ala 425 420 430 Val Ser Gln Ile Ile Thr Phe Gly Thr Met Ala Ala Lys Ala Val Ile 435 440 445 Arg Asp Val Gly Arg Val Leu Gly His Pro Tyr Gly Phe Val Asp Arg 455 460 Ile Ser Lys Leu Val Pro Pro Asp Pro Gly Met Thr Leu Ala Lys Ala 465 470 475 Phe Glu Ala Glu Pro Gln Leu Pro Glu Ile Tyr Glu Ala Asp Glu Glu 485 490 495 Val Lys Ala Leu Ile Asp Met Ala Arg Lys Leu Glu Gly Val Thr Arg 500 505 Asn Ala Gly Lys His Ala Gly Gly Val Val Ile Ala Pro Thr Lys Ile 515 520 Thr Asp Phe Ala Pro Leu Tyr Cys Asp Glu Ala Gly Gln His Pro Val 530 535 540 Thr Gln Phe Asp Lys Asn Asp Val Glu Tyr Ala Gly Leu Val Lys Phe 545 550 555 Asp Phe Leu Gly Leu Arg Thr Leu Thr Ile Ile Asn Trp Ala Leu Glu 570 575 565 Met Ile Asn Ala Arg Arg Glu Lys Asn Gly Glu Pro Pro Leu Asp Ile 580 585 590 Ala Ile Pro Leu Asp Asp Lys Lys Ser Phe Asp Met Leu Gln Arg 600 Ser Glu Thr Thr Ala Val Phe Gln Leu Glu Ser Arg Gly Met Lys Asp 615 620 Leu Ile Lys Arg Leu Gln Pro Asp Cys Phe Glu Asp Met Ile Ala Leu 630 635 Val Ala Leu Phe Arg Pro Gly Pro Leu Gln Ser Gly Met Val Asp Asn 645 650

Phe Ile Asp Arg Lys His Gly Arg Glu Glu Ile Ser Tyr Pro Asp Val 660 665 Gln Trp Gln His Glu Ser Leu Lys Pro Val Leu Glu Pro Thr Tyr Gly 675 680 685 Ile Ile Leu Tyr Gln Glu Gln Val Met Gln Ile Ala Gln Val Leu Ser 695 700 Gly Tyr Thr Leu Gly Gly Ala Asp Met Leu Arg Arg Ala Met Gly Lys 710 715 Lys Lys Pro Glu Glu Met Ala Lys Gln Arg Ser Ile Phe Glu Asp Gly
725 730 735 Ala Lys Lys Asn Gly Ile Asp Gly Glu Leu Ala Met Lys Ile Phe Asp 740 745 750 Leu Val Glu Lys Phe Ala Gly Tyr Gly Phe Asn Lys Ser His Ser Ala 755 760 765 Ala Tyr Ala Leu Val Ser Tyr Gln Thr Leu Trp Leu Lys Ala His Tyr 770 780 Pro Ala Glu Phe Met Ala Ala Val Met Thr Ala Asp Met Asp Asn Thr 790 795 Glu Lys Val Val Gly Leu Val Asp Glu Cys Trp Arg Met Gly Leu Lys 805 810 815 Ile Leu Pro Pro Asp Ile Asn Ser Gly Leu Tyr His Phe His Val Asn 820 825 830 Asp Asp Gly Glu Ile Val Tyr Gly Ile Gly Ala Ile Lys Gly Val Gly 835 840 845 Glu Gly Pro Ile Glu Ala Ile Ile Glu Ala Arg Asn Asn Gly Gly Tyr 850 855 860 Phe Arg Glu Leu Phe Asp Leu Cys Ala Arg Thr Asp Thr Lys Lys Leu 865 870 875 Asn Arg Arg Val Leu Glu Lys Leu Ile Met Ser Gly Ala Phe Asp Arg 885 890 895 Leu Gly Pro His Arg Ala Ala Leu Met Asn Ser Leu Gly Asp Ala Leu 900 905 910 Lys Ala Ala Asp Gln His Ala Lys Ala Glu Ala Ile Gly Gln Ala Asp 920 Met Phe Gly Val Leu Ala Glu Glu Pro Glu Gln Ile Glu Gln Ser Tyr 930 935 940 Ser Asn Cys Gln Pro Trp Pro Glu Gln Val Val Leu Asp Gly Glu Arg 950 955 Glu Thr Leu Gly Leu Tyr Leu Thr Gly His Pro Ile Asn Gln Tyr Leu 965 970 975 Lys Glu Ile Glu Arg Tyr Val Gly Gly His Arg Leu Lys Asp Met His 980 985 990 Pro Thr Glu Arg Gly Lys Ile Thr Thr Ala Ala Gly Leu Val Ile Ala 1000 1005 Ala Arg Val Met Val Thr Lys Arg Gly Asn Arg Ile Gly Ile Cys Thr 1015 1010 1020 Leu Asp Asp Arg Ser Gly Arg Leu Glu Val Met Leu Phe Thr Asp Ala 1025 1030 1035 Leu Asp Lys Tyr Gln Gln Leu Leu Glu Lys Asp Arg Ile Leu Ile Val 1045 1050 1055 Ser Gly Gln Val Ser Phe Asp Asp Phe Ser Gly Gly Leu Lys Met Thr 1060 1065 1070 Ala Arg Glu Val Met Asp Ile Asp Glu Ala Arg Glu Lys Tyr Ala Arg 1075 1080 1085 Gly Leu Ala Ile Ser Leu Thr Asp Arg Gln Ile Asp Asp Gln Leu Leu 1090 1095 1100 Asn Arg Leu Arg Gln Ser Leu Glu Pro His Arg Ser Gly Thr Ile Pro 1110 1115 Val His Leu Tyr Tyr Gln Arg Ala Asp Ala Arg Ala Arg Leu Arg Phe 1130 Gly Ala Thr Trp Arg Val Ser Pro Ser Asp Arg Leu Leu Asn Asp Leu

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Arg Gly Leu Ile Gly Ser Glu Gln Val Glu Leu Glu Phe Asp
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      1155
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<212> PRT
<213> Enterobacter cloacae
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Ala Glu Leu Glu Ala Lys Ile Asp Ser Leu Thr Ala Val Ser Arg Gln
         20
                          25
                                          3.0
Asp Glu Lys Leu Asp Ile Asn Ile Asp Glu Glu Val His Arg Leu Arg
      35
                      40
                                      4.5
Glu Lys Ser Val Glu Leu Thr Arg Lys Ile Phe Ala Asp Leu Gly Ala
 50
                  55
                               60
Trp Gln Ile Ala Gln Leu Ala Arg His Pro Gln Arg Pro Tyr Thr Leu
65
             70
                                75
Asp Tyr Val Arg Leu Ala Phe Asp Glu Phe Asp Glu Leu Ala Gly Asp
            85 90
Arg Ala Tyr Ala Asp Asp Lys Ala Ile Val Gly Gly Ile Ala Arg Leu
        100 105
Asp Gly Arg Pro Val Met Ile Ile Gly His Gln Lys Gly Arg Glu Thr
115
                      120
Lys Glu Lys Ile Arg Arg Asn Phe Gly Met Pro Ala Pro Glu Gly Tyr
 130 135 140
Arg Lys Ala Leu Arg Leu Met Glu Met Ala Glu Arg Phe Asn Met Pro
145
               150
                               155
Ile Ile Thr Phe Ile Asp Thr Pro Gly Ala Tyr Pro Gly Val Gly Ala
           165
                            170
                                 175
Glu Glu Arg Gly Gln Ser Glu Ala Ile Ala Arg Asn Leu Arg Glu Met
        180
                         185 190
Ser Arg Leu Lys Val Pro Val Ile Cys Thr Val Ile Gly Glu Gly Gly
 195
                      200
                                      205
Ser Gly Gly Ala Leu Ala Ile Gly Val Gly Asp Lys Val Asn Met Leu
 210 215
                                   220
Gln Tyr Ser Thr Tyr Ser Val Ile Ser Pro Glu Gly Cys Ala Ser Ile
225
               230
                              235
Leu Trp Lys Ser Ala Asp Lys Ala Pro Leu Ala Ala Glu Ala Met Gly
            245
                            250
Ile Ile Ala Pro Arg Leu Lys Glu Leu Lys Leu Ile Asp Thr Val Ile
         260
                         265
                                          270
Pro Glu Pro Leu Gly Gly Ala His Arg Lys Pro Glu Val Met Ala Ala
      275
                      280
                                      285
Ser Leu Lys Ala Gln Leu Leu Ala Asp Leu Ala Asp Leu Asp Val Leu
                  295 300
Ser Thr Glu Asp Leu Leu Asn Arg Arg Tyr Gln Arg Leu Met Thr Tyr
               310
                                315
Gly Tyr Ala
<210> 8351
<211> 124
<212> PRT
<213> Enterobacter cloacae
<400> 8351
Gln Ser Gln Tyr Ser Trp Glu His Lys Met Ser Asp Asp Val Ala Leu
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Pro Leu Glu Phe Thr Glu Ala Ala Ala Lys Lys Val Lys Thr Leu Ile
25
Ala Asp Glu Asp Asn Pro Asp Leu Lys Leu Arg Val Tyr Ile Thr Gly
35
Gly Gly Cys Ser Gly Phe Gln Tyr Gly Phe Thr Phe Asp Asp Gln Val
50
Asn Asp Gly Asp Met Thr Ile Glu Lys Gln Gly Val Ala Leu Val Val
65
Asp Pro Met Ser Leu Gln Tyr Leu Val Gly Gly Ser Val Asp Tyr Thr
85
90
Glu Gly Leu Glu Gly Ser Arg Phe Val Val Thr Asn Pro Asn Ala Thr
100
Ser Thr Cys Gly Cys Gly Ser Ser Ser Phe Ser Ile

<210> 8352 <211> 259 <212> PRT <213> Enterobacter cloacae

<400> 8352 Tyr Gly Ile Arg Gly Gly Ile Thr Pro Thr Phe Asn Ile Glu Val Leu 10 Asn Met Ala Thr Val Ser Met Arg Asp Met Leu Lys Ala Gly Val His 20 25 Phe Gly His Gln Thr Arg Tyr Trp Asn Pro Lys Met Lys Pro Phe Ile 40 45 Phe Gly Ala Arg Asn Lys Val His Ile Ile Asn Leu Glu Lys Thr Val 55 60 Pro Met Phe Asn Glu Ala Leu Ala Glu Leu Asn Lys Ile Ser Ser Arg 65 70 75 Lys Gly Lys Ile Leu Phe Val Gly Thr Lys Arg Ala Ala Ser Glu Ala 85 90 Val Lys Asp Ala Ala Asn Ser Cys Asp Gln Phe Phe Val Asn His Arg 100 105 110 Trp Leu Gly Gly Met Leu Thr Asn Trp Lys Thr Val Arg Gln Ser Ile 115 120 125 Lys Arg Leu Lys Asp Leu Glu Thr Gln Ser Gln Asp Gly Thr Phe Asp 130 135 140 Lys Leu Thr Lys Lys Glu Ala Leu Met Arg Thr Arg Glu Leu Asp Lys 145 150 155 160 Leu Glu Asn Ser Leu Gly Gly Ile Lys Asp Met Gly Gly Leu Pro Asp $165 \\ 170 \\ 175$ Ala Leu Phe Val Ile Asp Ala Asp His Glu His Ile Ala Ile Lys Glu 185 190 Ala Asn Asn Leu Gly Ile Pro Val Phe Ala Ile Val Asp Thr Asn Ser 200 205 Asp Pro Asp Gly Val Asp Phe Val Ile Pro Gly Asn Asp Asp Ala Ile 215 220 Arg Ala Val Ser Leu Tyr Leu Ser Ala Val Ala Ala Thr Val Arg Glu 230 235 Gly Arg Ser Gln Asp Leu Ala Ser Gln Ala Glu Glu Ser Phe Val Glu 245 250 Ala Glu

<210> 8353 <211> 312

<212> PRT <213> Enterobacter cloacae

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<400> 8353
Ile Gly Ala His Tyr Arg Pro Leu Phe Ser Ile Tyr Thr Val Trp Leu
                               1.0
Pro Ala Gly Gln Phe Thr Ser Pro Glu Asp Leu Arg Met Ala Glu Ile
                           25
Thr Ala Ser Leu Val Lys Glu Leu Arg Glu Arg Thr Gly Ala Gly Met
                       4.0
                                        4.5
Met Asp Cys Lys Lys Ala Leu Thr Glu Ala Asn Gly Asp Ile Glu Leu
          5.5
                               60
Ala Ile Glu Asn Met Arg Lys Ser Gly Ala Ile Lys Ala Ala Lys Lys
          70
                               7.5
Ala Gly Asn Val Ala Ala Asp Gly Val Ile Ile Thr Lys Ile Asp Gly
           8.5
                             90
Asn Tyr Gly Ile Ile Leu Glu Val Asn Cys Gln Thr Asp Phe Val Ala
                        105
          100
Lys Asp Ala Gly Phe Gln Ala Phe Ala Asn Lys Val Leu Asp Ala Ala
                            125
     115 120
Val Ala Gly Lys Ile Thr Asp Val Glu Val Leu Lys Ala Gln Phe Glu
 130
           135 140
Glu Glu Arg Val Ala Leu Val Ala Lys Ile Gly Glu Asn Ile Asn Ile
145 150 155 160
Arg Arg Val Ala Ser Leu Glu Gly Asp Val Leu Gly Ser Tyr Gln His
             165 170
Gly Ala Arg Ile Gly Val Leu Val Ala Ala Lys Gly Ala Asp Glu Glu
                          185 190
Leu Val Lys Gln Leu Ala Met His Ile Ala Ala Ser Lys Pro Glu Phe
 195
                       200
                             205
Val Lys Pro Glu Asp Val Ser Ala Glu Val Val Glu Lys Glu Tyr Gln
 210 215
                                     220
Val Gln Leu Asp Ile Ala Met Gln Ser Gly Lys Pro Lys Glu Ile Ala
                230 235
Glu Lys Met Val Glu Gly Arg Met Lys Lys Phe Thr Gly Glu Val Ser
             245 250
Leu Thr Gly Gln Pro Phe Val Met Asp Pro Ser Lys Ser Val Ala Gln
         260 265 270
Leu Leu Lys Glu His Asn Ala Asp Val Thr Gly Phe Ile Arg Phe Glu
      275 280 285
Val Gly Glu Gly Ile Glu Lys Val Glu Thr Asp Phe Ala Ala Glu Val
             295
Ala Ala Met Ser Lys Gln Ser
<210> 8354
<211> 110
<212> PRT
<213> Enterobacter cloacae
<400> 8354
Ser Ser Pro Pro Val Arg Val Thr Arg Ser Leu Pro Pro Ile Pro Gln
Pro Ala Trp Arg Gly Ile Glu Ile Glu Ala Asp Val Val Leu Lys Ala
         20
                           25
Thr Lys Val Asp Gly Val Phe Thr Ala Asp Pro Ala Lys Asp Pro Ser
      35
                       4.0
Ala Thr Met Tyr Asp Gln Leu Ser Tyr Ser Glu Val Leu Glu Lys Glu
                    55
Leu Lys Val Met Asp Leu Ala Ala Phe Thr Leu Ala Arg Asp His Lys
                70
                                 75
Leu Pro Ile Arg Val Phe Asn Met Asn Lys Pro Gly Ala Leu Arg Arg
             8.5
Val Val Met Gly Glu Lys Glu Gly Thr Leu Ile Thr Glu
```

A CONTRACT OF THE PARTY OF THE

<210> 8355 <211> 256

<212> PRT

<213> Enterobacter cloacae

<400> 8355

Lys Arg Val Met Leu Ser Ala Asn Gln Pro Ile Ser Glu Asn Leu Pro Ile Ser Glu Asn Leu Pro I 5 10 15 Ala His Gly Cys Arg His Val Ala Ile Ile Met Asp Gly Asn Gly Arg

Ala His Gly Cys Arg His Val Ala Ile Ile Met Asp Gly Asn Gly Arg 20 Trp Ala Lys Arg Gln Gly Lys Ile Arg Ala Phe Gly His Lys Ala Gly

35 40 45 Ala Lys Ser Val Arg Arg Ala Val Ser Phe Ala Ala Asn Asn Gly Ile

50 55 60
Asp Ala Leu Thr Leu Tyr Ala Phe Ser Ser Glu Asn Trp Asn Arg Pro

65 70 75 80 Ala Gln Glu Val Thr Ala Leu Met Glu Leu Phe Val Trp Ala Leu Asp

85 90 95 Ser Glu Val Lys Ser Leu His Arg His Asn Val Arg Leu Arg Ile Ile

100 105 110 Gly Glu Thr Ser Arg Phe Asn Ser Arg Leu Gln Glu Arg Ile Arg Lys

115 120 125
Ala Glu Ala Leu Thr Glu Asn Asn Thr Gly Leu Thr Leu Asn Ile Ala

130 135 140 Ala Asn Tyr Gly Gly Arg Trp Asp Ile Ile Gln Gly Val Arg His Leu

145 150 155 160 Ala Glu Gln Val Gln Glu Gly Leu Leu Arg Pro Asp Gln Ile Asp Glu 175 176 1770 178

Glu Ala Leu Ser Gln Gln Ile Cys Met Asn Glu Leu Ala Pro Val Asp 180 185 190

Leu Val Ile Arg Thr Gly Gly Glu His Arg Ile Ser Asn Phe Leu Leu 195 200 205

Trp Gln Ile Ala Tyr Ala Glu Leu Tyr Phe Thr Asp Val Leu Trp Pro 210 215 220

Asp Phe Asp Glu Gln Asp Phe Glu Gly Ala Leu His Ala Phe Ala Asn 225 230 235 240

<210> 8356

<211> 287

<212> PRT

<213> Enterobacter cloacae

<400> 8356

Leu Leu Lys Tyr Arg Leu Ile Ser Ala Phe Val Leu Ile Pro Val I 1 5 10 15 Val Ile Ala Ala Leu Phe Leu Leu Pro Pro Val Gly Phe Ala Ile Val

20 25 30 Thr Leu Val Val Cys Met Leu Ala Ala Trp Glu Trp Gly Gln Leu Ser

35 40 45 Gly Phe Thr Ser Arg Thr Gln Arg Val Trp Leu Ala Val Leu Cys Gly 50 55 60

Phe Leu Leu Ala Leu Met Leu Tyr Thr Leu Pro Glu Tyr His His Asp 65 70 75 80

Val His Gln Pro Leu Val Ala Gly Ser Leu Trp Ile Ser Leu Ala Trp 85 90 95 Trp Ile Ala Ala Leu Val Leu Val Leu Phe Tyr Pro Gly Ser Ala Ala

100

110

```
Ile Trp Arg Asn Ser Lys Val Leu Arg Leu Ile Phe Gly Leu Leu Thr
                      120
      115
Ile Val Pro Phe Phe Trp Gly Met Val Ala Leu Arg Ala Trp His Tyr
 130
                 135
                                   140
Asp Glu Asn His Tyr Ser Gly Ala Ile Trp Leu Leu Tyr Val Met Ile
145
    150
                               155
Leu Val Trp Gly Ala Asp Ser Gly Ala Tyr Met Phe Gly Lys Leu Phe 165 \\ 170 \\ 175
Gly Lys His Lys Leu Ala Pro Lys Val Ser Pro Gly Lys Thr Trp Gln
        180 185 190
Gly Phe Ile Gly Gly Leu Phe Thr Ala Ala Ile Ile Ser Trp Gly Tyr
    195 200 205
Gly Val Trp Ala Asn Leu Glu Val Ala Pro Ser Thr Leu Leu Val Cys
 210 215
                                  220
Ser Ile Phe Ala Ala Leu Ala Ser Val Leu Gly Asp Leu Thr Glu Ser
    230 235
Met Phe Lys Arg Glu Ala Gly Ile Lys Asp Ser Gly His Leu Ile Pro
            245 250 255
Gly His Gly Gly Ile Leu Asp Arg Ile Asp Ser Leu Thr Ala Ala Val
   260 265 270
Pro Val Phe Ala Cys Leu Leu Leu Leu Val Phe Gly Thr Ile
             280
<210> 8357
<211> 483
<212> PRT
<213> Enterobacter cloacae
<400> 8357
Glu Glu Arg Ile Ile Thr Met Ala Met Lys Lys Leu Leu Ile Ala Ser
                           10
Leu Leu Phe Ser Ser Ala Thr Val Tyr Gly Ala Asp Gly Phe Val Val
 2.0
                         25
Lys Asp Ile His Phe Glu Gly Leu Gln Arg Val Ala Val Gly Ala Ala
 35 40
                                      45
Leu Leu Ser Met Pro Val Arg Pro Gly Asp Thr Val Asn Asp Glu Asp
 50 55
Ile Ser Asn Thr Ile Arg Ala Leu Phe Ala Thr Gly Asn Phe Glu Asp
             70
Val Arg Val Leu Arg Asp Gly Asp Thr Leu Val Val Gln Val Lys Glu
           85 90
Arg Pro Thr Ile Ala Ser Ile Thr Phe Ser Gly Asn Lys Ser Val Lys
       100
                       105
Asp Asp Met Leu Lys Gln Asn Leu Glu Ala Ser Gly Val Arg Val Gly
                                      125
      115
                   120
Glu Ser Leu Asp Arg Thr Thr Leu Ala Asp Ile Glu Lys Gly Leu Glu
                   135
                                   140
  130
Asp Phe Tyr Tyr Ser Val Gly Lys Tyr Ser Ala Ser Val Lys Ala Val
             150
                               155
145
Val Thr Pro Leu Pro Arg Asn Arg Val Asp Leu Lys Leu Val Phe Gln
                             170
            165
Glu Gly Val Ser Ala Lys Ile Gln Gln Ile Asn Ile Val Gly Asn His
         180
                         185
                                          190
Ala Phe Ser Thr Asp Glu Leu Ile Ser Asn Phe Gln Leu Arg Asp Glu
                      200 205
      195
Val Pro Trp Trp Asn Val Val Gly Asp Arg Lys Tyr Gln Lys Gln Lys
                   215 220
Leu Ala Gly Asp Leu Glu Thr Leu Arg Ser Tyr Tyr Leu Asp Arg Gly
            230 235
Tyr Ala Arg Phe Asn Ile Asp Ser Thr Gln Val Ser Leu Thr Pro Asp
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250

245

Lys Lys Gly Ile Tyr Ile Thr Val Asn Ile Thr Glu Gly Asp Lys Tyr 260 265 Thr Leu Ser Gly Val Glu Val Ser Gly Asn Leu Ala Gly His Ser Ala 280 275 285 Glu Ile Glu Ser Leu Thr Lys Ile Gln Pro Gly Asp Leu Tyr Ser Gly 300 290 295 Ser Lys Val Thr Lys Met Glu Asp Ser Ile Lys Lys Leu Leu Gly Arg 305 310 315 Tyr Gly Tyr Ala Tyr Pro Arg Val Gln Thr Gln Pro Glu Ile Asn Asp 325 330 Thr Asp Lys Thr Val Lys Leu His Val Asn Val Asp Ala Gly Asn Arg $340 \hspace{1.5cm} 345 \hspace{1.5cm} 350$ Phe Tyr Val Arg Lys Ile Arg Phe Glu Gly Asn Asp Thr Ser Lys Asp 355 360 365 Ser Val Leu Arg Arg Glu Met Arg Gln Met Glu Gly Ala Trp Leu Gly 370 375 380 Ser Asp Leu Val Asp Gln Gly Lys Glu Arg Leu Asn Arg Leu Gly Tyr 390 395 Phe Glu Thr Val Asp Thr Asp Thr Gln Arg Val Pro Gly Arg Pro Asp 405 410 415Gln Val Asp Val Val Tyr Lys Val Lys Glu Arg Asn Thr Gly Ser Phe 420 425 430 Asn Phe Gly Ile Gly Tyr Gly Thr Glu Ser Gly Val Ser Phe Gln Val 435 440 Gly Val Gln Gln Asp Asn Trp Leu Gly Thr Gly Tyr Ser Val Gly Ile $450 \ \ 455 \ \ 460$ Asn Gly Thr Lys Asn Asp Tyr Gin Thr Tyr Ser Glu Phe Ser Val Thr 465 470 Asn Pro

<210> 8358 <211> 334 <212> PRT

<213> Enterobacter cloacae

<400> 8358 Phe Thr Val Asp Gly Val Ser Leu Gly Gly Arg Ile Phe Tyr Asn Asp Phe Lys Ala Asp Asp Ala Asp Leu Ser Ser Tyr Thr Asn Lys Ser Tyr 20 25 3.0 Gly Leu Asp Gly Thr Leu Gly Phe Pro Val Asn Glu Tyr Asn Thr Leu 40 4.5 Arg Ala Gly Leu Gly Tyr Val His Asn Asp Leu Ser Asn Met Gln Pro 55 Gln Val Ala Met Trp Arg Tyr Leu Asp Ser Ile Gly Gln Ser Ala Ser 70 75 Thr Ser Ser Asp Asp Asn Gly Phe Ala Ala Asp Asp Phe Thr Phe Asn 85 90 Tyr Gly Trp Thr Tyr Asn Arg Leu Asp Arg Gly Tyr Phe Pro Thr Glu 105 100 Gly Ser Arg Val Asn Leu Asn Gly Lys Val Thr Ile Pro Gly Ser Asp 120 115 125 Asn Glu Phe Tyr Lys Val Thr Leu Asp Thr Ala Ser Tyr Phe Pro Ile 135 140 Asp Glu Asp His Lys Trp Val Val Leu Gly Arg Thr Arg Trp Gly Tyr 150 155 Gly Asp Gly Ile Gly Ser Lys Glu Leu Pro Phe Tyr Glu Asn Phe Tyr 165 170 Ala Gly Gly Ser Ser Thr Val Arg Gly Phe Gln Ser Asn Asn Ile Gly 180 185 190

```
Pro Lys Ala Val Tyr Tyr Gly Gly Asn Asp Glu Asp Asn Cys Asn Lys
                      200
 195
Pro Ala Thr Asp Gly Ala Gly Asn Lys Asn Val Cys Ser Ser Asp Asp
                   215
                                   220
Ala Val Gly Gly Asn Ala Met Ala Val Ala Ser Leu Glu Phe Ile Thr
225 230 235 240
Phe Phe Met Asp Ala Gly Thr Val Trp Asp Thr Asn Trp Gln Asn Thr
         260 265 270
Thr Glu Thr Arg Leu Ala Gly Val Pro Asp Tyr Ser Asp Pro Ser Asn
     275 280 285
Ile Arg Met Ser Ala Gly Ile Ala Leu Gln Trp Met Ser Pro Leu Gly
 290 295 300
Pro Leu Val Phe Ser Tyr Ala Gln Pro Phe Lys Lys Tyr Asp Gly Asp
305 310 315
Lys Ala Glu Gln Phe Gln Phe Asn Ile Gly Lys Thr Trp
             325
                             330
<210> 8359
<211> 187
<212> PRT
<213> Enterobacter cloacae
<400> 8359
Asn Asp Arg Leu Ala Thr Gln Arg Thr Val Pro Leu Gly Cys Gln Trp
1
                             10
Asp Gly Lys Glu Leu Ile Val Lys Lys Trp Leu Leu Ala Ala Gly Leu
         20
                          25
Gly Leu Ala Met Ala Thr Ser Ala Gln Ala Ala Asp Lys Ile Ala Ile
35
                    40
                                       4.5
Val Asn Met Gly Asn Leu Pne Gln Gln Val Ala Gln Lys Thr Gly Val
5.0
                 55
Ser Ala Thr Leu Glu Asn Glu Phe Lys Gly Arg Ala Ser Glu Leu Gln
             70
                                75
                                                8.0
Arg Met Glu Gly Asp Leu Gln Ser Lys Met Gln Arg Leu Gln Arg Asp
                             90
            85
Gly Ser Thr Met Lys Ala Ser Glu Arg Ser Lys Leu Glu Lys Asp Val
                          105
                                         110
         100
Met Ser Gln Arg Gln Thr Phe Ser Gln Lys Ala Gln Ala Phe Glu Gln
                      120
                           125
      115
Asp Arg Gln Arg Arg Ser Asn Glu Glu Arg Gly Lys Leu Val Thr Arg
                   135
  130
                                    140
Ile Gln Ser Ala Val Lys Ala Val Ala Ala Asp Gln Ser Ile Asp Leu
145
                150
                                155
Val Val Asp Ser Asn Ala Val Ala Phe Asn Ser Ser Asp Val Lys Asp
             165
                             170
                                              175
Ile Thr Ala Asp Val Leu Lys Gln Val Lys
         180
<210> 8360
<211> 343
<212> PRT
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<213> Enterobacter cloacae

<400> 8360 Val Met Pro Ser Ile Arg Leu Ala Asp Leu Ala Gln Gln Leu Asp Ala 10 Glu Leu His Gly Asp Gly Asp Ile Val Ile Thr Ala Val Ala Ser Met 25 Gln Ser Ala Lys Ala Gly Thr Ile Thr Phe Met Val Ser Pro Lys Tyr Arg Glu His Leu Ala Gln Cys Gln Ala Ser Ala Val Val Leu Thr Gln 5.5 Asp Asp Leu Pro Phe Ala Thr Ser Ala Ala Leu Val Val Lys Asn Pro 70 75 Tyr Leu Thr Tyr Ala Arg Met Ala Gln Ile Leu Asp Thr Thr Pro Gln 85 90 Pro Ala Gln Asn Ile Ala Ala Ser Ala Ala Ile Asp Pro Thr Ala Gln 100 105 110 Leu Gly Asn Asn Val Ser Val Gly Ala Asn Ala Val Ile Glu Ser Gly 115 120 125 Val Val Leu Gly Asp Asn Val Val Ile Gly Pro Gly Cys Phe Val Gly 135 140 Lys Asn Thr Lys Ile Gly Ala Gly Thr Arg Leu Trp Ala Asn Val Ser 145 150 155 Val Tyr His Glu Val Glu Val Gly Glu Asn Cys Leu Val Gln Ser Ser 165 170 175 Thr Val Ile Gly Ser Asp Gly Phe Gly Tyr Ala Asn Asp Arg Gly Asn 180 185 Trp Val Lys Ile Pro Gln Leu Gly Arg Val Ile Ile Gly Asp Arg Val 195 200 Glu Ile Gly Ala Cys Thr Thr Ile Asp Arg Gly Ala Leu Asp Asp Thr 215 Ile Ile Gly Asn Gly Val Ile Ile Asp Asn Gln Cys Gln Ile Ala His 230 235 Asn Val Val Ile Gly Asp Asn Thr Ala Val Ala Gly Gly Val Ile Met 245 250 Ala Gly Ser Leu Lys Ile Gly Arg Tyr Cys Met Ile Gly Gly Ala Ser 260 265 270 Val Ile Asn Gly His Met Glu Ile Cys Asp Lys Val Thr Val Thr Gly 280 285 Met Gly Met Val Met Arg Pro Ile Thr Glu Pro Gly Val Tyr Ser Ser 290 295 300 Gly Ile Pro Leu Gln Pro Asn Lys Val Trp Arg Lys Thr Ala Ala Leu 305 310 315 320Val Met Asn Ile Asp Asp Met Ser Lys Arg Leu Lys Ala Ile Glu Arg 325 330

Lys Ile Asp Gln Gln Asp 340

<210> 8361 <211> 210 <212> PRT

<213> Enterobacter cloacae

<400> 8361

Ala Gly Gly Arg Cys Gly Ala Gly Val Ser Thr Met Met Glu Phe Ile Tyr Pro His Thr His Leu Val Ala Gly Val Asp Glu Val Gly Arg Gly 25 20 Pro Leu Val Gly Ala Val Val Thr Ala Ala Val Ile Leu Asp Pro Ala Arg Pro Ile Val Gly Leu Asn Asp Ser Lys Lys Leu Ser Glu Lys Arg 55 Arg Leu Ala Leu Phe Asp Glu Ile Lys Glu Lys Ala Leu Ala Trp Ser . 75 70 Leu Gly Arg Ala Glu Pro His Glu Ile Asp Asp Leu Asn Ile Leu His 8.5 95 Ala Thr Met Leu Ala Met Gln Arg Ala Val Ala Gly Leu Lys Ile Val 105 Pro Glu Tyr Val Leu Phe Asp Gly Asn Arg Cys Pro Ala Leu Pro Met

Pro Ser Met Ala Val Val Lys Gly Asp Ser Arg Val Ala Glu Ile Ser 130 135 140 Ala Ala Ser Ile Ile Ala Lys Val Thr Arg Asp Ala Glu Met Ala Ala 150 155 Leu Asp Leu Thr Tyr Pro Ala Tyr Gly Phe Ala Gln His Lys Gly Tyr 165 170 Pro Thr Ala Phe His Leu Glu Lys Leu Ala Glu His Gly Ala Thr Glu 180 185 190 His His Arg Arg Ser Phe Gly Pro Val Lys Arg Ala Leu Gly Leu Val Ser 210 <210> 8362 <211> 712 <212> PRT <213> Enterobacter cloacae <400> 8362 Thr Met Asn Ile Ile Ala Ile Met Gly Pro His Gly Val Phe Tyr Lys 10 Asp Glu Pro Ile Lys Glu Leu Glu Gln Ala Leu Lys Ala Arg Gly Tyr 20 25 Gln Leu Ile Trp Pro Gln Asn Ser Ala Asp Leu Leu Lys Phe Ile Glu 40 His Asn Pro Arg Ile Cys Gly Val Ile Phe Asp Trp Asp Glu Tyr Asp 55 60 Met Glu Leu Cys Ser Asp Ile Asn Lys Leu Asn Glu Tyr Leu Pro Leu 65 70 75 80 Tyr Ala Phe Ile Asn Thr His Ser Thr Met Asp Val Ser Ala His Asp 8.5 90 Met Arg Met Ala Leu Trp Phe Phe Glu Tyr Ser Leu Gly Val Ala Glu 100 105 Asp Ile Ala Thr Arg Ile Gln Gln Tyr Thr Gly Glu Tyr Leu Asp Asn 115 120 125 Ile Thr Pro Pro Phe Thr Arg Ala Leu Phe Thr Tyr Val Lys Glu Gly 130 135 140 Lys Tyr Thr Phe Cys Thr Pro Gly His Met Ala Gly Thr Ala Tyr Gln 150 155 Lys Ser Pro Val Gly Cys Leu Phe Tyr Asp Phe Phe Gly Gly Asn Thr 165 170 Leu Lys Ala Asp Val Ser Ile Ser Val Thr Glu Leu Gly Ser Leu Leu 180 185 190 Asp His Thr Gly Pro His Leu Glu Ala Glu Glu Tyr Ile Ala Arg Thr 200 205 Phe Gly Ala Glu Gln Ser Tyr Met Val Thr Asn Gly Thr Ser Thr Ser 215 220 Asn Lys Ile Val Gly Met Tyr Ala Ala Pro Ala Gly Ser Thr Leu Leu 230 235 Ile Asp Arg Asn Cys His Lys Ser Leu Ala His Leu Leu Met Met Ser 245 250 Asp Val Val Pro Leu Trp Leu Ser Pro Thr Arg Asn Ala Leu Gly Ile 270 260 265 Leu Gly Gly Ile Pro Arg Arg Glu Phe Ala His Glu Ala Ile Glu Asn 280 Lys Ile Ala Ala Ile Pro Glu Ala Ser Trp Pro Val His Ala Val Ile 295 300 Thr Asn Ser Thr Tyr Asp Gly Leu Leu Tyr Asn Thr Asn Trp Ile Lys 310 315 Gln Thr Leu Asp Val Pro Ser Ile His Phe Asp Ser Ala Trp Val Pro

```
325
                           330
Tyr Thr Asn Phe His Pro Ile Tyr Ser Gly Lys Ser Gly Met Ser Gly
        340
                       345
Glu Arg Val Pro Gly Lys Val Phe Phe Glu Thr Gln Ser Thr His Lys
     355 360
Met Leu Ala Ala Phe Ser Gln Ala Ser Leu Ile His Ile Lys Gly Glu
       375
                      380
Tyr Asp Glu Asp Thr Phe Asn Glu Ala Phe Met Met His Thr Thr Thr
     390 395
Ser Pro Ser Tyr Pro Leu Val Ala Ser Ile Glu Thr Ala Ala Ala Met
         405 410 415
Leu Arg Gly Asn Pro Gly Lys Arg Leu Ile Asn Arg Ser Val Glu Arg
       420 425 430
Ala Leu His Phe Arg Lys Glu Val Gln Arg Leu Lys Asp Glu Ala Asp
     435 440 445
Gly Trp Phe Phe Asp Ile Trp Gln Pro Glu Glu Ile Asp Glu Ala Glu
 450 455 460
Cys Trp Pro Val Ala Pro Gly Glu Ser Trp His Gly Phe Arg Asp Ala
     470 475
Asp Ala Asp His Met Phe Leu Asp Pro Val Lys Val Thr Ile Leu Thr
         485 490 495
Pro Gly Met Asp Glu Gln Gly Val Met Gly Glu Glu Gly Ile Pro Ala
      500 505 510
Ala Leu Val Ala Lys Phe Leu Asp Glu Arg Gly Val Val Val Glu Lys
 515 520 525
Thr Gly Pro Tyr Asn Leu Leu Phe Leu Phe Ser Ile Gly Ile Asp Lys
530 535 540
Thr Arg Ala Met Gly Leu Leu Arg Gly Leu Met Glu Phe Lys Arg Ala
545 550 555
Tyr Asp Leu Asn Leu Arg Val Lys Asn Met Leu Pro Asp Leu Tyr Ala
           565
               570
Glu Asp Pro Asp Phe Tyr Arg Asn Met Arg Ile Gln Asp Leu Ala Gln
        580
            585
Gly Ile His Arg Leu Ile Arg Gln His Asp Leu Pro Arg Leu Met Leu
                    600 605
Gln Ala Phe Asp Val Leu Pro Glu Met Lys Leu Thr Pro His Arg Ala
               615
                                620
Trp Gln Arg Gln Val Lys Gly Glu Val Glu Thr Val Glu Leu Glu Asn
            630
                             635
Leu Val Gly Arg Val Ser Ala Asn Met Ile Leu Pro Tyr Pro Pro Gly
           645 650 655
Val Pro Leu Leu Met Pro Gly Glu Met Ile Thr Glu Glu Ser Arg Ala
                       665
                           670
        660
Val Leu Asp Phe Leu Leu Met Leu Cys Ser Val Gly Arg His Tyr Pro
                    680
Gly Phe Glu Thr Asp Ile His Gly Ala Lys Arg Asp Asp Asn Gly Val
                 695
                                700
Tyr Trp Val Arg Val Leu Lys
<210> 8363
<211> 134
<212> PRT
<213> Enterobacter cloacae
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<400> 8363

Lys Gly Glu Thr Met Leu Gly Leu Lys Ala Val His His Ile Ala Ile 10 Ile Ala Thr Asp Tyr Ala Lys Ser Lys Ala Phe Tyr Cys Asp Val Leu Gly Phe Thr Leu Leu Ser Glu Ala Tyr Arg Glu Glu Arg Asp Ser Trp

Lys Gly Asp Leu Ala Leu Asn Gly Gln Tyr Val Ile Glu Leu Phe Ser 55 Phe Pro Phe Pro Pro Ala Arg Pro Ser Arg Pro Glu Ala Cys Gly Leu 70 Arg His Leu Ala Phe Ser Val Asp Asp Leu Asp Ser Ala Val Lys His 85 90 Leu Glu Ala His Gly Val Ala Cys Glu Ala Ile Arg Val Asp Pro Phe 105 110 100 Thr Asp Lys Arg Phe Thr Phe Phe Asn Asp Pro Asp Gly Leu Pro Leu 115 120 Glu Leu Tyr Gln Gln 130 <210> 8364 <211> 400 <212> PRT <213> Enterobacter cloacae <400> 8364 Leu Asn Phe Pro Met Leu Glu Leu Cys Ser Arg Glu Gly Phe Met Ala 1.0 Gly Trp His Leu Asp Thr Lys Met Ala Gln Asp Ile Val Ala Arg Thr 25 Met Arg Ile Ile Asp Thr Asn Ile Asn Val Met Asp Ala Arg Gly Arg 40 Ile Ile Gly Ser Gly Asp Arg Glu Arg Ile Gly Glu Leu His Glu Gly 55 60 Ala Leu Leu Val Leu Ser Gln Gly Arg Val Val Asp Ile Asp Asp Ala 7.0 75 Val Ala Lys His Leu His Gly Val Arg Gln Gly Ile Asn Leu Pro Leu 85 90 Arg Leu Glu Gly Glu Ile Val Gly Val Ile Gly Leu Thr Gly Asp Pro 100 105 110 Glu Ser Leu Arg Lys Tyr Gly Glu Leu Val Cys Met Thr Ala Glu Met 120 125 Met Leu Glu Gln Ser Arg Leu Met His Leu Leu Ala Gln Asp Ser Arg 135 140 Leu Arg Glu Glu Leu Val Met Asn Leu Ile Gln Ala Glu Glu His Thr 150 155 Pro Ala Leu Ser Glu Trp Ala Gln Arg Leu Gly Ile Asp Leu Asn Gln 165 170 Pro Arg Val Val Ala Val Ile Glu Val Asp Ser Gly Gin Leu Gly Val 180 185 190 Asp Ser Ala Met Val Glu Leu Gln Gin Leu Gln Asn Met Leu Ala Thr 200 205 Pro Glu Arg Asn Asn Leu Val Ala Ile Val Ser Leu Thr Glu Met Val 215 220 Val Leu Lys Pro Ala Leu Asn Gln Phe Gly Arg Trp Asp Ala Glu Asp 230 235 His Arg Arg Arg Val Glu Leu Leu Ile Glu Arg Met Lys Glu Asn Gly 245 250 Gln Leu Arg Phe Arg Val Ala Leu Gly Asn Tyr Phe Thr Gly Pro Gly 260 265 270 Ser Ile Ala Arg Ser Trp Arg Thr Ala Arg Thr Thr Met Met Val Gly 275 280 285 Lys Gln Arg Met Pro Glu Ser Arg Ser Tyr Phe Tyr Gln Asp Leu Met

295

310

Leu Pro Val Leu Leu Asp Ser Leu Arg Gly Gly Trp Gln Ala Asn Glu

Leu Ala Arg Pro Leu Met Arg Leu Lys Ala Met Asp Asn Asn Gly Leu

300

315

325 330 Leu Arg Arg Thr Leu Gln Ala Trp Phe Arg His Asn Val Gln Pro Leu 340 345 350 Ala Thr Ser Lys Ala Leu Phe Ile His Arg Asn Thr Leu Glu Tyr Arg 355 360 Leu Asn Arg Ile Ser Glu Leu Thr Gly Leu Asp Leu Gly Asn Phe Asp 370 375 380 Asp Arg Leu Leu Tyr Val Ala Leu Gln Leu Asp Glu Gln Arg 390 <210> 8365 <211> 424 <212> PRT <213> Enterobacter cloacae <400> 8365 Thr Pro Phe Arg Arg Thr Leu Ser Leu Ala Gly Gly Val Leu Leu Leu Ser Asp Leu Thr Phe Gly His Leu Met Lys His Leu Thr Leu Leu Gly 25 20 Ser Thr Gly Ser Ile Gly Cys Ser Thr Leu Asp Val Val Arg His Asn 35 4.0 Pro Asp Ser Tyr Thr Val Ala Ala Leu Val Ala Gly Lys Asn Val Gln 55 50 60 Arg Met Val Glu Gln Cys Leu Glu Phe Thr Pro Arg Phe Ala Val Met 65 70 Asp Asp Glu Glu Ser Ala Arg Gln Val Lys Ala Leu Leu Gln Glu Lys 85 90 Gly Cys Arg Thr Glu Val Leu Ser Gly Gln Gln Ala Ala Cys Asp Met 100 105 110 Ala Ala Leu Asp Glu Val Asp Gln Val Met Ala Ala Ile Val Gly Ala 115 120 125 Ala Gly Leu Leu Pro Thr Leu Ala Ala Ile Asp Ala Gly Lys Asp Val 130 135 140 Leu Leu Ala Asn Lys Glu Ser Leu Val Thr Cys Gly Arg Leu Phe Met 150 155 Asp Ala Val Lys Gln Arg Gly Ala Arg Leu Leu Pro Val Asp Ser Glu 165 170 175 His Asn Ala Ile Phe Gln Ser Leu Pro Gln Pro Phe Gln Gln Asn Leu 185 190 180 Gly Tyr Ala Asp Leu Glu Gln Asn Gly Val Val Ser Ile Leu Leu Thr 195 200 205 Gly Ser Gly Gly Pro Phe Arg Glu Thr Pro Leu Ser Glu Leu Ser Ala 210 215 220 Met Thr Pro Asp Gln Ala Cys Arg His Pro Asn Trp Ser Met Gly Arg 230 235 Lys Ile Ser Val Asp Ser Ala Thr Met Met Asn Lys Gly Leu Glu Tyr 245 250 255 Ile Glu Ala Arg Trp Leu Phe Asn Ala Ser Ala Lys Gln Met Glu Val 265 270 260 Leu Ile His Pro Gln Ser Val Ile His Ser Met Val Arg Tyr Gln Asp 280 285 Gly Ser Val Leu Ala Gln Leu Gly Glu Pro Asp Met Arg Thr Pro Ile 295 290 300 Ala His Thr Met Ala Trp Pro Asn Arg Val Lys Ser Gly Val Lys Pro 310 315 Leu Asp Phe Cys Lys Leu Ser Ser Leu Thr Phe Ser Glu Pro Asp Tyr 325 330 335 Asp Arg Tyr Pro Cys Leu Lys Leu Ala Met Thr Ala Phe Asp Gln Gly 345 Gln Ala Ala Thr Thr Ala Leu Asn Ala Ala Asn Glu Val Thr Val Glu

360 Ala Phe Leu Asn Gln Gln Ile Arg Phe Thr Asp Ile Ala Ala Leu Asn 375 380 Leu Ser Val Leu Glu Met Met Asp Leu Arg Glu Pro Gln Ser Val Glu 390 395 Glu Val Leu Ala Val Asp Glu Gln Ala Arg Ile Val Ala Arg Lys Gln 405 Val Thr Arg Leu Ala Ser Trp 420 <210> 8366 <211> 392 <212> PRT <213> Enterobacter cloacae <400> 8366 Thr Phe Asn Pro Trp Ser Asp Ser Leu Met Val Asp Ser Arg Pro Leu 10 Thr Ile Ala Leu Val Ala Gly Glu Thr Ser Gly Asp Ile Leu Gly Ala 20 25 Gly Leu Ile Arg Ala Leu Lys Ala Arg Val Pro Asn Ala Arg Phe Val 35 40 Gly Val Ala Gly Pro Leu Met Gln Ala Glu Gly Cys Glu Ala Trp Tyr 55 Glu Met Glu Glu Leu Ala Val Met Gly Ile Val Glu Val Leu Gly Arg 70 7.5 Leu Arg Arg Leu Leu His Ile Arg Ala Asp Leu Thr Arg Arg Phe Thr 85 90 Asp Leu Lys Pro Asp Val Phe Val Gly Ile Asp Ala Pro Asp Phe Asn 100 105 Ile Thr Leu Glu Gly Asn Leu Lys Lys Gln Gly Ile Lys Thr Ile His 115 120 Tyr Val Ser Pro Ser Val Trp Ala Trp Arg Gln Lys Arg Val Phe Lys 130 135 140 Ile Gly Arg Ser Thr Asn Leu Val Leu Ala Phe Leu Pro Phe Glu Lys 145 150 155 Ala Phe Tyr Asp Arg Phe Asn Val Pro Cys Arg Phe Ile Gly His Thr 165 170 175 Met Ala Asp Ala Met Pro Leu Asp Pro Asp Lys Asn Ala Ala Arg Asp 180 185 Glu Leu Gly Ile Pro His Asp Val His Cys Leu Ala Leu Leu Pro Gly 195 200 205 Ser Arg Gly Ala Glu Val Glu Met Leu Ser Ala Asp Phe Leu Lys Thr 215 220 Ala Gln Ile Leu Arg Lys Thr Tyr Pro Asp Leu Glu Val Val Val Pro 230 235 Leu Val Asn Ala Lys Arg Arg Glu Gln Phe Glu Arg Ile Lys Ala Asp 245 250 Val Ala Pro Asp Leu His Val Arg Leu Leu Asp Gly Lys Gly Arg Gln 260 265 270 Ala Met Phe Ala Ser Asp Ala Ala Leu Leu Ala Ser Gly Thr Ala Ala 280 285 Leu Glu Cys Met Leu Ala Lys Cys Pro Met Val Val Gly Tyr Arg Met 295 300 Lys Pro Phe Thr Phe Trp Leu Ala Lys Arg Leu Val Lys Thr Asp Tyr 310 315 Val Ser Leu Pro Asn Leu Leu Ala Gly Arg Glu Leu Val Lys Glu Leu 330 325 Leu Gln Asp Glu Cys Gln Pro Gln Ala Leu Ala Asp Ala Leu Leu Pro 340 345 Leu Leu Ala Asn Gly Lys Thr Ser His Gln Met His Asp Thr Phe Arg

```
360
Glu Leu His Gln Leu Ile Arg Cys Asn Ala Asp Glu Gln Ala Ala Asp
          375
Ala Val Leu Glu Leu Ala Gln
               390
<210> 8367
<211> 359
<212> PRT
<213> Enterobacter cloacae
<400> 8367
Phe Pro Met Thr Leu Pro Ala Ile Ala His Ala Val Ser Pro Tyr Arq
                         10
Gln Leu Leu Val Gly Phe Ser Gly Gly Leu Asp Ser Thr Val Leu Leu
  20
                        25
                                        30
His Arg Leu Lys Leu Trp Arg Asp Arg Glu Pro Asp Val Gln Leu Arg
 35
                     40
Ala Met His Ile His His Gly Leu Ser Pro His Ala Asp Asp Trp Val
50
                 55
                                60
Ala His Cys Glu Ala Val Cys Ser Gly Trp Glu Ile Pro Leu Ile Val
65 70
                              7.5
Glu Arg Val Thr Leu Glu Asp Glu Gly Leu Gly Ile Glu Ala Gln Ala
      85
                           90
Arg Lys Ala Arg Tyr Ala Ala Phe Ser Gly Ala Leu Gln Pro Gly Glu
    100 105 110
Ala Leu Val Thr Ala Gln His Leu Asp Asp Gln Cys Glu Thr Phe Leu
115 120 125
Leu Ala Leu Lys Arg Gly Ser Gly Pro Ala Gly Leu Ser Ala Met Pro
130 135
Glu Arg Ala Asp Phe Ala Glu Thr Glu Leu Ile Arg Pro Leu Leu Gly
    150 155
Glu Thr Arg Ala Ser Leu Glu Ala Trp Ala Gln Gln His His Leu Cys
        165 170 175
Trp Ile Glu Asp Asp Ser Asn Gln Asp Asp Ser Tyr Asp Arg Asn Phe
        180 185 190
Leu Arg Leu Arg Val Leu Pro Leu Leu Ser Glu Arg Trp Ala His Phe
     195 200 205
Ser Glu Ala Ala Ala Arg Ser Ala Met Leu Cys Ala Glu Gln Glu Ser
  210 215 220
Leu Leu Asp Glu Leu Leu Ser Gly Glu Leu Asn Thr Leu Ile Thr Ala
         230
                              235
Asp Gly Ala Leu Asn Val Ala Pro Leu Lys Val Met Ser Pro Val Arg
            245
                           250 255
Arg Ala Ala Leu Ile Arg Arg Trp Leu Ala Tyr His Arg Ala Val Met
         260
                        265 270
Pro Ser Arg Ala Met Leu Asn Arg Ile Trp Glu Glu Val Ala Gln Ala
                     280
                                     285
Arg Glu Asp Ala Ala Pro Cys Ile His Leu Asn Gly Tyr Asp Val Arg
                  295
                                  300
Arg Tyr Lys Gly Gln Leu Trp Trp Val Lys Ser Val Pro Ser Leu Ala
               310
                               315
Asp Val Val Leu Asp Trp Pro Ser Pro Glu Lys Ala Leu Thr Leu Pro
            325 330
Met Asn Ala Gly Val Val Ala Leu Ser His Ser Phe Phe Thr His Arg
         340
                        345
Gly Trp Gln His Arg Ala
      355
```

<210> 8368 <211> 91

```
<212> PRT
<213> Enterobacter cloacae
<400> 8368
Lys Arg Pro Ile Thr Ile Leu Gly Arg Gln Asn Ser Leu Gly His Pro
                        10
                                   1.5
Arg Ile Gly Leu Thr Val Ala Lys Lys Asn Val Lys Arg Ala His Glu
         20
                           25
                                           3.0
Arg Asn Arg Ile Lys Arg Leu Thr Arg Glu Ser Phe Arg Val Arg Gln
  35
                4.0
His Glu Leu Pro Ser Met Asp Pne Val Val Val Ala Lys Lys Gly Val
 50 55
                        60
Ala Asp Leu Asp Asn Arg Ala Leu Ser Glu Ala Leu Glu Lys Leu Trp
65 70 75
Arg Arg His Cys Arg Leu Ala Arg Gly Ser
             8.5
<210> 8369
<211> 379
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(126)
<220>
<221>UNSURE
<222>(168)
<400> 8369
Val Cys Gly Glu Thr Trp Ala Thr Ala Tyr Arg Thr Pro Val Arg Asn
Arg Trp Glu Ile Ser Thr Phe Gly Gln Leu Lys Gln Ser Ile Asn Leu
         20
                    25
                                           30
Pro Ser His Arg Asp Thr Gly Ser Ser Asn Phe Ala Leu His Thr Phe
          40
                                      4.5
Arg Gly Ala Ala Tyr Ser Thr Pro Asp Thr Lys Tyr Glu Lys Tyr Lys
                 55
                                    60
Phe Asp Thr Ile Ala Asp Asn Glu Asn Leu Asn Val Ser Ser Lys Gly
              70 75
                                                  8.0
Gly Trp Val Ala Met Leu Gln Gln Tyr Phe Ala Thr Ala Trp Val Pro
             8.5
                              90
Asn Asn Asp Gly Thr Asn Tyr Phe Tyr Thr Ala Asn Leu Gly Asn Gly
          100 105
                                          110
Ile Ala Ala Ile Gly Tyr Lys Ser Gln Pro Val Leu Val Xaa Pro Gly
      115
                     120
                                         125
Gln Thr Gly Lys Leu Ala Ser Thr Leu Trp Val Gly Pro Glu Ile Gln
                    135
                                     140
Asp Lys Met Ala Ala Val Ala Pro His Leu Asp Leu Thr Val Asp Tyr
      150
                                155
                                                  160
145
Gly Trp Leu Trp Phe Ile Ser Xaa Pro Leu Phe Lys Leu Leu Lys Phe
             165 170 175
Ile His Ser Phe Leu Gly Asn Trp Gly Phe Ser Ile Ile Val Ile Thr
          180
                           185
Phe Ile Val Arg Gly Ile Met Tyr Pro Leu Thr Lys Ala Gln Tyr Thr
       195
                                        205
Ser Met Ala Lys Met Arg Met Leu Gln Pro Lys Ile Gln Ala Met Arg
                    215
                                    220
Glu Arg Leu Gly Asp Asp Lys Gln Arg Gln Ser Gln Glu Met Met Ala
                 230
                                  235
                                                   240
```

Leu Tyr Lys Ala Glu Lys Val Asn Pro Leu Gly Gly Cys Phe Pro Leu 245 250 Leu Ile Gln Met Pro Ile Phe Leu Ala Leu Tyr Tyr Met Leu Met Gly 260 265 Ser Val Glu Leu Arg His Ala Pro Phe Ala Leu Trp Ile His Asp Leu 280 275 285 Ser Ala Gln Asp Pro Tyr Tyr Ile Leu Pro Ile Leu Met Gly Val Thr 295 300 Met Phe Phe Ile Gln Lys Met Ser Pro Thr Thr Val Thr Asp Pro Met 310 315 320 Gln Gln Lys Ile Met Thr Phe Met Pro Val Ile Phe Thr Val Phe Phe 325 330 335 Leu Trp Phe Pro Ser Gly Leu Val Leu Tyr Tyr Ile Val Ser Asn Leu 340 345 350 Val Thr Ile Ile Gln Gln Leu Ile Tyr Arg Gly Leu Glu Lys Arg 355 360 365 Gly Leu His Ser Arg Glu Lys Lys Lys Ser 375

<210> 8370 <211> 459 <212> PRT

<213> Enterobacter cloacae

<400> 8370

Thr Arg Ala Thr Met Ser His Asn Asp Thr Ile Val Ala Gln Ala Thr 10 Pro Pro Gly Arg Gly Gly Val Gly Ile Leu Arg Ile Ser Gly Leu Lys Ala Arg Glu Val Ala Glu Ala Val Leu Gly Lys Leu Pro Lys Pro Arg 35 40 Tyr Ala Asp Tyr Leu Pro Phe Lys Asp Ala Asp Gly Thr Pro Leu Asp 55 Gln Gly Ile Ala Leu Trp Phe Pro Gly Pro Asn Ser Phe Thr Gly Glu 7.0 75 Asp Val Leu Glu Leu Gln Gly His Gly Gly Pro Val Ile Leu Asp Leu 85 90 Leu Leu Lys Arg Ile Leu Thr Leu Pro Gly Leu Arg Ile Ala Lys Pro 100 105 Gly Glu Phe Ser Glu Arg Ala Phe Leu Asn Asp Lys Leu Asp Leu Ala 115 120 125 Gln Ala Glu Ala Ile Ala Asp Leu Ile Asp Ala Ser Ser Glu Gln Ala 130 135 140 Ala Arg Ser Ala Leu Asn Ser Leu Gln Gly Ala Phe Ser Ala Arg Val 150 155 Asn His Leu Val Glu Ala Leu Thr His Leu Arg Ile Tyr Val Glu Ala 165 170 175 Ala Ile Asp Phe Pro Asp Glu Glu Ile Asp Phe Leu Ser Asp Gly Lys 180 185 190 Ile Glu Ala Gln Leu Asn Gln Val Met Asn Asp Leu Asp Ala Val Arg 195 200 205 Ala Glu Ala Arg Gln Gly Ser Leu Leu Arg Glu Gly Met Lys Val Val 210 215 220 Ile Ala Gly Arg Pro Asn Ala Gly Lys Ser Ser Leu Leu Asn Ala Leu 225 230 235 Ala Gly Arg Glu Ala Ala Ile Val Thr Asp Ile Ala Gly Thr Thr Arg 245 250 Asp Val Leu Arg Glu His Ile His Ile Asp Gly Met Pro Leu His Ile 260 265 Ile Asp Thr Ala Gly Leu Arg Asp Ala Ser Asp Glu Val Glu Arg Ile 280

```
Gly Ile Glu Arg Ala Trp Gln Glu Ile Glu Gln Ala Asp Arg Val Leu
                 295
                                   300
Phe Met Val Asp Gly Thr Thr Thr Asp Ala Val Asp Pro Ala Glu Ile
               310
                                315
Trp Pro Asp Phe Ile Ala Arg Leu Pro Ala Lys Leu Pro Ile Thr Val
            325
                             330
                                              335
Val Arg Asn Lys Ala Asp Val Thr Gly Glu Thr Leu Gly Ile Ser Asp
                         345
         340
                                          350
Val Asn Gly His Ser Leu Ile Arg Leu Ser Ala Arg Thr Gly Glu Gly
     355 360
                                      365
Val Glu Ala Leu Arg Ser His Leu Lys Gln Ser Met Gly Phe Asp Thr
 370 375
                                   380
Ser Met Glu Gly Gly Phe Leu Ala Arg Arg Arg His Leu Gln Ala Leu
385 390 395 400
Glu Glu Ala Ala Arg His Leu Glu Gln Gly Lys Ala Gln Leu Ile Gly
       405 410 415
Ala Trp Ala Gly Glu Leu Leu Ala Glu Glu Leu Arg Leu Ala Gln Gln
       420 425 430
Asn Leu Ser Glu Ile Thr Gly Glu Phe Thr Ser Asp Asp Leu Leu Gly
 435 440
Arg Ile Phe Ser Ser Phe Cys Ile Gly Lys
 450 455
<210> 8371
<211> 429
<212> PRT
<213> Enterobacter cloacae
<400> 8371
Phe Pro Leu Ile Gln Gly Asp Phe His Gln Gly Asn His His Cys Pro
                       10
Asn Gly Asn Ser Pro Asn Pro Leu Ser Pro Pro Ile Leu His Ala Cys
       20
                    25
Ile Tyr Gly Gly Phe Met Ala Arg Phe Leu Phe Cys Ser Phe Ala Leu
                     4.0
Val Leu Leu Tyr Pro Ser Gly Ile Asp Met Tyr Leu Val Gly Leu Pro
                  5.5
His Ile Ala Arg Asp Leu Gly Ala Ser Glu Ala Gln Leu His Ile Ala
               70
                               7.5
Phe Ser Ala Tyr Leu Ala Gly Met Ala Ser Ser Met Val Phe Ala Gly
                            90
Lys Ile Ala Asp Lys Ala Gly Arg Gln Pro Val Ala Ile Thr Gly Ala
         100
                         105 110
Val Ile Phe Ala Leu Ala Ser Val Leu Cys Ser Val Ala Gln Glu Ser
                      120
     115
                                       125
Thr Met Phe Leu Ser Gly Arg Phe Ile Gln Gly Ile Gly Ala Gly Gly
                 135 140
Cys Tyr Val Val Ala Phe Ala Ile Leu Arg Asp Thr Leu Ser Ala Gln
    150
145
                                155
Arg Arg Ala Lys Val Leu Ser Met Leu Asn Gly Ile Thr Cys Ile Ile
                            170
                                             175
            165
Pro Val Leu Ala Pro Val Val Gly Tyr Leu Ile Met Leu Lys Phe Pro
                         185
                              190
         180
Trp Gln Ser Leu Phe Trp Thr Met Ala Ala Met Gly Ala Ile Val Phe
    195
                   200
                                      205
Ile Leu Ser Val Thr Val Leu Lys Glu Thr His Pro Gly Ser Gln Gln
   210
                215
Pro Tyr His Thr Ala Thr Leu His Pro Ala Glu Lys Leu Val Asn Arg
225 230
                                235
Phe Phe Leu Ser Arg Leu Ala Ile Thr Thr Leu Ser Val Ala Val Ile
             245
                             250
```

```
Leu Thr Tyr Val Asn Val Ser Pro Val Leu Leu Met Glu Thr Met Gly
               265
         260
Phe Asp Arg Gly Glu Tyr Ser Thr Val Met Ala Leu Thr Ala Met Val
    275
                  280
                            285
Ser Met Ala Val Ser Phe Ser Thr Pro Phe Ala Leu Asn Ile Phe Arg
 290 295 300
Gln Arg Thr Leu Met Leu Thr Ser Gln Thr Leu Phe Leu Ala Ala Gly
305 310 315
Val Ile Leu Ala Thr Ala Thr Ser His Ala Val Met Leu Val Gly Ile
         325 330 335
Thr Leu Ile Cys Ala Gly Phe Ser Val Gly Phe Gly Val Ala Met Ser
         340 345 350
Gln Ala Leu Gly Pro Phe Ser Leu Arg Ala Gly Val Ala Ser Ser Val
    355 360 365
Leu Gly Ile Ala Gln Val Cys Gly Ser Ser Leu Trp Ile Trp Leu Ala
       375
Ala Val Ile Gly Leu Asn Ala Leu Asn Met Leu Ile Gly Val Leu Ile
                390 395
Gly Cys Ser Ile Leu Cys Ile Thr Leu Leu Met Val Ile Gln Pro Ala
           405 410
Ala His Tyr Glu Glu Ala His Gln Gln Ser Arg Ser
                       425
<210> 8372
<211> 259
<212> PRT
<213> Enterobacter cloacae
<400> 8372
Pro Thr Thr Thr Ile Ile Lys Glu Arg Lys Met Ala Thr His Phe Ala
                             10
Arg Gly Thr Leu Thr Glu Gly His Leu Val Ser Ala Arg Leu Ser Ser
 20
                          25
                                          3.0
Ala Cys His Ser Glu Ala Leu Lys Leu Pro Glu His Arg Arg Thr Arg
                     4 0
                                       45
Phe Leu Ala Ser Arg Ala Leu Leu Ala Glu Leu Leu Phe Met Leu Tyr
                 55
5.0
                                    60
Gly Thr Ser Glu Leu Pro Asp Ile Leu Thr Gln Pro Glu Gly Arg Pro
65
         70
                                 75
                                                 80
Val Phe Ala Asp Pro Ala Leu Pro His Phe Ser Ile Ala Tyr Thr Gly
            8.5
                             90
Asn Ile Val Gly Val Ala Leu Thr Thr Glu Gly Asp Cys Gly Leu Asp
         100
                          105
Met Glu Leu Gln Arg Val Thr Arg Ser Phe His Gly Ala Asn Ala Leu
                       120
      115
                                        125
Asp Glu Tyr Pro Leu Ser Ser Asn Glu Lys Leu Trp Ile Arg Asn Gln
                    135
   130
                                    140
Asn Asp Pro Val Glu Ala Arg Ala Gln Leu Ile Thr Leu Arg Gln Ser
145
                150
                                155
Ile Arg Lys Leu Asn Gly Ala Ala Ser Asp Asp Ala Ser Leu Leu Gln
             165
                             170
Leu Leu Pro Gly Ser Gly Arg Leu Arg Ala Thr Lys Ala Ser Leu Val
         180
                          185
                                           190
Glu Ala Leu Ser Asp Ala Glu Asp Val Leu Ile Trp Ser Val Ala Val
      195
                       200
                                       205
Ser Pro Ala Ile Glu Arg Leu Lys Ile Trp Glu Phe Asp Ser Ile Arg
                   215
                                    220
Gly Trp Arg Ser Leu Pro Asp Val Pro Glu Arg Ala Asn Glu Pro Ala
225
               230
                                 235
Ala Arg Leu Met Arg Leu Thr Ser Leu Pro Ala Glu Lys Ala Tyr Thr
```

250

245

His Ser

<210> 8373 <211> 201

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<212> PRT
<213> Enterobacter cloacae
<400> 8373
Ser Val Gln Gly His His Asp Glu Thr Gly Val Ile Met Ser Asp Thr
Leu Lys Val Val Thr Leu Leu Gly Ser Leu Arg Lys Gly Ser Phe Asn
                            25
Gly Met Val Ala Arg Thr Leu Pro Gln Leu Ala Pro Ala Gly Met Glu
                        40
Ile Ser Ala Leu Pro Ser Ile Gly Asp Ile Pro Leu Tyr Asp Ala Asp
                     55
Val Gln Gln Glu Glu Gly Phe Pro Gln Ser Val Glu Ala Ile Ala Glu
                 70
Gln Ile Arg Gln Ala Asp Gly Val Val Ile Val Thr Pro Glu Tyr Asn
                               90
             85
Tyr Ser Val Pro Gly Gly Leu Lys Asn Ala Ile Asp Trp Leu Ser Arg
          100
                           105
Leu Pro Glu Gln Pro Leu Ser Gly Lys Pro Val Leu Ile Gln Thr Ser
 115
                        120
Ser Met Gly Ala Ile Gly Gly Ala Arg Cys Gln Tyr His Leu Arg Gln
 130
                     135 140
Ile Leu Val Phe Leu Asp Ala Met Val Met Asn Lys Pro Glu Phe Met
                 150
                      155
Gly Gly Val Ile Gln Asn Lys Val Asp Pro Gln Thr Gly Glu Val Val
              165 170
Asp Gln Ser Thr Arg Asp His Leu Ser Gly Gln Leu Thr Ala Phe Gly
                         185
          180
Asp Tyr Ile Lys Arg Val Lys Ala
```

```
<210> 8374
<211> 202
<212> PRT
```

195

<213> Enterobacter cloacae

<400> 8374 Tyr Gln Arg Thr Leu Thr Met Asp Ser Gln Arg Asn Leu Leu Ile Ile 10 Ala Leu Leu Phe Val Ser Phe Met Ile Trp Gln Ala Trp Glu Gln Asp 25 3.0 Lys Asn Pro Gln Pro Gln Gln Gln Thr Thr Gln Thr Thr Thr Ala 35 4.0 Ala Gly Ser Ala Ala Asp Gln Gly Val Pro Ala Ser Gly Gln Gly Lys 55 60 Gln Ile Thr Val Lys Thr Asp Val Leu Glu Leu Thr Ile Asn Thr Arg 7.5 Gly Gly Asp Val Glu Gln Ala Leu Leu Leu Thr Tyr Pro Lys Glu Leu 90 85 Lys Ser Thr Glu Pro Phe Gln Leu Leu Glu Thr Thr Pro Glu Phe Ile 105 100 Tyr Gln Ala Gln Ser Gly Leu Thr Gly Arg Asp Gly Pro Asp Asn Pro 120 125 115 Ala Asn Gly Ala Arg Pro Leu Tyr Asn Val Glu Asn Asp Thr Phe Val 135 140 Leu Ala Asp Gly Gln Asn Glu Leu Val Ile Pro Met Thr Tyr Thr Asp

150 155 Ala Ala Gly Asn Thr Phe Thr Lys Thr Phe Thr Leu Lys Arg Gly Glu 165 170 175 Tyr Ala Val Lys Leu Gly Leu Gln Arg Thr Glu Arg Arg Cys Glu Thr 185 180 Ala Gly Lys Ser Leu Pro Leu Val Ser

<210> 8375 <211> 102 <212> PRT

<213> Enterobacter cloacae

<400> 8375

Pro Ala Pro Pro Ala Thr Cys Cys Ala Ser Ile Ser Thr Ser Thr Glu 1.0 Cys Arg Cys Thr Ser Ser Thr Pro Leu Ala Cys Ala Met Arg Ala Met 20 2.5 Lys Ser Ser Val Ser Val Ser Asn Ala Pro Gly Arg Arg Ser Ser Arg 35 40 Pro Thr Ala Cys Cys Leu Trp Trp Thr Ala Pro Gln Pro Thr Pro Leu 50 55

Thr Arg Leu Lys Ser Gly Gln Thr Leu Ser Pro Val Ser Arg Leu Asn 7.0 75 Cys Arg Ser Pro Trp Cys Ala Thr Arg Pro Thr Leu Pro Ala Lys Arg 85

Trp Ala Ser Ala Met

<210> 8376 <211> 343

<212> PRT

<213> Enterobacter cloacae

<400> 8376

Leu Ala Val Ala Tyr Ser Ala Leu Pro Tyr Leu Trp Ser Ser Ser Pro 10 Arg Arg Thr Met Lys Lys Pro Ile Ser Ser Leu Asp Leu Asn Leu Leu 25 Leu Cys Leu Gln Leu Leu Gln Glu Arg Ser Val Thr Lys Ala Ala 40 Lys Arg Met Asn Val Thr Pro Ser Ala Val Ser Lys Ser Leu Ala Lys 5.5 Leu Arg Asp Trp Phe Asp Asp Pro Leu Phe Val Lys Thr Pro Leu Gly 70 7.5 Leu Leu Pro Thr Pro Leu Thr Val Ser Leu Glu Gln Asp Leu Ala Asp 90 8.5 Trp Met Gln Ile Gly Asn Gln Ile Leu Asp Lys Phe His His Ser Ser 100 105 110 Pro Gly Gly Leu Lys Phe Val Leu Ala Ala Glu Thr Pro Leu Met Leu 115 120 125 Ile Arg Phe Asn Thr Leu Leu Glu Gln Val Asn Glu Arg Tyr Pro Gln 135 140 Ala Thr Val Lys Leu Arg Gln Trp Asp Tyr Asp Ser Leu Asp Ala Ile 150 155 Thr Arg Gly Glu Val Asp Leu Gly Phe Thr Gly Arg Glu Thr His Pro 165 170 Arg Ser Arg Glu Leu Leu Lys Leu Met Pro Trp Phe Ile Asp Tyr Glu 180 185 190

Ile Leu Phe Ser Asp Arg Pro Cys Val Tyr Leu Arg Glu Asp His Pro 200

```
Ala Leu Gin Glu Ala Trp Asp Leu Glu Thr Phe Leu Arg Tyr Pro His
                      215
Ile Ser Ile Phe Trp Glu Arg Ser Asp Thr Trp Ala Leu Asp Glu Val
225
                  230
                                    235
Leu Arg Glu Met Gly Arg Glu Arg Asn Ile Ala Met Ser Leu Pro Gly
              245
                                 250
Phe Glu Gln Ser Met Phe Met Ala Ala Gln Pro Asp His Asn Tyr Ile
          260
                            265
                                   270
Ala Thr Ala Pro His Tyr Cys His His Tyr Asn Gln Leu His Gln Arg
      275 280 285
Asn Leu Val Cys Leu Pro Ile Pro Ile Asp Glu Ala Gln Ala Glu Lys
 290 295
                           300
Leu Thr Val Pro Phe Thr Leu Ile Trp His Lys Arg Asn Ser His Asn
305 310 315
Pro Lys Ile Leu Trp Leu Arg Glu Thr Ile Lys Ala Leu Tyr Thr Ala
       325 330
Pro Asp Gln Val Phe Ala
          340
<210> 8377
<211> 96
<212> PRT
<213> Enterobacter cloacae
<400> 8377
Pro Cys Ser Leu Gly Ser Val Gly Lys Ile Met Ala Pro Pro Leu Ser
                                 10
Pro Gly Ser Arg Val Leu Ile Ala Leu Ile Arg Val Tyr Gln Arg Leu
           20
Ile Ser Pro Leu Leu Gly Pro His Cys Arg Phe Thr Pro Thr Cys Ser
       3.5
                         40
Ser Tyr Gly Ile Glu Ala Leu Arg Arg Phe Gly Val Ile Lys Gly Ser
 50
                      55
                                       60
Trp Leu Thr Val Lys Arg Val Leu Lys Cys His Pro Leu His Pro Gly
               70
                                    75
Gly Asp Asp Pro Val Pro Pro Gly Pro Phe Asp Thr Arg Glu His
              85
<210> 8378
<211> 247
<212> PRT
<213> Enterobacter cloacae
<400> 8378
Phe Cys Leu Tyr Gly Asn Asp Cys Val Pro Val Asn Cys Arg Thr Lys
Thr Leu Asn Leu Leu Lys Gly Lys Gly Met Ser Gly Ile Glu Ala Val
          20
                             25
                                                3.0
Phe Phe Asp Cys Asp Gly Thr Leu Val Asp Ser Glu Val Ile Cys Ser
       3.5
                          40
                                            45
Arg Ala Tyr Val Ala Met Phe Glr. Glu Phe Gly Ile Thr Leu Asp Leu
Glu Glu Val Phe Lys Arg Phe Lys Gly Val Lys Leu Tyr Glu Ile Ile
                                     75
                 70
Asp Ile Ile Asn Glu Glu His Gly Val Asp Leu Ala Lys Ala Asp Leu
              8.5
                                 90
Glu Pro Val Tyr Arg Ala Glu Val Ala Arg Leu Phe Asp Ala Glu Leu
                             105
                                                110
Glu Val Ile Ala Gly Ala Asn Thr Leu Leu Asp Ala Met Thr Val Pro
                  120
Ile Cys Val Val Ser Asn Gly Pro Val Ser Lys Met Gln His Ser Leu
```

```
135
Gly Lys Leu Asn Met Leu His His Phe Pro Glu Lys Leu Phe Ser Gly
              150
                       155
Tyr Asp Ile Gln Arg Trp Lys Pro Asp Pro Ala Leu Met Phe His Ala
           165
                    170
                                  175
Ala Lys Ala Met Asn Val Asn Val Glu Asn Cys Ile Leu Val Asp Asp
         180
              185 190
Ser Ser Ala Gly Ala Gln Ser Gly Ile Asp Ala Gly Met Glu Val Phe
    195 200 205
Tyr Phe Cys Ala Asp Pro His Asn Lys Pro Ile Asp His Pro Lys Val
 210 215 220
Thr Thr Phe Thr Asp Leu Ala Gln Leu Pro Ala Leu Trp Lys Ala Arg
225 230
                     235
Gly Trp Asp Ile Thr Arq
             245
<210> 8379
<211> 198
<212> PRT
<213> Enterobacter cloacae
<400> 8379
Ile Met Glu Ser Phe Met Lys Leu Asn Val Ile Ala Thr Ser Leu Val
                      10
Leu Ser Ser Val Leu Phe Ser Gly Ala Thr Leu Ala Ala Asp Gly Thr
                                          3.0
Val His Phe Arg Gly Glu Val Ile Asp Ser Thr Cys Thr Val Thr Thr
                    4.0
Asp Thr Ser Asn Gln Thr Val Asn Ile Gly Arg Val Ser Val Lys Thr
50 55
                                   60
Phe Ala Gly Ile Asp Ser Thr Ala Ser Val Lys Asp Phe His Ile Arg
               70
                                 75
Leu Glu Gly Cys Pro Ala Thr Tyr Thr Gln Ala Ala Val Arg Phe Asp
            85
                             90
Gly Thr Glu Asp Lys Asp Thr Ile Gly Lys Gly Tyr Leu Ser Ile Gly
         100
                         105
                                          110
Thr Pro Val Asn Glu Asp Gly Thr Asp Gly Glu Phe Thr Gly Ser Gly
     115
                      120
                                       125
Asp Ala Ile Ala Ala Thr Gly Val Ala Ile Lys Leu Phe Asn Leu Ser
 130 135
                                    140
Asp Asp Thr Ala Ile Pro Leu Tyr Asn Asn Ser Lys Tyr Val Ala Ile
                150
                                155 160
Ala Asp Gly Lys Ala Asp Met Gly Phe Lys Ala Lys Phe Val Gln Thr
            165 170 175
Leu Ala Thr Val Thr Pro Gly Thr Ala Asn Ala Asp Ser Gln Phe Thr
         180
                       185
Ile Glu Tyr Leu Lys
     195
<210> 8380
<211> 321
<212> PRT
<213> Enterobacter cloacae
<400> 8380
Phe Met Ala Ala Thr Lys Pro Ala Phe Asn Pro Pro Gly Lys Lys Gly
                           10
Asp Met Ile Phe Ser Ala Leu Val Lys Leu Ala Ala Leu Ile Val Leu
                          25
Leu Leu Gly Gly Ile Ile Val Ser Leu Ile Phe Ser Ser Trp Pro
      35
                      40
```

<210> 8381

Ser Ile Gln Lys Phe Gly Phe Ala Phe Leu Trp Thr Lys Glu Trp Asp 5.5 Ala Pro Asn Asp Ile Tyr Gly Ala Leu Val Pro Ile Tyr Gly Thr Leu 70 75 Val Thr Ser Phe Ile Ala Leu Leu Ile Ala Val Pro Val Ser Phe Gly 90 8.5 Ile Ala Leu Phe Leu Thr Glu Leu Ala Pro Gly Trp Leu Arg Arg Pro 100 105 110 Leu Gly Ile Ala Ile Glu Leu Leu Ala Ala Ile Pro Ser Ile Val Tyr 115 120 125 Gly Met Trp Gly Leu Phe Ile Phe Ala Pro Leu Phe Ala Thr Tyr Phe 135 140 Gln Glu Pro Val Gly Asn Val Leu Ser Ala Val Pro Phe Val Gly Ala 145 150 155 Leu Phe Ser Gly Pro Ala Phe Gly Ile Gly Ile Leu Ala Ala Gly Val 165 170 Ile Leu Ala Ile Met Ile Ile Pro Tyr Ile Ala Ala Val Met Arg Asp 185 190 180 Val Phe Glu Gln Thr Pro Val Met Met Lys Glu Ser Ala Tyr Gly Ile 195 200 Gly Cys Thr Thr Trp Glu Val Ile Trp Arg Ile Val Leu Pro Phe Thr 215 220 Lys Asn Gly Val Ile Gly Gly Ile Met Leu Gly Leu Gly Arg Ala Leu 230 235 225 Gly Glu Thr Met Ala Val Thr Phe Ile Ile Gly Asn Thr Tyr Gln Leu 245 250 Asp Ser Ala Ser Leu Tyr Met Pro Gly Asn Ser Ile Thr Ser Ala Leu 265 260 Ala Asn Glu Phe Ala Glu Ala Glu Ser Gly Leu His Val Ala Ala Leu 280 285 275 Met Glu Leu Gly Leu Ile Leu Phe Val Ile Thr Phe Ile Val Leu Ala 295 300 290 Ile Ser Lys Leu Met Ile Met Arg Leu Ala Lys Asn Glu Gly Ala Arg 310 315 305

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<211> 277
<212> PRT
<213> Enterobacter cloacae
<400> 8381
Val Gln Arg Tyr Gly Cys Ala Val His Pro Ser Gly Glu Glu Thr Asn
                                   10
Arg Arg Leu Tyr Tyr Trp Pro Leu Arg Leu Ile Cys Leu Ser Ala Cys
Gly Glu Thr Met Asp Asn Leu Asn Leu Asn Lys His Ile Ser Gly Gln
                                               45
                           40
Phe Asn Ala Glu Leu Glu Ser Ile Arg Thr Gln Val Met Thr Met Gly
                      55
                                           60
Gly Met Val Glu Gln Gln Leu Ser Asp Ala Ile Thr Ala Met His Asn
                                        75
                   70
Gln Asp Ser Glu Leu Ala Lys Arg Val Ile Glu Gly Asp His Asn Val
                                    90
Asn Met Met Glu Val Ala Ile Asp Glu Ala Cys Val Arg Ile Ile Ala
           100
                               105
Lys Arg Gln Pro Thr Ala Ser Asp Leu Arg Leu Val Met Ala Ile Ile
       115
                            120
Lys Thr Ile Ala Glu Leu Glu Arg Ile Gly Asp Val Ala Asp Lys Ile
                        135
                                           140
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Cys Arg Thr Ala Leu Glu Lys Phe Ser Gln Gln His Gln Pro Leu Leu
145
        150
Val Ser Leu Glu Ser Leu Gly Arg His Thr Val Gln Met Leu His Asp
            165
                                170
Val Leu Asp Ala Phe Ala Arg Met Asp Leu Asp Glu Ala Val Arg Ile
         180 185
                                              190
Tyr Arg Glu Asp Lys Lys Val Asp Gln Glu Tyr Glu Gly Ile Val Arg
      195 200 205
Gln Leu Met Thr Tyr Met Met Glu Asp Ser Arg Thr Ile Pro Ser Val
       215
                                      220
Leu Thr Ala Leu Phe Cys Ala Arg Ser Ile Glu Arg Ile Gly Asp Arg
225 230 235
Cys Gln Asn Ile Cys Glu Tyr Ile Phe Tyr Phe Val Lys Gly Gln Asp
             245 250 255
Phe Arg His Val Gly Gly Asp Glu Leu Asp Lys Leu Leu Ala Gly Lys
          260
                     265
Asp Pro Lys Glu
       275
<210> 8382
<211> 133
<212> PRT
<213> Enterobacter cloacae
<400> 8382
Gly Ala Met Asn Leu Pro Phe Ala Trp Val Lys Thr Ser Met Glu Arg
                                10
Gly Val Phe Ile Leu Ile Leu Phe Tyr Ser Ile Lys Met Lys Gly Val
          20
Ser Gly Phe Val Lys Glu Leu Thr Leu Gln Pro Phe Asn His Trp Ala
       35
                        40
Phe Ile Pro Val Asn Leu Ile Leu Glu Gly Val Ser Leu Leu Ser Lys
                     55
Pro Val Ser Leu Gly Leu Arg Leu Phe Gly Asn Met Tyr Ala Gly Glu
                  70
                                   75
Leu Ile Phe Ile Leu Ile Ala Gly Leu Leu Pro Trp Trp Ser Gln Trp
                                90
              8.5
Ile Leu Asn Val Pro Trp Ala Ile Phe His Ile Leu Ile Ile Thr Leu
         100
                            105
Gln Ala Phe Ile Phe Met Val Leu Thr Ile Val Tyr Leu Ser Met Ala
                         120
       115
Ser Glu Glu His
   130
<210> 8383
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 8383
Thr Val Arg Arg Glu Gly Leu Met Ser Glu Phe Val Thr Val Ala Arg
                                                  1.5
                                10
Pro Tyr Ala Lys Ala Ala Phe Asp Phe Ala Val Glu His Gln Asn Val
                                               3.0
          20
                             25
Asp Arg Trp Gln Asn Met Leu Ala Phe Ala Ala Glu Val Thr Lys Asn
       35
                         40
Glu Gln Met Ala Glu Leu Leu Ser Gly Ala Leu Ala Pro Glu Thr Leu
                                       60
Ala Ala Ser Phe Ile Ala Val Cys Gly Glu Gln Leu Asp Ala Asn Gly
                  70
Gln Asn Leu Ile Lys Val Met Ala Glu Asn Gly Arg Leu Arg Val Leu
```

90 Pro Asp Val Leu Glu Gln Phe Glu His Leu Arg Ala Leu Ser Glu Ala 100 105 Thr Ala Glu Val Glu Val Thr Ser Ala Thr Glu Leu Ser Asp Glu Gln 115 120 125 Leu Ala Lys Ile Thr Ala Ala Met Glu Lys Arg Leu Ser Arg Lys Val 130 135 140 Lys Leu Asn Cys Lys Ile Asp Lys Ser Val Met Ala Gly Val Ile Ile 145 150 155 Arg Ser Gly Asp Met Val Ile Asp Gly Ser Val Arg Gly Arg Leu Glu 165 170 Arg Leu Ala Asp Val Leu Gln Ser 180 <210> 8384 <211> 518 <212> PRT <213> Enterobacter cloacae <400> 8384 Gly Asp Trp Ser Met Gln Leu Asn Ser Thr Glu Ile Ser Glu Leu Ile 10 Lys Gln Arg Ile Ala Gln Phe Asn Val Val Ser Glu Ala His Asn Glu 30 20 2.5 Gly Thr Ile Val Ser Val Ser Asp Gly Val Ile Arg Ile His Gly Leu 4.0 45 Ala Asp Cys Met Gln Gly Glu Met Ile Ser Leu Pro Gly Asn Arg Tyr 55 60 5.0 Ala Ile Ala Leu Asn Leu Glu Arg Asp Ser Val Gly Ala Val Val Met 7.5 70 Gly Pro Tyr Ala Asp Leu Ala Glu Gly Met Lys Val Lys Cys Thr Gly 85 90 Arg Ile Leu Glu Val Pro Val Gly Arg Gly Leu Leu Gly Arg Val Val 100 105 Asn Thr Leu Gly Ala Pro Ile Asp Gly Lys Gly Pro Val Glu His Asp 120 125 115 Gly Phe Ser Pro Ile Glu Val Ile Ala Pro Gly Val Ile Asp Arg Gln 130 135 140 Ser Val Asp Gln Pro Val Gln Thr Gly Tyr Lys Ser Val Asp Ala Met 150 155 Ile Pro Ile Gly Arg Gly Gln Arg Glu Leu Ile Ile Gly Asp Arg Gln 165 170 175 Thr Gly Lys Thr Ala Met Ala Ile Asp Ala Ile Ile Asn Gln Arg Asp 180 185 Ser Gly Ile Lys Cys Val Tyr Val Ala Ile Gly Gln Lys Ala Ser Thr 195 200 205 Ile Ser Asn Val Val Arg Lys Leu Glu Glu His Gly Ala Leu Ser Asn 210 215 220 Thr Ile Val Val Val Ala Thr Ala Ser Glu Ser Ala Ala Leu Gln Tyr 230 235 Leu Ala Pro Tyr Ala Gly Cys Ala Met Gly Glu Tyr Phe Arg Asp Arg 245 250 255 Gly Glu Asp Ala Leu Ile Val Tyr Asp Asp Leu Ser Lys Gln Ala Val 265 270 260 Ala Tyr Arg Gln Val Ser Leu Leu Leu Arg Arg Pro Pro Gly Arg Glu 275 280 285 Ala Phe Pro Gly Asp Val Phe Tyr Leu His Ser Arg Leu Leu Glu Arg 300 290 295 Ala Ser Arg Val Asn Ala Glu Tyr Val Glu Asn Phe Thr Lys Gly Glu 315 310

Val Lys Gly Lys Thr Gly Ser Leu Thr Ala Leu Pro Ile Ile Glu Thr

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325
Gln Ala Gly Asp Val Ser Ala Phe Val Pro Thr Asn Val Ile Ser Ile
                          345
         340
                                           350
Thr Asp Gly Gln Ile Phe Leu Glu Thr Asn Leu Phe Asn Ser Gly Ile
     355 360
                                        365
Arg Pro Ala Val Asn Pro Gly Ile Ser Val Ser Arg Val Gly Gly Ala
        375
                                     380
Ala Gln Thr Lys Ile Ile Lys Lys Leu Ser Gly Gly Ile Arg Thr Ala
385 390 395
Leu Ala Gln Tyr Arg Glu Leu Ala Ala Phe Ser Gln Phe Ala Ser Asp
           405 410 415
Leu Asp Glu Ala Thr Arg Lys Gln Leu Ser His Gly Gln Lys Val Thr
         420 425 430
Glu Leu Leu Lys Gln Lys Gln Tyr Ala Pro Met Ser Val Ala Gln Gln
           440 445
Gly Leu Val Leu Phe Ala Ala Glu Arg Gly Tyr Leu Glu Asp Val Glu
        455 460
  450
Leu Ala Lys Ile Gly Ser Phe Glu Ala Ala Leu Leu Ala Tyr Val Asp
       470 475
465
Arg Asp His Ala Pro Leu Met Gln Glu Ile Asn Gln Thr Gly Gly Tyr
             485 490 495
Asn Asp Glu Ile Glu Gly Lys Leu Lys Ala Ile Leu Asp Ser Phe Lys
                           505
          500
Ala Thr Gln Ser Trp
       515
<210> 8385
<211> 305
<212> PRT
<213> Enterobacter cloacae
<400> 8385
Ser Ser Gly Gly Leu Ser Gln Asp Lys Pro Ser Gly Ile Glu Glu Lys
Leu Met Ala Gly Ala Lys Glu Ile Arg Ser Lys Ile Ala Ser Val Gln
          20
                           25
Asn Thr Gln Lys Ile Thr Lys Ala Met Glu Met Val Ala Ala Ser Lys
                        40
Met Arg Lys Ser Gln Asp Arg Met Ala Ala Ser Arg Pro Tyr Ala Glu
                                  60
                    55
Thr Met Arg Lys Val Ile Gly His Leu Ala Asn Gly Asn Leu Glu Tyr
                 7.0
                                  75
Lys His Pro Tyr Leu Glu Glu Arg Asp Val Lys Arg Val Gly Tyr Leu
              85
                               90
Val Val Ser Thr Asp Arg Gly Leu Cys Gly Gly Leu Asn Ile Asn Leu
                           105
           100
Phe Lys Lys Leu Leu Ala Asp Met Lys Gly Trp Ser Asp Lys Gly Val
                        120
                                         125
       115
Gln Cys Asp Leu Ala Leu Ile Gly Ser Lys Gly Val Ser Phe Phe Asn
                                      140
                     135
   130
Ser Val Gly Gly Asn Ile Val Ala Gln Val Thr Gly Met Gly Asp Asn
                 150
                                  155
Pro Ser Leu Ser Glu Leu Ile Gly Pro Val Lys Val Met Leu Gln Ala
                                    175
              165
                               170
Tyr Asp Glu Gly Arg Leu Asp Arg Leu Tyr Val Val Ser Asn Lys Phe
                                            190
          180
                            185
 Ile Asn Thr Met Ser Gln Val Pro Thr Leu Thr Gln Met Leu Pro Leu
                                         205
    195
 Pro Ala Ser Glu Asp Asp Glu Lei Lys Gln Lys Ala Trp Asp Tyr Leu
                    215
Tyr Glu Pro Asp Pro Lys Pro Leu Leu Asp Thr Leu Leu Arg Arg Tyr
```

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230
                                     235
Val Glu Ser Gln Val Tyr Gln Gly Val Val Glu Asn Leu Ala Ser Glu
            245
                         250
Gln Ala Ala Arg Met Val Ala Met Lys Ala Ala Thr Asp Asn Gly Gly
          260 265
                                     270
Ser Leu Ile Lys Glu Leu Gln Leu Val Tyr Asn Lys Ala Arg Gln Ala
      275 280
                                  285
Ser Ile Thr Gln Glu Leu Thr Glu Ile Val Ser Gly Ala Ala Ala Val
   290 295
305
<210> 8386
<211> 144
<212> PRT
<213> Enterobacter cloacae
<400> 8386
Ser Glu Gly Asp Met Ala Met Thr Tyr His Leu Asp Val Val Ser Ala
                                  10
Glu Gln Gln Met Phe Ser Gly Leu Val Glu Lys Ile Gln Val Thr Gly
                              25
        20
Ser Glu Gly Glu Leu Gly Ile Phe Pro Gly His Ala Pro Leu Leu Thr
                          40
                                             45
       35
Ala Ile Lys Pro Gly Met Ile Arg Ile Val Lys Gln Phe Gly His Glu
                      5.5
                                         60
 5.0
Glu Phe Ile Tyr Leu Ser Gly Gly Ile Leu Glu Val Gln Pro Gly Ser
                                     7.5
Val Thr Val Leu Ala Asp Thr Ala Ile Arg Gly Gln Asp Leu Asp Glu
                                 90
              8.5
Ala Arg Ala Leu Glu Ser Lys Arg Lys Ala Glu Glu His Ile Asn Ser
                              105
           100
Ser His Gly Asp Val Asp Tyr Ala Gln Ala Ser Ala Glu Leu Ala Lys
    115
                                             125
Ala Ile Ala Lys Leu Arg Val Ile Glu Leu Thr Lys Lys Ala Met
                      135
   130
<210> 8387
<211> 475
<212> PRT
<213> Enterobacter cloacae
<400> 8387
Asn Phe Lys His Gln Thr Phe Leu Leu Leu Thr Gln Thr Thr Val Arg
Met Arg Met Leu Asn Ser Ala Met Ser Val Val Ile Leu Ala Ala Gly
                              25
Lys Gly Thr Arg Met Tyr Ser Asp Leu Pro Lys Val Leu His Thr Leu
                                           4.5
                          40
Ala Gly Lys Pro Met Val Gln His Val Ile Asp Ala Ala Asn Glu Leu
                      55
Gly Ala Ser Gln Val His Leu Val Tyr Gly His Gly Gly Asp Leu Leu
                                                        80
65
                   7.0
                                      75
Lys Lys Thr Leu Arg Asp Asp Asn Leu Asn Trp Val Leu Gln Ala Glu
                                                     95
Gln Leu Gly Thr Gly His Ala Met Gln Gln Ala Ala Pro Phe Phe Ala
           100
                              105
                                                 110
Asp Asp Glu Asp Ile Leu Met Leu Tyr Gly Asp Val Pro Leu Ile Ser
      115
                           120
Val Glu Thr Leu Thr Arg Leu Arg Glu Ala Lys Pro Gln Gly Gly Ile
                                          140
    130
```

```
Gly Leu Leu Thr Val Val Leu Asp Asp Pro Thr Gly Tyr Gly Arg Ile
                             155
145 150
Thr Arg Glu Asn Gly Asn Val Thr Gly Ile Val Glu His Lys Asp Ala
                     170
        165
Thr Asp Glu Gln Arg Gln Ile Gln Glu Ile Asn Thr Gly Ile Leu Ile
   180 185
                                     190
Ala Asn Gly Ala Asp Met Lys Arg Trp Leu Ser Arg Leu Asn Asn Asn
 195 200
                                   205
Asn Ala Gln Gly Glu Tyr Tyr Ile Thr Asp Ile Ile Ala Met Ala Tyr
 210 215
                     220
Gln Glu Gly Arg Glu Ile Ala Ala Val His Pro Ala Arg Ile Ser Glu
225 230 235 240
Thr Asp Gly Val Asn Asn Arg Leu Gln Leu Ser Arg Leu Glu Arg Ile
          245 250
                                        255
Tyr Gln Ser Glu Gln Ala Glu Lys Leu Leu Leu Ala Gly Val Met Leu
        260 265 270
Arg Asp Pro Ala Arg Phe Asp Leu Arg Gly Thr Leu Thr His Gly Arg
  275 280 285
Asp Val Glu Ile Asp Thr Asn Val Ile Leu Glu Gly Asn Val Thr Leu
  290 295 300
Gly Asn Arg Val Lys Ile Gly Thr Gly Cys Val Ile Lys Asn Ser Ala
                     315 320
305
              310
Ile Gly Asp Asp Cys Glu Ile Ser Pro Tyr Ser Val Val Glu Asp Ala
           325 330 335
His Leu Glu Ala Ala Cys Thr Ile Gly Pro Phe Ala Arg Leu Arg Pro
                       345 350
        340
Gly Ala Glu Leu Leu Glu Gly Ala His Val Gly Asn Phe Val Glu Met
      355 360 365
Lys Lys Ala Arg Leu Gly Lys Gly Ser Lys Ala Gly His Leu Thr Tyr
                 375 380
 370
Leu Gly Asp Ala Glu Ile Gly Asp Asn Val Asn Ile Gly Ala Gly Thr
385 390 395 400
Ile Thr Cys Asn Tyr Asp Gly Ala Asn Lys Phe Lys Thr Ile Ile Gly
          405 410 415
Asp Asp Val Phe Val Gly Ser Asp Thr Gln Leu Val Ala Pro Val Thr
                      425 430
        420
Val Gly Lys Gly Val Thr Ile Ala Ala Gly Thr Thr Val Thr Arg Asp
                    440 445
     435
Val Ala Glu Asn Glu Leu Val Leu Ser Arg Val Pro Gln Val Ser Lys
 450 455
                                460
Gln Gly Trp Lys Arg Pro Val Lys Gln Lys
              470
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<210> 8388 <211> 615 <212> PRT <213> Enterobacter cloacae

Ala Thr His Gly Glu Pro Ser Glu Gly Asn Ala His Pro His Val Ser

Glu His Ile Val Val Val His Asn Gly Ile Ile Glu Asn His Glu Pro 105 110 100 Leu Arg Glu Glu Leu Lys Ala Arg Gly Tyr Thr Phe Val Ser Glu Thr 120 115 125 Asp Thr Glu Val Ile Ala His Leu Val His Trp Glu Leu Ala Lys Gly 130 135 140 Gly Thr Leu Arg Asp Ala Val Leu Arg Ala Ile Pro Gln Leu Arg Gly 145 150 155 Ala Tyr Gly Thr Val Ile Met Asp Ser Arg Asp Pro Ser Thr Leu Leu 165 170 175 Ala Ala Arg Ser Gly Ser Pro Met Val Ile Gly Leu Gly Met Gly Glu 180 185 190 Asn Phe Ile Ala Ser Asp Gln Leu Ala Leu Leu Pro Val Thr Arg Arg 195 200 205 Phe Ile Phe Leu Glu Glu Gly Asp Ile Ala Glu Val Thr Arg Arg Ser 210 215 220 Val Thr Val Phe Asp Thr Lys Gly Glu Gln Val Lys Arg Gln Glu Ile 230 235 Glu Ser Asn Leu Gln Tyr Asp Ala Gly Asp Lys Gly Ala Tyr Arg His 245 250 255 Tyr Met Gln Lys Glu Ile Tyr Glu Gln Pro Asn Ala Ile Lys Asn Thr 260 265 270 Leu Thr Gly Arg Ile Ser His Gly Glu Val Asp Leu Ser Glu Leu Gly 275 280 285 Ala Asn Ala Asn Glu Leu Leu Ser Lys Val Glu His Ile Gln Ile Val 290 295 300 Ala Cys Gly Thr Ser Tyr Asn Ser Gly Met Val Ser Arg Tyr Trp Phe 310 315 305 Glu Ser Leu Ala Gly Val Pro Cys Asp Val Glu Ile Ala Ser Glu Phe 325 330 335 Arg Tyr Arg Lys Ser Ala Val Arg Arg Ass Ser Leu Met Ile Thr Leu $340 \hspace{1.5cm} 345 \hspace{1.5cm} 350 \hspace{1.5cm}$ Ser Gln Ser Gly Glu Thr Ala Asp Thr Leu Ala Ala Leu Arg Leu Ser 360 365 355 Lys Glu Leu Gly Tyr Leu Gly Ser Leu Ala Ile Cys Asn Val Pro Gly 370 375 380 Ser Ser Leu Val Arg Glu Ser Asp Leu Ala Leu Met Thr Lys Ala Gly 390 395 385 Thr Glu Ile Gly Val Ala Ser Thr Lys Ala Phe Thr Thr Gln Leu Thr 405 410 415 Val Leu Leu Met Leu Val Ala Lys Leu Ala Arg Leu Lys Gly Gln Asp 425 430 420 Ala Ser Val Glu His Asp Ile Val His Gly Leu Gln Ala Leu Pro Ser 435 440 445 Arg Ile Glu Gln Met Leu Ser Gln Asp Lys Arg Ile Glu Ala Leu Ala 455 460 Glu Asp Phe Ser Asp Lys His His Ala Leu Phe Leu Gly Arg Gly Asp 470 475 Gln Tyr Pro Ile Ala Leu Glu Gly Ala Leu Lys Leu Lys Glu Ile Ser 485 490 495 Tyr Ile His Ala Glu Ala Tyr Ala Ala Gly Glu Leu Lys His Gly Pro 505 510 500 Leu Ala Leu Ile Asp Ala Asp Met Pro Val Ile Val Val Ala Pro Asn 525 520 515 Asn Glu Leu Leu Glu Lys Leu Lys Ser Asn Ile Glu Glu Val Arg Ala 535 540 Arg Gly Gly Val Leu Tyr Val Phe Ala Asp Lys Asp Ala Gly Phe Ala 550 555 Ser Ser Asp Asn Met His Ile Ile Glu Met Pro His Val Glu Glu Val 570 565 Ile Ala Pro Ile Phe Tyr Thr Val Pro Leu Gln Leu Leu Ala Tyr His

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580
                          585
Val Ala Leu Ile Lys Gly Thr Asp Val Asp Gln Pro Arg Asn Leu Ala
   595
                    600
Lys Ser Val Thr Val Glu
   610
<210> 8389
<211> 262
<212> PRT
<213> Enterobacter cloacae
<400> 8389
Gly Asn Glu Ser Met Ser Met Val Asp Thr Ala Pro Gly Lys Ile Gln
                              10
Val Arg Asp Leu Asn Phe Tyr Tyr Gly Lys Phe His Ala Leu Lys Asn
         20
                           25
Ile Asn Leu Asp Ile Ala Lys Asn Gln Val Thr Ala Phe Ile Gly Pro
 35
                       40
                                      4.5
Ser Gly Cys Gly Lys Ser Thr Leu Leu Arg Thr Phe Asn Lys Met Tyr
                          60
                    5.5
 50
Ser Leu Tyr Pro Glu Gln Arg Ala Glu Gly Glu Ile Leu Leu Asp Gly
                                 7.5
                7.0
Asp Asn Ile Leu Thr Asn Thr Gln Asp Ile Ala Leu Leu Arg Ala Lys
                              90
            85
Val Gly Met Val Phe Gln Lys Pro Thr Pro Phe Pro Met Ser Ile Tyr
          100 105 110
Asp Asn Ile Ala Phe Gly Val Arg Leu Phe Glu Lys Leu Ser Arg Ala
                        120
                                        125
Asp Met Asp Glu Arg Val Gln Trp Ala Leu Thr Lys Ala Ala Leu Trp
                    135
                                     140
 130
Asn Glu Thr Lys Asp Lys Leu His Gln Ser Gly Tyr Ser Leu Ser Gly
          150 155
Gly Gln Gln Arg Leu Cys Ile Ala Arg Gly Ile Ala Ile Arg Pro
                              170 " 175
              165
Glu Val Leu Leu Asp Glu Pro Cys Ser Ala Leu Asp Pro Ile Ser
          180 185
                                            190
Thr Gly Arg Ile Glu Glu Leu Ile Thr Glu Leu Lys Gln Asp Tyr Thr
                       200
                            205
       195
Val Val Ile Val Thr His Asn Met Gln Gln Ala Ala Arg Cys Ser Asp
                    215
                                     220
  210
His Thr Ala Phe Met Tyr Leu Gly Glu Leu Ile Glu Phe Ser Asp Thr
                 230 235 240
Asp Ala Leu Phe Thr Arg Pro Ala Lys Lys Gln Thr Glu Asp Tyr Ile
        245
                               250
Thr Gly Arg Tyr Gly
           260
<210> 8390
<211> 459
<212> PRT
 <213> Enterobacter cloacae
<400> 8390
 Asp Ser Asp Glu Phe Ser Leu Leu Val Arg Lys Leu Met Met Ser Gln
                               10
 Gln His Thr Thr Gln Thr Ser Gly Gln Gly Leu Leu Glu Arg Val Phe
                                       3.0
       20
 Lys Leu Arg Glu His Gly Thr Thr Ala Arg Thr Glu Val Ile Ala Gly
     35
                        40
                                       45
 Phe Thr Thr Phe Leu Thr Met Val Tyr Ile Val Phe Val Asn Pro Gln
```

55

```
Ile Leu Gly Val Ala Gly Met Asp Thr Ser Ala Val Phe Val Thr Thr
Cys Leu Ile Ala Ala Leu Gly Ser Ile Leu Met Gly Val Phe Ala Asn
          8.5
                           90
Leu Pro Val Ala Leu Ala Pro Ala Met Gly Leu Asn Ala Phe Phe Ala
    100 105
Phe Val Val Val Gin Ala Met Gly Leu Pro Trp Gin Val Gly Met Gly
 115 120 125
Ala Ile Phe Trp Gly Ala Val Gly Leu Leu Leu Leu Thr Ile Phe Arg
 130 135 140
Val Arg Tyr Trp Met Ile Ala Asn Ile Pro Val Ser Leu Arg Val Gly
       150 155
Ile Thr Ser Gly Ile Gly Leu Phe Ile Gly Met Met Gly Leu Lys Asn
          165 170 175
Ala Gly Val Ile Val Ala Asn Pro Glu Thr Leu Val Ser Ile Gly Asn
        180 185 190
Leu Thr Ser His Ser Val Leu Leu Gly Val Leu Gly Phe Phe Ile Ile
      195 200 205
Ala Ile Leu Ala Ser Arg Asn Ile His Ala Ala Val Leu Val Ser Ile
                 215 220
  210
Ile Val Thr Thr Leu Leu Gly Trp Met Leu Gly Asp Val His Tyr Asn
              230 235
Gly Ile Val Ser Ala Pro Pro Ser Val Ser Thr Val Ile Gly His Val
                           250
            245
Asp Leu Ala Gly Ser Leu Asn Leu Gly Leu Ala Gly Val Ile Phe Ser
                            270
         260 265
Phe Met Leu Val Asn Leu Phe Asp Ser Ser Gly Thr Leu Ile Gly Val
                     280
Thr Asp Lys Ala Gly Leu Ala Asp Glu Lys Gly Lys Phe Pro Arg Met
                  295 300
 290
Lys Gln Ala Leu Tyr Val Asp Ser Ile Ser Ser Val Ala Gly Ser Phe
              310 315
305
Ile Gly Thr Ser Ser Val Thr Ala Tyr Ile Glu Ser Ser Ser Gly Val
                                           335
                           330
            325
Ser Val Gly Gly Arg Thr Gly Leu Thr Ala Val Val Gly Leu Leu
             345 350
         340
Phe Leu Leu Val Ile Phe Leu Ser Pro Leu Ala Gly Met Val Pro Pro
                     360 365
 355
Tyr Ala Ala Ala Gly Ala Leu Ile Tyr Val Gly Val Leu Met Thr Ser
                  375 380
   370
Ser Leu Ala Arg Val Lys Trp Glu Asp Leu Thr Glu Ala Val Pro Ala
                              395 400
               390
Phe Ile Thr Ala Val Met Met Pro Phe Ser Phe Ser Ile Thr Glu Gly
            405
                           410 415
Ile Ala Leu Gly Phe Ile Ser Tyr Cys Val Met Lys Ile Gly Thr Gly
420 425 430
Arg Phe Arg Glu Leu Ser Pro Cys Val Ile Ile Val Ala Leu Leu Phe
             440
    435
Val Leu Lvs Ile Val Phe Ile Asp Ser His
                  455
   450
<210> 8391
<211> 160
<212> PRT
<213> Enterobacter cloacae
<400> 8391
Pro Phe Thr Ser Leu Met Pro Ser Val Ser Pro Val Thr Ser Ala Leu
                          10
Leu Arg Thr Thr Val Ile Gly Ser Leu Ala Gly Arg Arg Ala Ile Lys
```

25

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Ser Gly Gln Ile Ser Ala Gly Ser Thr Ala Ser Val Val Val Pro Ser
Thr Ile Asn Ser Thr Arg Ser Ala Cys Ser Ile Ser Cys Gln Ala Arg
Ser Ile Pro Ile Arg Ser Thr Ser Ser Leu Ala Ser Arg Arg Pro Ala
                 70
Val Ser Met Met Cys Ser Gly Ile Pro Ser Met Trp Ile Cys Ser Arg
            85
                              90
Ser Thr Ser Arg Val Val Pro Ala Met Ser Val Thr Ile Ala Ala Ser
          100
               105
                                             110
Arg Pro Ala Arg Ala Phe Ser Arg Leu Asp Phe Pro Ala Leu Gly Arg
     115 120
Pro Ala Met Thr Thr Phe Met Pro Ser Arg Ser Arg Leu Pro Trp Arg
 130 135 140
Ala Ser Ala Arg Thr Ala Ser Arg Ser Phe Ile Thr Trp Leu Ser
                 150
```

<210> 8392

<211> 86

<212> PRT <213> Enterobacter cloacae

<400> 8392

Asn Lys Leu Glu Thr Val Met Glu Asn Leu Asn Met Asp Leu Leu Tyr 10 Met Ala Ala Ala Val Met Met Gly Leu Ala Ala Ile Gly Ala Ala Ile 25 Gly Ile Gly Ile Leu Gly Gly Lys Phe Leu Glu Gly Ala Ala Arg Gln 35 40 Pro Asp Leu Ile Pro Leu Leu Arg Thr Gln Phe Phe Ile Val Met Gly 5.5

Leu Val Asp Ala Ile Pro Met Ile Ala Val Gly Leu Gly Leu Tyr Val 65

Met Phe Ala Val Ala

<210> 8393 <211> 169

<212> PRT

<213> Enterobacter cloacae

<400> 8393

Asn Pro Lys Pro Gln Lys Phe Lys Arg Tyr Cys Ala Val Asn Met Asn 1.0 Ala Thr Ile Leu Gly Gln Ala Ile Ala Phe Ile Leu Phe Val Trp Phe 20 25 Cys Met Lys Tyr Val Trp Pro Pro Leu Met Ala Ala Ile Glu Lys Arg 35 40 Gln Lys Glu Ile Ala Asp Gly Leu Ala Ser Ala Glu Arg Ala Lys Lys 55 60 50 Asp Leu Asp Leu Ala Gln Ala Asn Ala Thr Asp Gln Leu Lys Lys Ala 7.5 7.0 Lys Ala Glu Ala Gln Val Ile Ile Glu Gln Ala Asn Lys Arg Arg Ser 90 85 Gln Ile Leu Asp Glu Ala Lys Ala Glu Ala Glu Gln Glu Arg Thr Lys 105 110 100 Ile Val Thr Gln Ala Gln Ala Glu Ile Glu Ala Glu Arg Lys Arg Ala 120 125 Arg Glu Glu Leu Arg Lys Gln Val Ala Ile Leu Ala Val Ala Gly Ala 135 140

Glu Lys Ile Ile Glu Arg Ser Val Asp Glu Ala Ala Asn Ser Asp Ile

160 145 150 Val Asp Lys Leu Val Ala Glu Leu 165 <210> 8394 <211> 502 <212> PRT <213> Enterobacter cloacae <400> 8394 Leu Lys Ser Cys Ser Trp Phe Thr Thr Lys Leu Val Arg Pro Ala Leu 10 Leu Arg Asn Ser Pro Arg Ser Ser Arg Gly Pro Pro Arg Phe Asn Gln 20 25 30 Val Tyr Glu Leu Arg Arg Gly Phe Lys Met Ala Thr Gly Lys Ile Val 35 40 45 Gln Val Ile Gly Ala Val Val Asp Val Glu Phe Pro Gln Asp Ala Val 55 60 Pro Arg Val Tyr Asp Ala Leu Glu Val Gln Asn Gly Asn Glu Ser Leu 70 75 Val Leu Glu Val Gln Gln Gln Leu Gly Gly Gly Ile Val Arg Thr Ile 85 90 95 Ala Met Gly Ser Ser Asp Gly Leu Arg Arg Gly Leu Glu Val Lys Asp 100 105 110 Leu Glu His Pro Ile Glu Val Pro Val Gly Lys Ala Thr Leu Gly Arg 115 120 125 Ile Met Asn Val Leu Gly Gln Pro Ile Asp Met Lys Gly Asp Ile Gly 130 135 140 Glu Glu Glu Arg Trp Ala Ile His Arg Ala Ala Pro Ser Tyr Glu Glu 145 150 155 160 Leu Ser Ser Ser Gln Glu Leu Leu Glu Thr Gly Ile Lys Val Ile Asp 165 170 175 Leu Met Cys Pro Phe Ala Lys Gly Gly Lys Val Gly Leu Phe Gly Gly 180 185 Ala Gly Val Gly Lys Thr Val Asn Met Met Glu Leu Ile Arg Asn Ile 195 200 205 Ala Ile Glu His Ser Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg 210 215 220 Thr Arg Glu Gly Asn Asp Phe Tyr His Glu Met Thr Asp Ser Asn Val 230 235 240 Leu Asp Lys Val Ser Leu Val Tyr Gly Gln Met Asn Glu Pro Pro Gly 250 255 245 Asn Arg Leu Arg Val Ala Leu Thr Gly Leu Thr Met Ala Glu Lys Phe 260 265 270

 Ser Ala Val Gly Tyr
 Gln
 Pro
 Thr
 Leu
 Ala
 Glu
 Glu
 Met
 Gly
 Val
 Leu

 305
 315
 315
 320

 Gln
 Glu
 Arg
 Ile
 Thr
 Ser
 Ile
 Thr
 Ser
 Val
 Glu

 325
 330
 335

 Ala
 Val
 Pro
 Ala
 Asp
 Asp
 Leu
 Thr
 Asp
 Pro
 Ala
 Thr

 340
 345
 345
 350

295

Arg Asp Glu Gly Arg Asp Val Leu Leu Phe Val Asp Asn Ile Tyr Arg

Tyr Thr Leu Ala Gly Thr Glu Val Ser Ala Leu Leu Gly Arg Met Pro

275

290

280 285

300

Thr Phe Ala His Leu Asp Ala Thr Val Val Leu Ser Arg Gin Ile Ala 355 360 365 365 Ser Leu Gly Ile Tyr Pro Ala Val Asp Pro Leu Asp Ser Thr Ser Arg

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405
                                410
Ala Ile Leu Gly Met Asp Glu Leu Ser Glu Glu Asp Lys Leu Val Val
                         425
                                          430
        420
Ala Arg Ala Arg Lys Ile Gln Arg Phe Leu Ser Gln Pro Phe Phe Val
      435 440
                                          445
Ala Glu Val Phe Thr Gly Ser Pro Gly Lys Tyr Val Ser Leu Lys Asp
         455
                                       460
Thr Ile Arg Gly Phe Lys Gly Ile Met Glu Gly Glu Tyr Asp His Leu
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Pro Glu Gln Ala Phe Tyr Met Val Gly Ser Ile Glu Glu Ala Val Glu
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             485
Lys Ala Lys Lys Leu
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<213> Enterobacter cloacae
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Gly His Trp Ile Met Pro Gly Arg Ile Val Asn Val Leu Leu Ala Cys
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Cys Leu Thr Gly Ile Ser Thr Met Ala Ser Ala Gly Val Val Ile Gly
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        20
Gly Thr Arg Val Val Tyr Ser Ser Asp Lys Ser Asp Ala Thr Ile Thr
                                          4.5
                         40
       35
Val Lys Asn Asn Glu Ala Ala Ile Pro Tyr Leu Ile Gln Thr Trp Val
                                      60
                     5.5
 50
Asp Pro Phe Ser Asn Thr Gly Thr Ala Lys Lys Pro Pro Phe Thr Val
                                   7.5
                  7.0
Ile Pro Pro Val Ser Arg Leu Glu Aia Gly Gln Glu Lys Ile Leu Arg
                                90
              8.5
Ile Met Lys Thr Glu Gly Asn Leu Pro Gln Asp Arg Glu Ser Val Phe
                          105 110
           100
Trp Leu Asn Ile Lys Asn Ile Pro Pro Ala Ser Asn Lys Pro Asn Ala
                         120 125
Met Glu Ile Ala Ile Lys Thr Arg Ile Lys Leu Ile Trp Arg Pro Ala
                      135
                                       140
    130
Ser Leu Asn Ile Thr Pro Glu Arg Ala Ala Thr Gln Val Lys Trp His
                                    155
                  150
Arg Glu Asn Arg Gln Leu Val Val Glu Asn Pro Thr Pro Leu Asn Ile
                                170 175
               165
Asn Val Met Asn Val Thr Val Asp Gly Lys Asp Val Pro Leu Asn Ile
                             185 190
           180
Val His Pro Phe Glu Thr Leu Arg Leu Pro Leu Pro Glu Gly Val Asn
       195 200
Gly His Ala Leu Val Trp Arg Tyr Val Asn Asp Phe Gly Ala Ile Ser
                     215
 Gln Asp Leu Lys Ala Ala Leu
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 Ala Ser Gly Met Val Leu Gly Leu Ser Gly Glu Val Ala Ala Arg Asp
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Met Phe Asn Pro Ala Leu Leu Glu Ile Asp His Pro Val Asp Val Asp 4.0 Ile His Gln Phe Asn Arg Ala Asn Ser Leu Pro Ala Gly Asn Tyr Lys 55 60 Val Ser Ile Tyr Val Asn Gly Glu Tyr Val Asp Arg Arg Glu Val Thr 7.5 70 Phe Val Glu Asp Thr Ala Thr Ser Asn Leu His Pro Cys Phe Ser Asp 90 8.5 Ile Lys Thr Val Leu Ala Glu Leu Gly Val Lys Val Ala Ala Ile Lys 100 105 Ala Leu Asn Asp Ile Asp Asp Lys Ala Cys Leu Asp Pro Ala Pro Leu 125 115 120 Val Pro Gly Ser Thr Trp Thr Phe Asp Thr Asp Lys Leu Gln Leu Asn 135 140 130 Val Thr Leu Pro Gln Ile Tyr Ile Asp Val Ser Ala Arg Gly Tyr Ile 150 155 Asn Pro Ser Arg Trp Asp Glu Gly Ile Asn Ala Leu Met Val Asn Tyr 165 170 Asp Phe Ser Gly Ser Ser Thr Val His Ser Asn Glu Asp Asp Asn Asn 185 190 180 Asp Phe Tyr Tyr Leu Asn Leu Arg Asn Gly Ala Asn Leu Gly Ala Trp 200 205 195 Arg Leu Arg Asn Tyr Ser Thr Leu Asn Val Thr Asp Gly Glu Ser Ser 220 215 Tyr His Ser Ile Asn Thr Tyr Leu Gln Arg Asp Ile Ala Ala Leu Arg 230 235 225 Ser Gln Ile Met Leu Gly Asp Thr Trp Thr Ala Ser Asp Val Phe Asp 250 255 245 Ser Thr Gln Leu Arg Gly Met Arg Leu Tyr Thr Asp Asp Asp Met Leu 265 260 Pro Ser Ser Leu Thr Gly Phe Ala Pro Val Val Arg Gly Val Ala Lys 280 285 275 Ser Asn Ala Thr Val Ile Val Arg Gln Asn Gly Tyr Ile Ile Tyr Gln 295 300 Ser Ala Val Pro Gln Gly Ala Phe Ala Leu Lys Asp Leu Asn Thr Thr 310 315 Asn Ser Gly Gly Asp Leu Asp Val Thr Ile Lys Glu Glu Asp Gly Ser 325 330 Glu Gln His Phe Thr Gln Pro Tyr Ala Ser Leu Ala Ile Leu Lys Arg 340 345 Glu Asp Gln Thr Asp Val Asp Ile Ser Ala Gly Glu Leu Arg Asp Gln 360 365 355 Asn Asp Phe Gln Pro Thr Val Phe Gln Ala Gln Val Leu His Gly Phe 375 380 370 Pro Ala Gly Ile Thr Leu Tyr Gly Gly Val Gln Gly Thr Ser Asp Tyr 395 390 Thr Ser Ala Ala Leu Gly Val Gly Lys Asp Met Gly Ser Leu Gly Ala 410 415 405 Leu Ser Leu Asp Val Thr His Ala Arg Ser Arg Phe Glu Asp Asp Asp 430 425 420 Glu Ser Gly Gln Ser Tyr Arg Phe Leu Tyr Ser Lys Arg Phe Asp Glu 440 445 435 Thr Asn Thr Thr Phe Arg Leu Val Gly Tyr Arg Tyr Ser Thr Glu Gly 455 460 450 Tyr Tyr Thr Leu Asn Glu Trp Ala Ser Arg Gln Asn Asn Glu Ser Asp 470 475 Phe Trp Thr Thr Gly Asn Arg Arg Ser Arg Leu Glu Gly Thr Trp Thr 490 485 Gln Thr Phe Gly Asp Gly Met Gly Asn Ile Tyr Leu Thr Leu Ser Arg 510 500 505 Gln Gln Tyr Trp Lys Thr Asp Glu Val Glu Arg Leu Val Gln Leu Gly

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515
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Tyr Ser Asn Ser Trp Arg Ala Ile Ser Trp Asn Val Ser Trp Asn Tyr
          535
                                  540
Thr Asp Ser Leu Thr Ser Ala Gln Asn Ser Thr Asp Thr Asp Val Ser
      550
                      555
Asp Ser Gln Gly Ser Glu Gln Ile Phe Met Leu Ser Leu Ser Ile Pro
          565 570 575
Leu Ser Gly Trp Leu His Asp Ser Tyr Val Asn Tyr Gly Tyr Thr Gln
        580 585 590
Asn Asn His Gly Lys Gly Met His Gln Val Gly Leu Ser Gly Asn Ala
     595 600 605
Leu Asp Ala His Asn Leu Ser Trp Asn Val Gln Gln Ser Tyr Asp Ala
       615 620
Asp Asn Glu Asp Tyr Asn Asn Ser Ala Gly Val Gly Tyr Asp Gly Thr
               630 635
Tyr Gly Ser Val Asn Ala Ser Tyr Asp Tyr Thr Gln Asp Asn Gln Arg
                650 655
            645
Leu Asn Tyr Gly Met Lys Gly Gly Ile Leu Ala His Ser Asp Gly Ile
                         665
         660
Thr Phe Ser Gln Glu Leu Gly Glu Thr Val Ala Leu Val Lys Ala Pro
                     680 685
      675
Gly Ala Ser Gly Leu Ala Leu Glu Asn Gly Thr Gly Lys Ala Thr Asp
                       700
 690
                   695
Trp Arg Gly Tyr Thr Val Gln Thr Gln Leu Asn Ala Tyr Asp Glu Asn
             710
                    715
705
Arg Val Glu Ile Asp Ser Asp Tyr Phe Ala Lys Ala Asn Val Glu Ile
                          730
             725
Asp Asn Ser Ile Leu Ser Val Ile Pro Thr Arg Gly Ala Val Val Arg
                         745
          740
Ala Glu Phe Val Thr His Val Gly Tyr Arg Val Leu Phe Asn Val Arg
                      760
                          765
Gln Lys Ser Gly Lys Pro Val Pro Phe Gly Ala Met Ala Ser Ala Asp
   770 775
                                   780
Leu Pro His Gly Ser Val Thr Gly Ile Val Gly Glu Asn Gly Glu Leu
                790
                                795
Tyr Leu Ser Gly Met Pro Glu Glu Gly Ala Phe Val Leu Lys Trp Gly
                            810
            805
Ala Asp Asn Thr Met Thr Cys Pro Val Asn Tyr His Phe Thr Pro Pro
                         825
         820
Glu Gly Val Glu Leu Ile Gln Ile Ser Ala Val Cys Gln
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<210> 8397 <211> 362 <212> PRT

<213> Enterobacter cloacae

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840

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100
                       105
Leu Asn Asn Asn Leu Ser Ile Ala Thr Ser Ile Leu Val Leu Gly Arg
                             125
 115
                   120
Asp Tyr Ile Pro Val Pro Phe Ser Ala Glu Pro Asn Val Met Ser His
 130 135
                       140
Ser Ser Tyr Cys Tyr Ala Pro Gly Glu Glu Gly Ser Glu Pro Thr Leu
145 150 155
Asn Thr Gly Ser Lys Ile Lys Ile Ser Phe Leu Ile Asn Lys Pro Phe
        165 170 175
Ile Gly Arg Val Ser Val Pro Gly Thr Ile Val Ala Asp Leu Tyr Gly
       180 185 190
Gly Leu Asp Ala Ala Ser Ser Thr Ser Ser Thr Glu Lys Met Ala Glu
     195 200 205
Ile Lys Ile Ala Gly Asp Ile Val Val Pro Gln Asn Cys Glu Ile Ala
              215 220
Pro Gly Gln Thr Leu Glu Ile Asp Phe Gly Lys Ile Pro Ala Pro Glu
            230 235
Phe Ser Ala Thr Lys Gly Thr Ala Val Thr Ser His Lys Val Lys
           245 250 255
Thr Ile Gln Val Gln Cys Thr Gly Met Leu Asp Glu Asn Ile Val Tyr
            265 270
        260
Ser Thr Phe His Gly Asp Pro Val Asp Ala Asp Ala Thr Met Met Lys
     275 280 285
Val Asn Gly Asn Asp Asp Val Gly Ile Val Val Tyr Asp Lys Trp Asp
              295 300
Arg Gln Val Ser Val Asn Gly Gly Arg Met Asp Met Asp Arg Gly Glu
            310 315
305
Asn Asn Asn Gly Ala Glu Asn Asn Ser Leu Thr Phe Ser Ala Ala Pro
           325 330 335
Ala Ser Ala Thr Gly Ala Gln Pro Lys Pro Gly Thr Phe Glu Ala Tyr
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Ala Thr Val Thr Leu Glu Ile Glu His
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<210> 8398 <211> 358

<212> PRT

<213> Enterobacter cloacae

<400> 8398 Thr Met Ile Tyr Glu Ile Leu Ala Gly Asp Ile Met Lys Val Met Arg Thr Thr Val Ala Thr Val Val Ala Ala Thr Leu Ser Met Ser Ala Phe 20 25 Ser Ala Phe Ala Ala Ala Ser Leu Thr Gly Ala Gly Ala Thr Phe Pro 40 35 Ala Pro Val Tyr Ala Lys Trp Ala Asp Thr Tyr Gln Lys Glu Thr Gly 55 60 Asn Lys Val Asn Tyr Gln Gly Ile Gly Ser Ser Gly Gly Val Lys Gln 7.5 70 Ile Thr Ala Asn Thr Val Asp Phe Gly Ala Ser Asp Ala Pro Leu Ser 90 85 Asp Glu Lys Leu Asn Gln Glu Gly Leu Phe Gln Phe Pro Thr Val Ile 105 110 100 Gly Gly Val Val Leu Ala Val Asn Ile Pro Gly Leu Lys Ser Gly Glu 125 120 115 Leu Val Leu Asp Gly Lys Thr Leu Gly Asp Ile Tyr Leu Gly Lys Ile 135 140 130 Lys Lys Trp Asp Asp Glu Ala Ile Thr Lys Leu Asn Pro Gly Val Lys 155 150 145 Leu Pro Ser Gin Asn Ile Ala Val Val Arg Arg Ala Asp Gly Ser Gly

170 165 Thr Ser Phe Val Phe Thr Ser Tyr Leu Ala Lys Val Asn Glu Glu Trp 185 190 180 Lys Ser Lys Val Gly Ser Gly Ser Thr Val Asn Trp Pro Thr Gly Leu 195 200 205 Gly Gly Lys Gly Asn Asp Gly Ile Ala Ala Phe Val Gln Arg Leu Pro 210 215 220 Gly Ser Ile Gly Tyr Val Glu Tyr Ala Tyr Ala Lys Gln Asn Asn Leu 230 235 240 Ala Tyr Thr Lys Leu Val Ser Ala Asp Gly Lys Pro Val Ser Pro Thr 245 250 255 Glu Glu Asn Phe Ala Asn Ala Ala Lys Gly Ala Asp Trp Ser Lys Ser 265 270 260 Phe Ala Gln Asp Leu Thr Asn Gln Lys Gly Glu Asp Ala Trp Pro Ile 280 285 Thr Ser Thr Thr Phe Ile Leu Val His Lys Glu Gln Lys Lys Pro Glu 295 Gln Gly Ala Glu Val Leu Lys Phe Phe Asp Trp Ala Tyr Lys Asn Gly 310 315 320 Gly Lys Gln Ala Asn Asp Leu Asp Tyr Ala Ser Leu Pro Asp Ser Val 330 335 325 Val Glu Gln Ile Arg Ala Ala Trp Lys Thr Asn Val Lys Asp Ser Ser 345 Gly Lys Ala Leu Tyr

355

<210> 8399 <211> 303 <212> PRT

<213> Enterobacter cloacae

<400> 8399 Lys Arg Gly Gly Thr Leu Met Ala Thr Leu Asp Met Gln Asn Thr Ala 10 Gln Leu Ala Glu Ser Arg Arg Lys Met Gln Ser Lys Arg Arg Ile Lys 25 20 Asn Arg Ile Ala Leu Thr Leu Ser Met Ala Thr Met Ala Phe Gly Leu 40 4.5 Phe Trp Leu Ile Trp Ile Leu Met Ser Thr Ile Thr Arg Gly Ile Asp 55 60 Gly Met Ser Leu Ala Leu Phe Tnr Glu Met Thr Pro Pro Pro Asn Thr 7.0 75 Ala Gly Gly Leu Ala Asn Ala Leu Ala Gly Ser Gly Leu Leu Ile 90 8.5 Leu Trp Ala Thr Val Phe Gly Thr Pro Leu Gly Ile Met Ala Gly Ile 105 100 Tyr Leu Ala Glu Tyr Gly Arg Lys Ser Trp Ile Ala Glu Val Ile Arg 120 115 Phe Ile Asn Asp Ile Leu Leu Ser Ala Pro Ser Ile Val Val Gly Leu 140 135 130 Phe Val Tyr Thr Ile Val Val Ala Gln Met Glu His Phe Ser Gly Trp 155 150 Ala Gly Val Ile Ala Leu Ala Leu Leu Gln Val Pro Ile Val Ile Arg 175 170 165 Thr Thr Glu Asn Met Leu Lys Leu Val Pro Asp Ser Leu Arg Glu Ala 185 190 180 Ala Tyr Ala Leu Gly Thr Pro Lys Trp Lys Met Ile Ser Ala Ile Thr 200 205 Leu Lys Ala Ser Val Ser Gly Ile Met Thr Gly Ile Leu Leu Ala Ile 215 Ala Arg Ile Ala Gly Glu Thr Ala Pro Leu Leu Phe Thr Ala Leu Ser

230 235 Asn Gln Phe Trp Ser Thr Asp Met Met Gln Pro Ile Ala Asn Leu Pro 245 250 Val Thr Ile Phe Lys Phe Ala Met Ser Pro Phe Ala Glu Trp Gln Gln 260 265 270 Leu Ala Trp Ala Gly Val Leu Ile Ile Thr Leu Cys Val Leu Leu Leu 275 280 285 Asn Ile Leu Ala Arg Val Ile Phe Ala Lys Lys Lys His Gly 295 <210> 8400 <211> 101 <212> PRT <213> Enterobacter cloacae <400> 8400 Ser Leu Pro Phe Arg Val Lys Val Ile Thr Ser Pro Ala Cys Ala Pro 10 Val Thr Leu Pro Val Thr Ile Ser Ala Trp Pro Cys Ser Ala Ile Leu 25 3.0 20 Thr Met Ser Ser Pro Ala Thr Met Ser Lys Val Ile Cys Gly Thr Val 4.0 4.5 35 Val Ser Thr Ser Thr Asp Ala Pro Ala Leu Ala Gly Leu Pro Ala Leu 50 55 60 Ser Asp Thr Val Thr Val Thr Ala Ala Leu Pro Ser Ala Ile Pro Ala 7.5 70 Arg Ser Ala Ala Gly Thr Ser Ser Val Gln Leu Pro Phe Ala Cys Thr 85 Trp Ala Val Tyr <210> 8401 <211> 727 <212> PRT <213> Enterobacter cloacae <400> 8401 Thr Gly Arg Ser Ile Met Lys Thr His Pro Gln Tyr Glu Pro Trp Leu 10 Gln Gly Met Leu Ile Ile Ala Lys Tyr Tyr Arg Leu Asp Phe Ser Ala Glu His Val Arg Val Thr Ile Asn His Glu Ser Gln Ser Pro Arg Gln 40 35 Leu Val Leu Glu Glu Met Ala Arg Gln Leu Gly Leu Gly Met Arg Trp 55 Val Ala Ala Glu Ala Leu Ser Leu Asp Pro Trp Arg Leu Pro Leu Leu 7.5 70 Ala Glu Phe Thr Gly Gly Gln Ile Ala Val Ile Asn Arg Met Asp Asn 90 85 Asp Gly Asn Val Ser Val Gln Phe Ser Gly Asp Gly Gly Leu Glu Thr 105 100

130 140 Lys Pro Tyr Glu Lys Asn Trp Phe Trp Gln Leu Ala Leu Lys Asp Trp 150 155 Arg Arg Tyr Ser Asp Ile Met Leu Val Ala Leu Val Ala Asn Val Leu 165 170 Ala Leu Ser Gly Met Val Phe Ser Met Gln Val Tyr Asp Arg Val Val 180 185

Thr Leu Thr Arg Asp Glu Leu Gly Ser Arg Leu Lys Gly Leu Met Val

120 Leu Arg Pro Leu Glu Ser Thr Pro Asp Ala Arg Val Asp Asp Tyr Ile

115

125

Pro Ser Gln Ser Glu Ala Thr Leu Trp Val Leu Phe Gly Gly Val Met 195 200 Ile Ala Ile Val Phe Glu Phe Ile Met Arg Met Leu Arg Val His Ile 215 220 Ser Asp Val Val Gly Lys Arg Ala Asp Leu Arg Ile Ser Glu Arg Val 230 235 240 Phe Ala His Ala Leu Arg Ile Lys Asn Gly Ala Arg Ser Lys Ser Thr 250 255 245 Gly Ser Phe Ile Ala Gln Ile Arg Glu Leu Glu Ser Val Arg Glu Leu 260 265 270 Ile Thr Ser Thr Thr Ile Ala Ala Ile Ser Asp Leu Pro Phe Phe Leu 280 285 275 Leu Phe Val Phe Ile Leu Trp Met Ile Gly Gly Pro Leu Val Leu Val 290 295 300 Val Leu Leu Ala Val Pro Leu Leu Leu Ile Pro Gly Leu Leu Val Gln 310 315 Arg Pro Leu Gly Lys Leu Ser Ser Glu Gly Met Arg Glu Ser Ala Ile 325 330 335 Arg Asn Ala Thr Leu Val Glu Ala Val Gln Gly Leu Glu Asp Ile Lys 340 345 350 Leu Met Arg Ala Glu Gln Arg Phe Gln Asn Gln Trp Asn Asn Thr Asn 355 360 365 Asp Val Ala Ala Ser Val Gly Met Lys Gln Arg Trp Leu Thr Gly Leu 370 375 380 Leu Leu Thr Trp Thr Gln Glu Val Gln Ser Ile Val Tyr Ala Val Val 390 395 400 Leu Leu Val Gly Cys Tyr Leu Val Ile Ser Gly Asp Met Thr Thr Gly 405 410 415 Ala Leu Val Gly Thr Ser Ile Leu Ala Ser Arg Thr Ile Ala Pro Leu 420 425 430 Ser Gln Ile Ser Gly Val Leu Ser Arg Trp Gln Ser Ala Lys Val Ala 435 440 445 Arg Lys Gly Leu Asp Asp Leu Met Gln Arg Pro Ile Asp Asp Pro Gln 450 455 460 His Gly Lys Lys Val His Lys Ala His Leu Arg Gly Asp Tyr Leu Leu 465 470 475 Asp Asp Val Gly Phe Tyr Tyr Asp Glu Glu Glu Lys Leu Thr Val Leu 485 490 495 Asn Ile Ser Lys Leu Arg Ile Arg Ala Gly Glu Arg Val Ala Val Leu 500 505 510 Gly Arg Asn Gly Ser Gly Lys Ser Thr Leu Leu His Leu Leu Ala Gly 515 520 525 Met Gln Glu Pro Gln Gln Gly Ser Ile Leu Leu Asp Asp Ile Ala Leu 535 540 Asn His Leu Asp Pro Ala Asp Val Arg Arg Asp Met Gln Leu Leu Ser 550 555 Gin Gin Ala Arg Leu Phe Phe Gly Ser Val Arg Asp Asn Ile Leu Met 565 570 575 Gly Asn Pro Leu Ala Thr Asp Glu Glu Ile His Gln Ala Leu Val Asn 585 Ser Gly Ala Leu Glu Tyr Val Arg Lys Gln Lys Met Gly Leu Asn Thr 595 600 605 Ile Ile Asn Glu Gly Gly Thr Gly Leu Ser Gly Gly Gln Arg Gln Ala 615 620 Leu Leu Leu Ala Arg Ala Leu Ile Thr Ser Pro Asn Ile Leu Leu Leu 630 635 Asp Glu Pro Thr Ala Trp Leu Asp Glu Val Ser Glu Lys Gln Phe Ile 645 650 655 Gln His Leu His Gln Trp Leu Gly Lys Arg Arg Thr Leu Val Val Ala 665 Thr His Arg Leu Pro Ile Leu Asp Leu Val Asp Arg Ile Ile Val Leu

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355 360 365 Thr Ala Ser Pro Val Ile Ser Val Asp Thr Ile Ala Gln Asp Asn Ile

375 Ile Asn Ala Ala Glu His Asn Gln Pro Leu Thr Leu Thr Gly Lys Thr 390 395 Asp Ala Glu Ala Gly Gln Ile Val Thr Val Thr Leu Asn Gly Lys Asn 405 410 His Thr Ala Thr Val Gly Ser Asp Gly Ser Trp Ser Val Thr Leu Pro 420 425 Ala Ser Glu Val Gln Thr Leu Ala Asn Gly Glu His Thr Leu Thr Val 435 440 445 Asn Val Ser Asp Lys Ala Gly Asn Gly Ser Ser Ile Thr Ala Asp Phe 450 455 460 Thr Val Asp Thr Ala Ala Pro Val Val Thr Ile Asn Thr Val Ala Gly 470 475 Asp Asp Ile Leu Asn Thr Ser Glu Gln Glv Gln Ala Gln Ile Ile Ser 485 490 495 Gly Gln Ala Asn Gly Ala Ala Glu Gly Asp Val Val Thr Val Thr Val 500 505 510 Gly Gly Lys Thr Phe Thr Gly Val Val Gln Ala Asp Gly Ser Trp Ser 515 520 525 Val Gly Val Pro Ala Ser Val Ile Gly Ala Leu Gly Glu Gly Ser His 530 535 540 Thr His Gly Ile Thr Leu Ser Gly Asn Pro Pro Glu Phe Thr Leu Asp 565 570 Pro Ile Ser Gln Asp Asn Val Leu Asn Ala Gln Glu Ala Met Gln Pro 580 585 590 Leu Ser Leu Ser Gly Thr Ser Asn Leu Pro Asn Gly Ser Ala Val Thr 595 600 605 Val Thr Leu Asn Asn Val Asn Tyr Gln Ala Thr Val Glu Asn Gly Arg 610 615 620 Trp Ser Val Gln Val Pro Val Ser Asp Val Leu Asp Leu Ala Asn Thr 625 630 635 640 Leu Tyr Thr Val Ser Val Ser Gly Thr Asp Ser Val Gly Asn Ser Gly 645 650 Ser Ala Glu Ala Asn Leu Leu Val Asp Thr Val Leu Pro Gln Val Ile 660 665 Val Asn Thr Phe Ala Gly Asp Asn Leu Val Asn Asn Ala Glu Ala Ala 675 680 685 Val Asp Gln Thr Leu Ser Gly Arg Val Thr Gly Ala Ala Ala Gly Asp 690 695 700 Thr Val Ser Val Thr Val Gly Gly Lys Ser Tyr Thr Ala Thr Val Gly 710 715 Ser Asp Leu Lys Trp Ser Val Thr Ile Pro Ser Ala Asp Leu Gln Ala 725 730 Phe Gly Asp Gly Asp Leu Thr Phe Ser Ala Ser Val Thr Asn Ala His 740 745 750 Gly Asn Thr Gly Thr Gly Glu Arg Asp Ile Asn Ile Asn Ala Glu Leu 755 760 765 Pro Gly Leu Arg Val Asn Thr Ile Ser Gly Asp Asp Val Ile Asn Ala 770 775 780 Ile Glu Gln Gln Asp Leu Ala Val Thr Gly Ser Ser Thr His Leu 785 790 795 Ala Glu Gly Thr Gln Ile Thr Val Thr Ile Asn Asn Val Glu Tyr Val 805 810 Thr Thr Val Asn Ala Ser Gly Ser Trp Gln Ile Gly Val Pro Ala Ala 820 825 Asp Leu Gln Ala Trp Thr Ala Gly Gly Ile Thr Val Ser Val Ser Ala 835 840 Glu Asp Ala Trp Gly Asn Thr Val Ala Ala Glu His Pro Ile Glu Leu 855 8.60

Asp Leu Asn Ala Val Ala Val Thr Ile Asp Thr Val Thr Thr Asp Asp 865 870 875 Met Leu Asn Ala Ala Glu Lys Gly Ala Asp Val Thr Leu Ser Gly Gln 885 890 895 Thr Gln Gly Val Glu Ala Gly Gln Thr Val Val Val Lys Phe Ala Asp 900 905 910 Gln Thr Phe Thr Ala Gln Val Gln Gln Asp Gly Ser Trp His Leu Thr 920 925 915 Val Pro Ala Ser Ala Met Glu Thr Leu Ile Asp Gly Arg Ala Gln Val 930 935 940 Ser Val Ser Val Thr Asn Val Asn Gly Asn Ser Ala Asp Ala Ser Arg 950 955 960 Val Val Ile Val Asp Thr Gln Pro Pro Ala Ile Thr Leu Asp Asn Leu 965 970 975 Thr Asp Asp Asn Ile Ile Asn Ala Ala Glu Ala Gln Gln Asp Leu Val 980 985 990 Leu Ser Gly Ser Thr Thr Ala Glu Thr Gly Gln Thr Val Thr Val Thr 995 1000 1005 Leu Asn Gly Lys Ser Tyr Gln Thr Thr Val Gln Ala Asp Gly Arg Trp 1010 1015 1020 Gln Leu Asn Val Pro Ala Ala Asp Val Gly Ala Leu Thr Asp Gly Asn 1025 1030 1035 1040 Val Thr Val Thr Ala Thr Val Ser Asp Val Ala Gly Asn Ser Ser Ser 1045 1050 1055 Ala Asp Arg Val Gly Leu Val Asp Ala Thr Val Pro Gln Val Thr Ile 1060 1065 1070 Asn Asp Phe Val Thr Asp Thr Asn Thr Val Asn Gln Leu Ala His Ala 1075 1080 1085 Gin Ala Gin Ile Leu Ser Gly Ser Val Thr Gly Ala Ala Ala Gly Asp 1090 1095 1100 Leu Val Thr Ile Thr Ile Asn Asn Val Asp Tyr Thr Thr Val Val Asp 1105 1110 1115 1120 Ala Ala Gly Asn Trp Ser Leu Gly Leu Pro Ala Ser Val Ile Gln Gly 1125 1130 1135 Leu Thr Asp Gly Thr Trp Thr Ile Asn Val Ser Val Thr Asp Arg Ser 1140 1145 1150 Gly Asn Thr Gly Ser Ser Val Asp Val Val Val Asn Thr Val Thr 1155 1160 1165 Pro Val Ile Gly Ile Asn Thr Leu Ala Ala Asp Asp Val Ile Asn Ala 1170 1175 1180 Ala Glu Lys Gly Glu Asp Leu Leu Leu Ser Gly Thr Ser Asn Gln Pro 1185 1190 1195 1200 Glu Gly Thr Thr Ile Thr Val Asn Leu Asn Gly Ile Asn Tyr Ser Ala 1205 1210 1215 Thr Thr Asp Ala Ser Gly Asn Trp Ser Val Thr Val Pro Ala Ser Ala 1225 1230 Val Ser Ala Leu Gly Glu Ala Asn Tyr Thr Val Thr Ala Ser Val Thr 1235 1240 1245 Asp Asn Val Gly Asn Ser Ala Ala Ala Thr His Asp Val Leu Val Asp 1250 1255 1260 Ser Ser Leu Pro Val Val Thr Leu Asn Asn Phe Ala Gly Asp Asn Ile 1265 1270 1275 Val Asn Ala Ala Glu Val Ala Ala Gly Gln Thr Leu Thr Gly Lys Val 1285 1290 1295 Ser Asn Ala Ala Ser Gly Asp Thr Val Thr Ile Ile Leu Gly Gly Gln 1300 1305 1310 Thr Tyr Thr Ala Thr Val Gln Asp Asp Leu Thr Trp Ser Leu Pro Leu 1315 1320 1325 Thr Gln Ser Gln Leu Thr Ala Leu Gly Asn Gly Asp Leu Thr Val Ser

1330 1335

Ala Ser Val Thr Asn Ala His Gly Asn Thr Gly Ser Ser Ser Leu Asp

1340

1355 Val Thr Ile Asp Ala Gln Leu Pro Gly Leu Arg Ile Asp Thr Val Ala 1365 1370 1375 Gly Asp Asp Val Ile Asn Val Ile Glu His Ala Gln Asn Leu Val Ile 1380 1385 1390 Ser Gly Thr Ser Thr Asp Leu Ala Ala Gly Ser Thr Val Thr Val Thr 1395 1400 1405 Ile Asn Gly Lys Ser Tyr Ser Ala Ser Val Gln Ala Asp Gly Thr Trp 1410 1415 1420 Gln Ala Ala Val Pro Ala Ala Asp Val Ser Arg Trp Ala Asp Gly Ser 1425 1430 1435 1440 Leu Thr Ile Ser Ala Ser Ala Gln Asp Thr Ser Gly Asn Pro Val Asn 1445 1450 1455 Ile Gly Thr Val Val Asp Val Asp Leu Ala Pro Val Ala Ile Ser Ile 1460 1465 1470 Asn Thr Val Thr Asp Asp Asn Val Leu Asn Ala Ala Glu Lys Gly Gln 1475 1480 1485 Asn Leu Val Leu Ser Gly Ser Ser Ser Asn Val Glu Ala Gly Gln Thr 1490 1495 1500 Val Thr Ile Ile Phe Ala Gly Lys Thr Trp Thr Thr Thr Val Asp Ala 1505 1510 1515 1520 Asn Gly Asp Trp Thr Cys Thr Val Pro Ala Ala Asp Leu Ser Gly Leu 1525 1530 1535 Lys Asp Gly Glu Ala Ser Val Gln Val Ser Val Thr Asn Val Asn Gly 1540 1545 1550 Asn Ala Ala Ser Ser Ser Gln Ala Phe Ser Val Ala Thr Ala Ala Pro 1555 1560 1565 Ala Val Thr Ile Asn Thr Ile Ser Gly Asn Asn Met Leu Asn Ala Ala 1570 1575 1580 Glu Ala Ala Gln Glu Leu Thr Leu Ser Gly Thr Ser Thr Ala Glu Ala 1585 1590 1595 1600 Gly Gln Thr Val Thr Phe Asn Gly Asn Gln Tyr Thr Ala Gln 1605 1610 1615 Val Gln Ala Asn Gly Ser Trp Thr Leu Asp Val Pro Ala Ala Asp Leu 1620 1625 1630 Ala Gly Ile Ala Asp Gly Ser Ala Ala Val Thr Val Thr Val Ser Asp 1635 1640 1645 Lys Ala Gly Asn Pro Ala Ser Ala Gly Ala Ser Val Leu Val Asp Thr 1650 1655 1660 Thr Val Pro Gln Ile Thr Phe Asp Ile Val Ala Gly Asp Asp Ile Val 1665 1670 1675 1680 Asn Ile Ala Glu His Gly Gln Ala Leu Ile Val Thr Gly Lys Val Thr 1685 1690 1695 Gly Ala Gln Ala Gly Asp Val Ile Thr Leu Thr Leu Asn Gly Lys Asp 1700 1705 1710 Tyr Thr Ala Met Leu Asp Gly Ala Gly Asn Trp Ser Val Gly Val Pro 1715 1720 1725 Ala Ala Asp Val Gly Ala Leu Ala Asn Gly Asp Gln Thr Ile Ser Ala 1730 1735 1740 Thr Val Thr Asp Lys Ala Gly Asn Ser Thr Ser Ala Thr His Ala Phe 1745 1750 1755 1760 Asp Val Ser Leu Thr Ala Pro Val Ile Ala Ile Asn Thr Leu Ala Val 1765 1770 1775 Asp Asp Val Ile Asn Ala Thr Glu Lys Gly Gln Asp Leu Leu Ile Ser 1780 1785 1790 Gly Thr Ser Asn Gln Pro Asp Gly Thr Arg Ile Thr Val Thr Leu Asn 1795 1800 1805 Gly Ile Ser Tyr Ala Ala Thr Thr Asp Ala Ser Gly Asn Trp Ser Val 1810 1815 1820 Thr Val Pro Ala Ala Asn Val Ser Ala Leu Gly Glu Ala Ser Tyr Ser 1830 1835

His Ser Val Leu Val Asp Ser Ala Leu Pro Gln Val Thr Ile Asn Ala 1860 1865 1870

Val Ala Thr Asp Asp Val Ile Asn Ala Ala Glu Val Ala Ser Gly Gln
1875
1880
1885

Thr Leu Ser Gly Lys Val Ser Gly Ala Ala Ser Gly Asp Thr Val Thr 1890 1895 1900

Ile Ser Val Gly Gly Asn Thr Tyr Thr Thr Ile Val Gln Asp Asp Leu 1905 - 1910 1920 Ser Trp Ser Val Asn Val Ala Ser Asp Val Leu Thr Ala Ile Gly Asn

1925 1930 1935 Gly Asp Leu Thr Val Ser Ala Ser Val Thr Asn Gly His Gly Asn Thr

1940 1945 1950 Gly Ser Gly Glu Arg Asp Ile Thr Ile Asp Ala Asn Leu Pro Gly Leu 1955 1960 1965

1955 1960 1965 Arg Val Asn Lys Val Ala Gly Asp Asp Val Ile Asn Ser Ile Glu His 1970 1975 1980

Gly Gln Asn Leu Ile Ile Thr Gly Ser Ser Asp Gly Leu Ala Ala Gly 1985 - 1990 Ser Ala Leu Thr Val Thr Val Asn Gly Lys Thr Tyr Ala Ala Thr Val

2005 2010 Leu Ala Asp Gly Thr Trp Thr Ala Ala Val Pro Ala Ala Asp Val Gly

2020 2025 2030 2030 Ala Leu Ser Glu Gly Thr Val Thr Val Thr Val Glu Gly Gln Ser Ala 2035 2040 2045

Ala Gly Asn Pro Val Ser Ile Ser His Asp Val Lys Val Asp Leu Ala 2050 2055 2060 Thr Val Ala Ile Ser Ile Asp Ala Ile Ala Thr Asp Asp Val Ile Asn

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Ser Ala Thr Val Asp Ala Ser Gly Asn Trp Thr Ala Thr Val Pro Ser 2115 2120 2125

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Thr Ile Asn Asn Lys Asp Tyr Thr Ala Thr Leu Asp Ala Ser Gly Arg 2305 2310 2315 Trp Ser Val Gly Val Pro Ala Ala Asp Val Ser Ala Leu Thr Ala Gly

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Thr Asp Gly Ser Val Thr Val Thr Ala Ser Val Ser Asp Lys Ala Gly 2835 2845

Asn Pro Ala Ser Val Asp His Ala Leu Thr Val Asp Val Thr Val Pro 2850 2855 2860

Ala Val Thr Ile His Thr Val Ala Gly Asp Asp Val Ile Asn Val Ala 2865 \$2870\$ 2870 \$2870\$ Ear Ala Thr Gly Ala Ala Glu His Asn Gln Ala Gln Ile Ile Ser Gly Ser Ala Thr Gly Ala Ala

Glu His Asn Gln Ala Gln Ile Ile Ser Gly Ser Ala Thr Gly Ala Ala 2895 2890 2895 Ala Gly Asp Lys Val Thr Val Thr Ile Gly Gly Gln Thr Tyr Thr Thr

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Thr Gly Leu Pro Ser Val Ser Phe Asn Ala Ile Ser Asp Asp Asn Val 2965 2970 Leu Asn Ala Val Glu Lys Gly Gln Asp Leu Ser Val Ser Gly Thr Ser

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Gly Glu Arg Glu Ile Ala Ile Asp Ala Asn Leu Pro Gly Leu Arg Val 3155 Asp Thr Val Ala Gly Asp Asp Val Val Asn Thr Ile Glu His Ala Gln

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Pro Glu Gly Thr Val Lys Ile Ser Val Thr Gly Asp Ser Ala Ala Gly 3235 3240 3245

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Glu Lys Gly Ala Asp Leu Val Leu Ser Gly Val Thr Thr Asn Val Glu 3285 3290 3295 Ala Gly Gln Thr Val Thr Ile Ser Leu Asn Gly Arg Ile Tyr Thr Thr

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- Ala Gly Gln Ser Ala Ala Gly Asn Pro Val Thr Ile Ser His Asp Val
 - Ala Gly Gin Ser Ala Ala Gly Asn Pro Val Thr Ile Ser His Asp Va. 3845 3850 3855
- Thr Val Asp Leu Ala Ala Val Ala Ile Ser Ile Asp Ala Ile Ala Thr 3860 3865 3870 Asp Asp Val Ile Asn Ala Ala Glu Lys Gly Val Asp Leu Val Leu Ser
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- Ala Gly Asn Ser Ser Thr Gln Thr His Asp Val Val Val Asn Thr Ala 4145 \$4150\$ Ser Val Ala Leu Thr Val Asn Thr Leu Ser Gly Asp Asp Val Ile Asn
- 4165 4170 4175 Ala Ala Glu Ala Gly Ala Ser Leu Val Ile Asn Gly Ser Ser Ala Gln 4180 4185 4190
- Phe Ala Ser Gly Thr Gln Val Thr Ile Thr Leu Asn Gly Lys Ser Tyr 4195 4200 4205
- Thr Ala Thr Ile Gln Ser Asp Gly Ser Trp Thr Thr Thr Val Pro Ala 4210 4215 4220
- Ala Asp Val Gly Thr Leu Ala Asp Gly Ala Ser Tyr Gln Val Ser Val 4225 4230 4235 4240 Ser Ala Gln Asp Ser Ala Gly Asn Ser Ala Ser Ala Thr His Thr Ile
- 4245 4250 4255

 Ser Val Asp Thr Thr Ala Pro Val Ile Ser Val Asp Thr Leu Ser Gly
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Ala Pro Asp Ala Ser Lys Thr Ile Ala Ile Asp Ser Ile Ser Asp Asp $4770 \hspace{1.5cm} 4775 \hspace{1.5cm} 4780$

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Leu Phe Ala Leu Leu Val Val Phe Ile Thr Trp Ala Ser Leu Phe Gln
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                             7.5
Val Arg Glu Gly Asp Ile Val Glu Arg Gly Gln Gln Leu Ala Gln Leu
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Asp Arg Thr Lys Thr Glu Ser Ser Val Leu Glu Ser Glu Ser Arg Leu
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Asn Ala Ala Met Ala Thr Ala Ala Arg Leu Asn Ala Glu Val Asn Asp
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                          125
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Ser Arg Ile Leu Arg Asp Gly Pro Glu Lys Glu Gly Lys Glu Ser Leu
       195
                           200
Asn Gly Leu Thr Lys Arg Glu Leu Thr Val Leu Leu Asn Phe Tyr Arg
  210
                       215
                                         220
Gly Ile Ser Ile Lys Glu Gln Ser Ala Arg Leu Gly Leu Ser Asp Lys
225
                                   235
                  230
Thr Ile Tyr Thr His Arg Lys Lys Gly Val Gly Lys Ile Tyr Pro Asn
                        250
               245
Gln Gly Phe Gly
           260
<210> 8405
<211> 110
<212> PRT
<213> Enterobacter cloacae
<400> 8405
Asn Arg Val Ile Phe Ser Gly Gly Leu Met Ala Asp Phe Thr Leu Ser
               - 5
Lys Pro Ile Phe Gly Gly Lys Gln Pro Lys Thr Ser Thr Ala Gly Asn
          20
                              2.5
Ile Ala Tyr Ala Leu Phe Val Leu Phe Cys Phe Trp Ala Gly Thr Gln
      35
                          40
Leu Leu Asn Met Leu Val His Ala Pro Gly Val Tyr Glu His Leu Met
       55
Gln Val Gln Asp Thr Gly Arg Pro Arg Val Glu Phe Gly Leu Gly Val
                70
                                      75
Ser Thr Val Phe Gly Leu Ile Pro Phe Leu Ala Gly Ser Met Val Leu
            8.5
                                  90
Gly Val Ile Ala Leu Val Leu Arg Trp Arg Asn Arg His
<210> 8406
<211> 445
<212> PRT
<213> Enterobacter cloacae
<400> 8406
Arg Leu Ser Tyr Gly Arg Cys His Lys Met Gly Ala Thr Leu Gln Val
                                  10
Asn Cys Ser Asn Leu Pro Thr Val Thr Phe Phe Ser Leu Ser Leu Cys
                              25
                                                  30
Lys Ser Gly His Cys Pro Thr Pro Ile Ser Ser Ile Thr Thr Arg Asn
                          40
                                              45
Phe Pro Tyr Ser Leu Asp Gly Cys Phe Ser Leu Lys Arg Cys Leu Leu
                      5.5
                                          60
Ser Ile Ala Ala Leu Cys Ala Val Ser Leu Ser Thr Ala Gln Ala Ala
                   70
                                      75
Gln Pro Leu Thr Ala Pro Val Leu Ala Ser Asp Ile Ala Asp Arg Tyr
               85
                                  90
Ala Asn Leu Ile Tyr Tyr Gly Ser Gly Ala Thr Gly Met Ala Leu Val
           100
                              105
Val Ile Asp Gly Asn Gln Arg Val Phe Arg Ser Phe Gly Glu Thr Arg
       115
                          120
Pro Gly Asn Asn Val Arg Pro Gln Leu Asp Ser Val Ile Arg Val Ala
                      135
                                          140
Ser Ile Thr Lys Leu Met Thr Ser Glu Met Leu Val Lys Leu Leu Asp
                  150
                                      155
Gln Gly Val Val Lys Leu Asp Asp Pro Leu Ser Lys Tyr Ala Pro Pro
              165
                                  170
Gly Ala Arg Val Pro Thr Tyr Gln Gly Thr Pro Ile Arg Leu Val Asn
```

```
185
        180
Leu Ala Thr His Thr Ser Ala Leu Pro Arg Glu Gln Pro Gly Gly Ala
     195
                 200
                                  205
Ala His Arg Pro Val Phe Val Trp Pro Thr Arg Glu Gln Arg Trp Asn
               215
                               220
Tyr Leu Ser Thr Ala Thr Leu Lys Ser Ala Pro Gly Ser Gln Ala Gly
           230
                 235
Tyr Ser Asn Leu Ala Phe Asp Leu Leu Ala Asp Ala Leu Ala Thr Ala
         245 250 255
Ser Gly Lys Pro Tyr Pro Gln Leu Phe Glu Glu Gln Ile Thr Arg Pro
       260
            265 270
Leu Gly Met Lys Asp Thr Thr Tyr Thr Pro Ser Pro Asp Gln Cys Lys
     275 280 285
Arg Leu Met Val Ala Glu Lys Gly Ala Ser Pro Cys Asn Asn Thr Leu
 290 295
                     300
Ala Ala Ile Gly Ser Gly Gly Val Tyr Ser Thr Pro Gly Asp Met Met
305 310 315
Arg Trp Met Gln Gln Phe Leu Ser Ser Asp Phe Tyr Ala Arg Ser Asn
      325 330
Gln Ala Asp Arg Met Gln Thr Leu Ile Tyr Gln Arg Ala Gln Leu Arg
       340 345
Arg Val Ile Gly Met Asp Val Pro Gly Lys Ala Asp Ala Leu Gly Met
     355 360 365
Gly Trp Val Tyr Met Ala Pro Lys Asp Gly Arg Pro Gly Ile Ile Gln
370 375
Lys Thr Gly Gly Gly Gly Phe Ile Thr Tyr Met Ala Met Ile Pro
385 390
                           395
Gln Ser Asn Val Gly Ala Phe Val Val Val Thr Arg Ser Pro Asn Thr
          405 410 415
Arg Phe Val Asn Met Ser Asp Gly Val Asn Asn Leu Val Ala Glu Leu
   420 425
Ser Ala Asn Lys Ala Gln Val Leu Thr Ala Ser Asn
```

<210> 8407 <211> 576

<212> PRT <213> Enterobacter cloacae

<400> 8407

Ser Met Phe Ser Leu Asp Ser Val Leu Asp Asp Leu Trp Pro Gln Ala Arg Pro Ala Pro Trp Gln Lys Ser Leu Leu Lys Arg Leu Leu His Glu 25 Asp Glu Phe Gln Gln Phe Ala Ala Ser His Arg His Leu Lys Gly Leu 35 4.0 45 Asp Met Val Asp Gln Val Leu Glu His Leu Asp Ile His Cys Ser Val 5.5 60 Ser Ala Arg Asp Leu Glu Gln Ile Pro Glu His Gly Pro Leu Ile Val 70 7.5 Ile Ala Asn His Pro Thr Gly Thr Leu Asp Gly Leu Ala Leu Leu Tyr 8.5 90 Ala Val Ser Arg Val Arg Arg Asp Val Arg Val Val Thr Asn Arg Met 100 105 Leu Ser His Leu Glu Pro Leu Ser Ser Leu Phe Ile Pro Val Asp Asn 120 Met Gly Gly Arg Thr Ala Lys Ala Ser Leu Ile Gln Met Glu Gln His 130 135 140 Leu Gln Asn Ala Gly Val Leu Ile Phe Phe Pro Ala Gly Glu Val Ser 150 155

Arg Pro Thr Arg Lys Gly Ile Arg Asp Lys Lys Trp His Pro Gly Phe

```
165
                         170
Ile Lys Leu Ala Gly Lys Leu Arg Val Pro Leu Pro Val His Ile
      180
                185
Gln Ala His Asn Ser Leu Leu Phe Tyr Ala Ser Thr Leu Val Ser Pro
              200
   195
                              205
Thr Val Ser Met Leu Leu Met Gln Gln Met Phe Arg Arg Arg His
 210 215
                      220
Ser Gln Leu Pro Ile Lys Ile Gly Gln Gln Ile Ala Trp Asn Asp Arg
225 230 235 240
Phe Ser Ser Thr Leu Ser Ser Arg Glu Met Ala Glu Gln Cys Arg Gln
          245
               250 255
His Val Ile Arg Leu Gly Lys Gly Leu Pro Gly Val Phe Lys Thr Gln
       260
           265 270
Cys Ala Ile Ala Arg Pro Glu Asp Arg Ala Thr Leu Lys Arg Glu Leu
     275
         280 285
Ala Gln Ala Glu Cys Leu Gly Lys Thr Ser Asp Gly Lys Ala Ile Tyr
 290 295 300
Leu Trp Gln Arg Asn Gly Gln Glu Glu Ala Pro Leu Leu Arg Glu Leu
   310 315
Gly Arg Leu Arg Glu Ile Ala Phe Arg Ala Val Glu Glu Gly Ser Gly
      325 330 335
Lys Arg Arg Asp Thr Asp Ser Tyr Asp Asp Asp Tyr Leu His Leu Ile
   340 345 350
Leu Trp Asp Asp Asp Leu Glu Ile Val Gly Ala Tyr Arg Phe Met
355 360 365
Pro Thr Ala Met Gln Val Glu Lys Arg Gly Val Glu Gly Leu Tyr Ser
370 375 380
Tyr Ser Leu Phe His Tyr Asp Glu Lys Met Gln Asp Ile Leu Glu His
385 390 395 400
Gly Ile Glu Leu Gly Arg Ser Phe Ile Gln Pro Arg Tyr Trp Gly Arg
      405 410
Arg Gly Leu Asp Tyr Leu Trp Ser Gly Ile Gly Ala Tyr Leu Ala Arg
 420 425
Tyr Pro His Tyr Arg Tyr Leu Phe Gly Pro Val Ser Ile Ser Gly Gly
435 440
                               445
Leu Pro Pro Ala Ala Arg Asp Leu Leu Val Ala Phe Tyr Arg Leu Trp
450 455 460
Phe Pro Ala Thr His Pro Leu Ala Ala Ser Arg Gln Pro Tyr Pro Ala
465 470 475
Ser Leu Pro Asp Val Leu Ala Gln Phe Gly Gly Val Asp Tyr Val Asp
         485 490
Asp Leu Thr Lys Leu Lys Ser Leu Leu Gly Asn Leu Gly Cys Gly Ile
      500 505 510
Pro Pro Leu Tyr Lys Gln Tyr Ser Glu Leu Cys Glu Pro Gly Gly Val
    515 520
Gln Phe Val Asp Phe Gly Ser Asp Pro Ala Phe Asn Asn Cys Ile Asp
 530 535
                   540
Gly Leu Val Leu Val Asp Leu Cys Tyr Leu Lys Ala Asn Arg Tyr Gln
545 550 555
Arg Tyr Ile Glu Ala His Leu Ile Pro Ser Pro Leu Pro Ser Pro
                        570
<210> 8408
```

<211> 292 <212> PRT

<213> Enterobacter cloacae

<400> 8408

Arg Arg Arg Asn Thr Lys Cys Asp Ala Gln Met Leu Ile His Thr Ala 10 Thr Thr Ala Lys Pro Glu Met Ala Asp Ser Ala Thr Asn Thr Val Ser

```
Gly Ala Thr Thr Leu Glu Asn Ser Ala Ser Thr Pro Pro Ser Met Glu
                     40
Thr Glu Ser Ala Val Ser Gly Thr Pro Phe Leu Leu Thr Arg Ala Lys
                  55
Gln Arg Gly Ser Val Phe Ser Leu Asp Arg Asp His Ser Ile Arg Pro
              70
                           75
Glu Ala Tyr Arg Pro Glu Phe Ala Ala Glu Arg Ile Ala Val Arg Ile
           85
                        90 95
Thr Lys Leu Lys Ile Ser Ala Ala Tyr Gly Met Pro Thr Phe Ser Asn
       100
              105
Thr Ser Thr Asn Gly Leu Phe Ser Thr Pro Ala Cys Cys Met Gly Ile
   115
         120
                        125
Ser Ala Ala Ser Thr Asn Thr Val Pro Ile Lys Lys Met Met Ser Arg
 130 135 140
Ala Met Val Val Arg Ile Ala Thr Gly Ile Thr Leu Cys Gly Phe Ser
145 150 155
Val Ser Pro Ala Ala Met Pro Ile Ser Ser Val Pro Glu Lys Ala Lys
      165 170
Leu Thr Ala Thr Met Val Ile Arg Ile Gly Arg Pro Pro Cys Gly Asn
                       185 190
 180
Gln Pro Ser Ala Val Met Leu Leu Lys Pro Gly Ala Gly Glu Pro Ser
195 200
                         205
Cys Ile Gly Ile Lys Pro Lys Ile Ala Ala Pro Pro Arg Ile Met Lys
210 215 220
Ala Met Met Val Met Thr Phe Thr Ser Glu Ash Gln Ash Ser Pro Ser
225 230
                             235
Ala Lys Lys Arg Val Glu Ile Thr Leu Arg Ala Lys Ile Thr Thr Gln
                           250
Lys Thr Thr His His Val Gln Thr Gly Thr Cys Gly Asn Gln Tyr Cys
                       265
Ile Gln Asn Pro Ala Ala Val Lys Leu Asp Pro Ser Ala Thr Val Gln
Val Asn Gln
 290
```

<210> 8409 <211> 385 <212> PRT

<213> Enterobacter cloacae

<400> 8409 Ile Ser Ser Ile Val Asp Thr Val Ser Ser Ser Pro Gly Leu Thr Met 10 Arg Phe Asn Gly Leu Thr Lys Gly Phe Phe Ile Leu Ile Leu Ala Leu 20 25 Val Thr Trp Ala Phe Phe Asp Val Leu Ser Pro Tyr Phe Ser Ala Ile 40 Leu Trp Ala Ala Ile Leu Thr Ile Ile Phe Asn Pro Val Lys Asn Lys 60 Leu Arg Thr Ala Leu Gly Asp Arg Asn Gly Leu Ala Ser Leu Leu Thr 75 Leu Gly Ile Ile Cys Leu Ile Val Phe Ile Pro Leu Met Val Ile Leu 85 90 Ser Ser Leu Ala Val Glu Leu Asn Met Val Tyr Thr Lys Leu Gln Gln 100 105 Asn Asn Thr Gln Phe Pro Glu Val Ile Ala Gly Ile Phe Asn Arg Leu 120 Pro Asp Trp Ala Ser Gly Phe Leu Ala Asp His Asn Leu Thr Asn Ala 135 140 Ala Gln Ile Gln Lys Lys Leu Ser Asp Val Ala Leu Gln Gly Gly Gln

```
Tyr Leu Ala Gly Ser Ala Phe Leu Ile Gly Lys Gly Thr Phe Gly Phe
          165
                       170
Ala Ile Ser Phe Gly Ile Met Leu Tyr Leu Leu Phe Phe Leu Leu Lys
        180
               185
                          190
Asp Gly Pro Tyr Leu Val Arg Gln Ile Leu Asp Ser Leu Pro Leu Ser
     195
         200
                        205
Asp Phe Val Lys Gln His Leu Phe Ala Lys Phe Val Gly Val Ser Arg
 210 215 220
Ala Thr Val Lys Gly Thr Ala Val Val Ala Val Val Gln Gly Thr Leu
        230 235
Gly Gly Ile Ala Phe Ala Ile Val Gly Ile Asp Gly Ser Val Leu Trp
         245 250
Gly Ala Leu Met Ala Phe Leu Ser Leu Val Pro Ala Val Gly Ser Ala
      260 265 270
Ile Val Trp Val Pro Ala Ala Ile Phe Leu Phe Ala Thr His Gln Leu
 275 280 285
Trp Gln Gly Leu Phe Ile Val Gly Phe Phe Val Ile Ile Val Gly Leu
 290 295 300
Val Asp Asn Leu Leu Arg Pro Leu Leu Val Gly Lys Asp Thr Lys Met
305 310 315
Pro Asp Tyr Leu Ile Leu Ile Thr Thr Leu Gly Gly Met Glu Leu Tyr
        325 330
Gly Ile Asn Gly Phe Val Ile Gly Pro Leu Ile Ala Ala Leu Phe Ile
           345 350
Ala Cys Trp Asn Leu Phe Ser Gly Arg Asp His Ala Gly Asn Ala Glu
   355 360
                                 365
Glu Leu Asp Ala Asp Phe Ile Glu Glu Gly Lys Asn Pro Pro Asp Leu
                375
```

385

<210> 8410 <211> 607

<211> 607 <212> PRT

<213> Enterobacter cloacae

<400> 8410 Thr Leu Phe His Ile Cys Arg Arg Arg Ile Gln Gln Val Arg Ile Ala 1.0 Thr Ile Thr Asn Trp Ala Tyr Gly Val Thr Val Cys Leu Thr Ile Ala 25 30 Ser Gly Ile Val Met Leu Met Ala Ser His Ala Asp Asn Val Glu Arq 3.5 4.0 4.5 Gln Ala Val Lys Gln Arg Gln Ile Phe Asp Gln Leu Thr Glu Glu Ile 55 Glu Ala Glu Thr Trp Met Leu Ser Asp Leu Ala Arg Leu Tyr Ala Ile 75 Lys Lys Glu Pro Asp Val Leu Lys Thr Tyr Gln Ala Lys Glu Gly Glu 8.5 90 Leu Lys Asn Ile Glu Arg Lys Leu Gly Gln Leu Lys Asp Thr Gly Ala 105 100 Thr Gly Glu Glu Leu Ala Leu Leu Tyr Glu Gly Leu Lys Ile Val Asp 115 120 125 Asp Leu Gln Asp Glu Gln Gln Ala Ala Ile Ala Ser Val Ala Arg Gly 130 135 140 Glu Glu Gln Gln Ala Ile Ala Leu Leu Phe Gly Lys Ile Tyr Glu Leu 150 155 Glu Met Glu Arg Ala Gln Ser Lys Ile Asp His Phe Arg Val Leu Leu 165 170 Asp Lys Arg Ile Ile Ala Asp Val Gln Ala Ala Thr Asn Thr Ser Lys

```
180
                       185
Thr Leu Arg Thr Ala Ser Glu Met Met Val Gly Leu Thr Ala Leu Leu
     195
               200 205
Phe Leu Phe Val Met Gly Phe Ile Leu Lys His Arg Val Leu Arg Pro
 210 215 220
Val Val Arg Leu Ser Asp Val Val His Arg Leu Ala Ser Gln Asp Tyr
      230 235
Ala Val Glu Thr Pro Asn Phe Asn Gln Val Asp Glu Ile Gly Asp Met
        245 250 255
Ala Gln Ala Ile Arg Ile Phe Arg Glu Asn Gly Leu Ala Arg Gln Arg
      260 265 270
Leu Glu Lys Glu Arg Asp Ala Asp Trp Ala Ile Arg Glu Leu Leu Ala
    275 280 285
Arg Met Thr Gln Arg Leu Gln Gly Cys Glu Asn Val Ser Asp Val Ile
 290 295 300
Glu Val Ala Glu Leu Phe Ala Pro Asn Ile Ala Pro Gly Val Ala Gly
305 310 315
Arg Leu Tyr Ile Leu Asp Arg Asn Pro Trp Glu Met Arg Cys Ala Ala
       325 330
Glu Trp Leu Ser Pro Gln Gly Glu Lys Asn Ala Phe His Pro Asp Gln
      340 345 350
Cys Trp Ala Ile Arg Arg Gly Gln Ser His Pro Pro Val Asn Gly Glu
 355 360
                                  365
Pro Asp Ile Gly Cys Gln His Leu Pro Glu Ser Gln Lys Asp Ser Ser
370 375 380
Leu Cys Val Pro Leu Ile Ala Gln Gly Glu Ala Ile Gly Leu Leu Ser
   390 395
Phe Gln Asn Ile Thr Pro Glu Thr Ala Pro Ser Arg Ala Tyr Leu Glu
          405 410
Leu Met Ala Glu Ala Leu Gly Leu Ala Leu Ala Asn Gln Arg Leu Arg
      420 425
Asp Ala Leu Leu Glu Lys Ala Leu Phe Asp Pro Leu Thr Gly Leu Arg
 435 440 445
Asn Arg His His Leu Glu Asp Thr Leu Arg Thr Gln Ile Ala Gln Ala
450 455 460
Met Arg Asn Asp Glu Pro Val Ser Cys Met Met Ile Asp Ile Asp His
465 470 475
Phe Lys Ser Ile Asn Asp Arg Phe Gly His Glu Ala Gly Asp His Val
          485 490
Ile Lys Ser Val Ala Thr Ile Val Gln Arg Ala Val His Asp Ala Gly
                      505 510
Leu Ala Phe Arg Phe Gly Gly Glu Glu Phe Leu Val Leu Leu Thr Gly
     515 520
                                  525
Ala Asp Glu Glu Ala Ala His Ala Cys Ala Thr Glu Ile Tyr Asn Gly
                535
                               540
Val His Thr Leu Ser Leu Arg Tyr Gly Leu Ala Glu Ile Gly Pro Val
              550
                            555
                                        560
Asp Val Ser Ile Gly Ile Ala Ser Tyr Pro Gln His Ala Gln Ser Asp
           565 570 575
Asp Leu Leu Arg Ala Ala Asp Val Ala Leu Tyr Arg Ala Lys Glu Leu
            585
        580
                          590
Gly Arg Ser Arg Ile Val Ser Phe Ser Met Leu Glu Ala Gly
                   600
<210> 8411
<211> 263
<212> PRT
<213> Enterobacter cloacae
```

<400> 8411

Thr Thr Phe Ala Leu Ser Leu Ile Ile Val Glu Glu Arg Met Met Asp

```
10
Ile Pro Arg Ile Phe Thr Val Ser Glu Ser Glu His Arg Ile His Asn
         20
                         25
Pro Phe Thr Glu Glu Lys Tyr Ala Thr Leu Gly Arg Val Leu Arg Met
     35
                       40
Lys Pro Gly Thr Arg Ile Leu Asp Leu Gly Ser Gly Ser Gly Glu Met
Leu Cys Thr Trp Ala Arg Asp Tyr Gly Ile Thr Gly Thr Gly Ile Asp
             7.0
                                7.5
Met Ser Gln Leu Phe Thr Ala Gln Ala Thr Leu Arg Ala Glu Glu Leu
            8.5
                            90
Gly Val Ser Glu Arg Val His Phe Ile His Asn Asp Ala Ala Gly Tyr
        100
                        105
Val Ala Asn Glu Lys Cys Asp Val Ala Ala Cys Val Gly Ala Thr Trp
     115
                     120
                             125
Ile Ala Gly Gly Val Ala Gly Thr Met Asp Leu Leu Ala Lys Ser Leu
         135
  1.30
Lys Pro Gly Gly Ile Met Leu Ile Gly Glu Pro Tyr Trp Arg Gln Val
       150 155
Pro Ala Thr Glu Glu Thr Ala Gln Ala Cys Gly Val Ser Ser Ile Thr
       165 170
Asp Phe Leu Thr Leu Pro Gly Leu Val Ala Ser Phe Asp Gln Gln Gly
 180 185 190
Tyr Asp Leu Val Glu Met Val Leu Ala Asp Gln Glu Gly Trp Asp Arg
195 200 205
Tyr Glu Ala Ala Lys Trp Met Thr Met Arg Arg Trp Leu Glu Glu Asn
 210 215
                            220
Pro Asp Asp Phe Ala Gln Glu Val Arg Ala Glu Leu Thr Ile Ala
225 230 235
Pro Glu Arg His Val Thr Tyr Thr Arg Glu Tyr Phe Gly Trp Gly Val
         245
Phe Ala Leu Met Ala Arg
        260
```

<210> 8412

<211> 407 <212> PRT

<213> Enterobacter cloacae

<400> 8412

Thr Asp Leu Phe Leu Ser Arg Ala Pro Leu Gln His Pro Ser Lys Tyr 10 Tyr Gly Arg Arg Pro Arg Asn Pro Pro Gly Ile Val Val Cys Tyr Trp 2.5 30 Leu Phe Val Arg Leu Glu Glu Ser Glu Met Ala Lys Gln Arg Val Gly 4.0 Ile Val Phe Gly Gly Lys Ser Ala Glu His Glu Val Ser Leu Gln Ser 60 Ala Lys Asn Ile Val Asp Ala Ile Asp Lys Ser Arg Phe Asp Val Val 75 Leu Leu Gly Ile Asp Lys Gln Gly Gln Trp His Val Asn Asp Ala Ser 8.5 90 Gln Tyr Leu Leu His Ala Asp Asp Pro Ala His Ile Ala Leu Asn Pro 100 105 Ser Asp Ile Ser Val Ala Thr Val Pro Gly Val Val Gln Gly Gln Leu 115 120 Ile Asp Ala Gly Asn Ala Gln Ala Leu Ala Gln Ile Asp Val Val Phe 135 140 Pro Ile Val His Gly Thr Leu Gly Glu Asp Gly Ser Leu Gln Gly Met 150 155 Leu Arg Met Ala Asn Leu Pro Phe Val Gly Ser Asp Val Leu Gly Ser

```
165
                          170
Ala Ala Cys Met Asp Lys Asp Val Thr Lys Arg Leu Leu Arg Asp Ala
        180
                       185
                                     190
Gly Leu Asn Ile Ala Pro Phe Val Ala Leu Thr Arg Ala Asn Arg Asp
     195
               200
                                  205
Lys His Ser Phe Ala Gln Ile Gln Ala Gln Leu Gly Leu Pro Leu Phe
        215 220
Val Lys Pro Ala Asn Gln Gly Ser Ser Val Gly Val Ser Lys Val Thr
      230
                  235
Ser Glu Ala Gln Phe Asn Glu Ala Val Arg Leu Ala Phe Glu Phe Asp
         245 250
His Lys Val Val Val Glu Gln Gly Ile Asn Gly Arg Glu Ile Glu Cys
      260 265 270
Ala Val Leu Gly Asn Asp Phe Pro Gln Ala Ser Thr Cys Gly Glu Val
   275 280 285
Val Leu Asn Ser Asp Phe Tyr Ser Tyr Asp Thr Lys Tyr Ile Asp Asp
 290 295 300
Lys Gly Ala Gln Val Val Pro Ala Ala Leu Asp Pro Asp Val Asn
305 310 315
Asp Lys Ile Arg Ala Ile Ala Val Glu Ala Tyr Gln Ala Leu Gly Cys
      325 330
Cys Gly Met Ala Arg Val Asp Val Phe Leu Thr Pro Asp Asn Glu Val
  340 345 350
Val Ile Asn Glu Ile Asn Thr Leu Pro Gly Phe Thr Asn Ile Ser Met
355 360 365
Tyr Pro Lys Leu Trp Gln Ala Ser Gly Ile Ser Tyr Pro Glu Leu Ile
370 375 380
Thr Arg Leu Ile Glu Leu Ala Leu Glu Arg His Ala Ala Asp Ser Ala
Leu Lvs Ser Ser Val Asn
           405
```

<210> 8413 <211> 365 <212> PRT <213> Enterobacter cloacae

<400> 8413 Thr Lys Tyr Met Gln Arg Ile Leu Val Asp Phe Glu Asn Leu Lys Asp 10 Asn Phe Ser Lys Thr Pro Leu Pro Ala Phe Arg Tyr Thr Ile Pro Leu 25 Cys Ser Thr Asn Ile Arg His Thr Met Thr Asp Leu Ile Ala Arg Pro 4.0 4.5 Arg Arg Leu Arg Lys Ser Pro Ala Leu Arg Ala Met Phe Glu Glu Thr 55 60 Thr Leu Thr Leu Asn Asp Leu Val Leu Pro Ile Phe Val Glu Glu Glu 70 75 Ile Asp Asp Tyr Lys Ala Ile Asp Ala Met Pro Gly Val Met Arg Ile 85 90 Pro Glu Lys His Leu Ala Arg Glu Ile Glu Arg Ile Ala Asn Ala Gly 100 105 Ile Arg Ser Val Met Thr Phe Gly Ile Ser His His Thr Asp Ala Thr 115 120 Gly Ser Asp Ala Trp Lys Glu Asp Gly Leu Val Ala Arg Met Ser Arg 1.35 140 Ile Cys Lys Glu Ser Val Pro Glu Met Ile Val Met Ser Asp Thr Cys 145 150 155 Phe Cys Glu Tyr Thr Ser His Gly His Cys Gly Val Leu Cys Asp His 165 170 Gly Val Asp Asn Asp Ala Thr Leu Leu Asn Leu Gly Lys Gln Ala Val

```
185
Val Ala Ala Ala Gly Ala Asp Phe Ile Ala Pro Ser Ala Ala Met
   195
                    200
                             205
Asp Gly Gln Val Gln Ala Ile Arg His Ala Leu Asp Ala Ala Gly Phe
                 215
                      220
Thr Asp Thr Ala Ile Met Ser Tyr Ser Thr Lys Phe Ala Ser Ser Phe
      230
                   235 240
Tyr Gly Pro Phe Arg Glu Ala Ala Gly Thr Ala Leu Lys Gly Asp Arg
           245 250 255
Lys Thr Tyr Gln Met Asn Pro Leu Asn Arg Arg Glu Ala Ile Arg Glu
        260 265 270
Ser Leu Leu Asp Glu Ala Gln Gly Ala Asp Cys Leu Met Val Lys Pro
    275 280 285
Ala Gly Ala Tyr Leu Asp Ile Leu Arg Asp Ile Arg Glu Arg Thr Glu
 290 295 300
Leu Pro Leu Gly Ala Tyr Gln Val Ser Gly Glu Tyr Ala Met Ile Lys
305 310 315
Phe Ala Ala Gln Ala Gly Ala Ile Asp Glu Glu Lys Val Ile Leu Glu
      325 330 335
Ser Leu Gly Ala Ile Lys Arg Ala Gly Ala Asp Leu Ile Phe Ser Tyr
 340 345
Phe Ala Leu Asp Leu Ala Glu Lys Lys Ile Leu Arg
<210> 8414
<211> 653
<212> PRT
<213> Enterobacter cloacae
<400> 8414
Ile Val Val Gln Glu Asn Ile Met Asn Arg Ile Leu Val Gly Ile Ile
                       10
Phe Ser Leu Phe Ile Thr Thr Gly Tyr Ile Ala Phe Leu Val Tyr Asp
20
Arg Gln Gln Glu Leu Gln Lys Leu Thr His Tyr Thr Glu Ser Trp Ser
                    40
                                   45
Val Ala Gln Leu Val Ser Glu Tyr Tyr Arg Phe Glu Ser Trp Ile Gly
50 55
                        60
Leu Tyr Ala Thr Glu Thr Asp Asp Val Thr Val Asp Gln Val Arg Met
                           75
             70
Arg Leu Glu Ile Met Leu Ser Gln Asn Asp Leu Leu Lys Glu Gly Gly
                        90
Leu Gly Arg Tyr Ile Asn Ser Glu Lys Ala His Gln Ala Leu Ala Leu
        100 105
                                      110
Arg Leu Glu Asn Ile Leu Asn Tyr Leu Asp Gly His Leu Glu Lys Met
                    120 125
Ser Arg Ser Glu Leu Lys Leu Tyr Leu Asn Asn Met His Ser Leu Asp
               135
                                140
Ala Pro Leu Ser Gln Leu Ser Ser Thr Ala Leu Thr Lys Asp Val Asn
145 150 155
Thr Ile Asn Glu Thr Asn Leu Lys Ile Gln Val Leu Tyr Tyr Ile Tyr
      165 170
Ser Ala Leu Ser Leu Leu Leu Val Ile Leu Ser Phe Ile Leu Gly Phe
        180 185 190
Leu Ile Ile Tyr Gln Asn Lys Asn Ile Leu Lys Ala His Met Gln Val
     195 200
                                    205
Lys Thr Leu Ala Glu Glu Leu Gln Leu Ser Lys Glu Thr Leu Gln Ile
210 215
                                220
Gln Asn Thr Lys Leu Glu Tyr Asp Val Tyr His Asp Ser Leu Thr Gly
225 230
                              235
```

Met Lys Asn Arg Leu Phe Phe Trp Asp Asp Leu Asn Lys Leu Asn Leu

```
245
                           250
Gln Ala Glu Lys Lys His Ile Ser Val Thr Val Met Leu Phe Asp Leu
                       265
        260
                                      270
Asp Arg Phe Lys Glu Val Asn Asp Thr Tyr Gly His Asp Thr Gly Asp
                  280
Leu Leu Leu Arg Glu Val Ser Thr Arg Leu Asn Ala Leu Gly Arg Phe
       295
                                300
Ser Glu Thr Phe Tyr Arg Leu Gly Gly Asp Glu Phe Ala Phe Leu Ser
      310 315
Ser Gly Leu Thr Glu Thr Ala Ala Val Ser Arg Ala Arg Glu Ile Ser
         325 330 335
Asp Ser Ile Ser Lys Pro Tyr Thr Ile Asn Asn Gln Leu Ile Lys Ile
        340 345 350
Ala Thr Cys Val Gly Ile Val Leu Ser Asp Asn Glu Arg Arg Ser Asp
     355 360 365
Tyr Leu Tyr Lys Phe Ala Asp Leu Ala Leu Tyr Glu Ala Lys Lys Glu
 370 375 380
Gly Ser Gln Gln Ile Lys Val Pne Arg Gln Arg Met Leu Gln Lys Leu
385 390 395
Gln Glu Ser Arg Thr Leu Glu Asn Asp Met Ala Arg Ala Ile Glu Asn
           405 410 415
Asp Glu Phe Val Val Tyr Tyr Gln Pro Ile Val Asn Ser Val Ser Lys
      420 425 430
Glu Ile Tyr Gly Tyr Glu Ala Leu Ile Arg Trp Met His Pro Val Lys
435 440 445
Gly Met Leu Ala Pro Asp Ser Phe Ile Phe Ala Ala Glu Lys Thr Gly
450 455
                                460
Met Ile Asn Glu Ile Gly Lys Thr Val Leu Lys Leu Ala Cys Arg Glu
465 470 475 480
Ala Val Ser Trp Thr Val Pro Ala Arg Ile Ser Val Asn Val Ser Pro
           485 490
Val Gln Leu Gly Ser Lys Ser Phe Ile Asn Thr Val Gln Ser Val Leu
        500 505
                           510
Ala Glu Thr Gly Leu Pro Ala Asn Arg Leu Glu Leu Glu Val Thr Glu
     515 520
                                  525
Ser Ser Leu Phe Ser Asp Arg Asn Asn Pro Ile Ala Ile Leu Lys Lys
 530 535
                                 540
Leu Arg Ala Leu Gly Val Arg Ile Ser Ile Asp Asp Phe Gly Thr Gly
                              555
Tyr Ser Ser Leu Ser Arg Leu Ser Glu Leu Asn Phe Asp Lys Ile Lys
          565
                          570 575
Ile Asp Lys Ser Phe Val Asn Pro Ile Ser Thr Gln Glu Asp Ala Leu
        580
                       585
Asn Ile Val Lys Leu Ile Thr Gly Met Ala Lys Ser Leu Asn Met Gly
                    600 605
Val Ile Ala Glu Gly Val Glu Thr Glu Glu Gln Leu Glu Arg Leu Gln
                 615
                                620
Ala Leu Gly Cys Glu Leu Val Gln Gly Tyr Leu Phe Ser Lys Pro Gln
625 630
                             635
Pro Gln Val Asp Ser Lys Ile Lys Ser Gly Gln Glu
           645
```

<210> 8415

<211> 61

<212> PRT

<213> Enterobacter cloacae

<400> 8415

Ser Asn Ser Phe Ser Met Met Phe Asp Asn Ser Gly Asp Ile Thr Pro I 5 10 15 Pro Cys Gly Thr Pro Ser Leu Ala Ala Arg Lys Arg Pro Thr Ser Ile

```
25
Cys Pro Ala Leu Met Val Phe His Ser Arg Val Met Lys Arg Ala Ser
                       40
Leu Ile Leu Arg Arg Thr Ala Phe Ile Ser Ser Arg
                     55
<210> 8416
<211> 148
<212> PRT
<213> Enterobacter cloacae
<400> 8416
Ile Arg Arg Asp Gly Ser Val Ala Ala His Val Ala Ser Leu Arg Cys
Ile Ser Leu Ile Ile Lys Gly Leu His Leu Val Arg Ser Val Asn Ser
                             25
Arg Arg Lys His Ile Gln Thr Ala Ser Leu Arg His Val Met Gly Phe
      35
                         4.0
                                           45
Pro His Arg Gly Leu Leu Arg Lys Leu Arg Gln Pro Ala Arg His Arg
                  55
 5.0
                                       60
Ser His Ala Pro Leu Thr Ser Val Ala Asp Leu Pro Arg Phe Thr Cys
               7.0
                                    75
Leu Asp Ser Gly Ile Leu Arg Arg Leu Pro Val Ala Leu Phe Ile Leu
              85
                                90
Ala Cys Arg Lys Leu Ala Glu Val Ser Asn Ala Ser Val Ile Asp Ala
          100
                             105
Ala Ala Pro Val Phe Arg Ile His Val Lys Thr Pro Ser Thr Gly Ser
 115 120
                                           125
Ala Tyr Val Ser Leu Pro Val Pro Pro Ala Arg Pro Val Arg Ser Arg
 130 135
Arg Pro Trp
145
<210> 8417
<211> 141
<212> PRT
<213> Enterobacter cloacae
<400> 8417
Thr Leu Leu Pro Arg Cys Phe Ala Tyr Met Ser Lys His Leu Arg Pro
Ala Val Leu Thr Tyr His Cys Gln Phe Leu Leu His Gly Leu Ser Asp
        20
                             25
His Val Gly Arg Gly Asp Val Phe Asn Pro Gln Arg Arg Ile Asn Gly
                        40
Phe Met Phe Phe Ser Leu Ser Val Leu Asn Leu Glu Asp His Leu Gly
                     55
Leu Val Ile Ser Pro Gln Ser Pro Leu Ser Ala Gly Tyr Ile Thr Leu
               7.0
                             7.5
Arg Ala Cys Arg Arg Ser Leu Pro Leu Arg Phe Ser Thr Val Thr Pro
              85
                                90
Gly Gly Ile Val Gly Phe Leu Ile Val Ser Tyr Arg Phe Asn Ile Pro
                            105
Asp Arg Leu Ala Val His Leu Ser Ile His Ala Arg Pro Glu Leu Arg
                     120
Ala His Tyr Thr Ser His Arg Arg Thr Thr Pro Asp
                     135
<210> 8418
<211> 174
<212> PRT
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<213> Enterobacter cloacae

<400> 8418 Asn Gly Lys Arg His Ile Lys Lys Gly Tyr Arg Ala Phe Asp Val Arg Leu Pro Glu Gln Phe Ser Leu Ile Glu Lys Leu Arg Ala Gln Tyr Pro 25 Val Val Thr Leu Cys Gln Val Phe Gly Val His Arg Ser Ser Tyr Lys 40 Tyr Trp Val Lys Ser Pro Glu Lys Pro Asp Gly Lys Arg Ala Val Leu 55 60 Arg Ser Gln Val Leu Glu Leu His Asn Ile Ser His Gly Ser Ala Gly 7.0 7.5 Ala Arg Ser Ile Ala Ile Met Ala Thr Leu Arg Gly Phe Arg Met Gly 85 90 Arg Trp Leu Ala Gly Arg Leu Met Lys Glu Leu Gly Leu Val Ser Cys 105 110 100 Gln Gln Pro Thr His Arg Tyr Lys Arg Gly Gly His Glu His Ile Ala 115 120 125 Ile Pro Asn His Leu Glu Arg Gln Phe Ala Val Thr Glu Ser Asn Gln 130 135 140 Val Trp Cys Gly Asp Val Thr Tyr Ser Val Pro Gly Val Gln Gly Gly 145 150 155 His Gly Cys Leu Asn Glu Pro Arg Val Cys Leu Glu Tyr

<210> 8419 <211> 510 <212> PRT

<213> Enterobacter cloacae

<400> 8419 Arg Pro Leu Ile Ile Ser Glu Met Gln Arg Lys Leu Ala Thr Trp Ala 10 Ala Thr Asp Pro Ser Leu Arg Ile Gln Arg Leu Leu Arg Leu Ile Thr 2.5 Gln Pro Glu Trp Leu Ala Glu Ala Ala Arg Ile Thr Leu Ser Ser Lys 40 Gly Ala His Thr Pro Gly Val Asp Gly Val Asn Lys Thr Met Leu Gln 5.5 60 Ala Arg Leu Ala Val Glu Leu Glr Ile Leu Arg Asp Glu Leu Leu Ser 70 75 Gly His Tyr Gln Pro Leu Pro Ala Arg Arg Val Tyr Ile Pro Lys Ser 90 95 Asn Gly Lys Leu Arg Pro Leu Gly Ile Pro Ala Leu Arg Asp Arg Ile 100 105 110 Val Gln Arg Ala Met Leu Met Ala Met Glu Pro Ile Trp Glu Ser Asp 115 120 125 Phe His Thr Leu Ser Tyr Gly Phe Arg Pro Glu Arg Ser Val His His 135 140 Ala Ile Arg Thr Val Lys Leu Gln Leu Thr Asp Cys Gly Glu Thr Arg 150 155 Gly Arg Trp Val Ile Glu Gly Asp Leu Ser Ser Tyr Phe Asp Thr Val 165 170 His His Arg Leu Leu Met Lys Ala Val Arg Arg Arg Ile Ser Asp Ala 180 185 190 Arg Phe Met Thr Leu Leu Trp Lys Thr Ile Lys Ala Gly His Ile Asp 200 205 Val Gly Leu Phe Arg Ala Ala Ser Glu Gly Val Pro Gln Gly Gly Val 215 Ile Ser Pro Leu Leu Ser Asn Ile Met Leu Asn Glu Phe Asp Gln Tyr

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230
Leu His Glu Arg Tyr Leu Ser Gly Lys Ala Arg Lys Asp Arg Trp Tyr
            245
                      250
Trp Asn Asn Ser Ile Gln Arg Gly Arg Ser Thr Ala Val Arg Glu Asn
         260
                      265
Trp Gln Trp Lys Pro Ala Val Ala Tyr Cys Arg Tyr Ala Asp Asp Phe
            280
                                   285
Val Leu Ile Val Lys Gly Thr Lys Ala Gln Ala Glu Ala Ile Arg Glu
                295
                        300
Glu Cys Arg Gly Val Leu Glu Gly Ser Leu Lys Leu Arg Leu Asn Met
       310 315 320
Asp Lys Thr Lys Ile Thr His Val Asn Asp Gly Phe Ile Phe Leu Gly
           325 330 335
His Arg Ile Ile Arg Lys Arg Ser Arg Tyr Gly Glu Met Arg Val Val
        340 345 350
Ser Thr Ile Pro Gln Glu Lys Ala Arg Asn Phe Ala Ala Ser Leu Thr
   355 360 365
Ala Leu Leu Ser Gly Asn Tyr Ser Glu Ser Lys Val Asp Met Ala Glu
 370 375 380
Gln Leu Asn Arg Lys Leu Lys Gly Trp Ala Met Phe Tyr Gln Phe Val
385 390 395
Asp Phe Lys Ala Lys Val Phe Ser Tyr Ile Asp Arg Val Val Phe Trp
       405 410
Lys Leu Ala His Trp Leu Ala Arg Lys Tyr Arg Thr Gly Ile Ala Ser
 420 425 430
Leu Met Arg Trp Trp Cys Lys Ser Pro Lys Pro Gly Gln Ser Lys Thr
435 440 445
Trp Val Leu Phe Gly Lys Thr Asn His Gly Lys Leu Ser Gly Glu Ile
450 455
Leu Tyr Arg Leu Val Gly Gln Gly Lys Lys Leu Phe Arg Trp Arg Leu
465 470 475
Pro Glu Gly Asn Pro Tyr Leu Arg Thr Glu Thr Arg Asn Thr Tyr Thr
        485 490
Ser Arg Phe Thr Glu Val Ala Met Ala Phe Ala Ser Ile
<210> 8420
<211> 70
<212> PRT
<213> Enterobacter cloacae
<400> 8420
Gly Arg Met Thr Ile Thr Val Gly Tyr Pro Gln Thr Asn Arg Lys Thr
                           10
Asp Thr Gly Lys Thr Leu Lys Pro Trp Pro Val Leu Val Asp His Phe
                        25
Lys Gln Leu Asn Pro Ser Met Leu His Phe Leu Ala Glu Cys Leu Thr
    35 40
                            4.5
Leu Ser Val Glu Arg Arg His Asn Pro Lys Gly Tyr Thr Ala Ser Val
Met Leu Ser Arg His
<210> 8421
<211> 319
<212> PRT
<213> Enterobacter cloacae
<400> 8421
Cys Gly Thr Gly Arg Asp Arg Ser Asp Arg Arg Asp Arg Leu Trp Ile
```

1.0

Arg Thr Gly Thr Ala Arg Ala Thr Ala Ser Pro Asp Ala Leu Ala Trp 20 Arg Asn Thr Met Ser Glu Arg Leu Thr Ile Ile Pro Leu Gly Pro Tyr Ile Gly Ala Gln Val Ser Gly Leu Asp Val Thr Arg Pro Leu Ser Asp 55 60 Asn Gln Phe Glu Gln Leu Tyr His Ala Val Leu Arg His Gln Val Val 75 Phe Leu Arg Glu Gln Ala Ile Thr Pro His Gln Gln Arg Ala Leu Ala 85 90 Leu Arg Phe Gly Asp Leu His Ile His Pro Val Tyr Pro His Ala Glu 100 105 Gly Val Glu Glu Ile Ile Val Leu Asp Thr His Asn Asp Asn Pro Pro 115 120 125 Asp Asn Asp Asn Trp His Thr Asp Val Thr Phe Ile Asp Thr Pro Pro 135 140 Ala Gly Ala Ile Leu Ala Ala Lys Leu Leu Pro Glu Thr Gly Gly Asp 150 155 Thr Leu Trp Ala Ser Gly Ile Ala Ala Phe Glu Ala Leu Ser Ala Pro 165 170 175 Leu Gln Thr Leu Leu Ser Gly Leu Arg Ala Glu His Asp Phe Lys Lys 180 185 190 Ser Phe Gln Glu Tyr Lys Tyr Arg Lys Thr Glu Glu Glu His Gln Arg 195 200 Trp Leu Asp Ala Val Glu Lys His Pro Pro Leu Leu His Pro Val Val 210 215 220 Arg Thr His Pro Val Thr Gly Lys Gln Ala Leu Phe Val Asn Glu Gly 225 230 235 Phe Thr Thr Arg Ile Val Asp Val Ala Glu Lys Glu Ser Glu Ala Leu 245 250 255 Leu Gly Phe Leu Phe Ala His Ile Thr Lys Pro Glu Phe Gln Val Arg 260 265 270 Trp Arg Trp Gln Glu Asn Asp Leu Ala Ile Trp Asp Asn Arg Val Thr 275 280 Gln His Tyr Ala Asn Ala Asp Tyr Leu Pro Gln Arg Arg Ile Met Gln 290 295 300 Arg Ala Thr Ile Leu Gly Asp Lys Pro Phe Tyr Arg Ala Val

<210> 8422 <211> 144 <212> PRT

<213> Enterobacter cloacae

310

<400> 8422 Gly Met Lys Leu Gly Tyr Asp Trp Lys Pro Asn Leu Ser Gly Tyr Val 10 Thr Pro Tyr Ala Ala Ile Ser Gly Leu Phe Gln Ser Arg Asp Glu Tyr 25 Gln Leu Ser Asn Asp Met Arg Ile Asp Gly Gln Ser Tyr Asp Ser Met 4.0 45 Arg Tyr Glu Val Gly Val Asp Ala Gly Tyr Thr Phe Asn Thr Gly Gly 5.5 Glu Gln Ala Leu Thr Pro Tyr Phe Lys Leu Ala Tyr Val Tyr Asp Asp 70 Ala Asp Asn Asn Ala Asp Ile Asn Asn Asp Ser Ile Asp Asn Gly Val 85 90 Glu Gly Ser Ala Val Arg Val Gly Leu Gly Thr Gln Phe Ser Phe Thr 100 105 Lys Asn Phe Ser Ala Tyr Thr Asp Ala Thr Tyr Leu Gly Gly Gly Asp 120

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Val Asp Gln Asn Trp Gly Ala Asn Leu Gly Val Lys Tyr Thr Trp
  130
                 135
<210> 8423
<211> 413
<212> PRT
<213> Enterobacter cloacae
<400> 8423
Gln Gln Glu Gly Ser Thr Met Phe Lys Ser Phe Phe Pro Lys Pro Gly
                        10
Pro Phe Phe Leu Ser Ala Phe Ile Trp Ala Leu Leu Ala Val Ile Phe
                     25
                               30
Trp Gln Ala Gly Gly Ala Trp Leu Thr Arg Leu Thr Gly Ala Thr
                 40
                       45
Gly Asp Ile Pro Ile Ser Ala Ala Arg Phe Trp Ser Met Ser Tyr Leu
 50 55 60
Leu Phe Tyr Ala Tyr Tyr Val Leu Cys Val Gly Leu Phe Ala Met Phe
                 75
       70
Trp Phe Val Tyr Ser Pro His Arg Trp Gln Tyr Trp Ser Ile Leu Gly
        85 90
Thr Ser Leu Ile Ile Phe Val Thr Trp Phe Leu Val Glu Val Gly Val
 100 105 110
Ala Val Asn Ala Trp Tyr Aia Pro Phe Tyr Asp Leu Ile Gln Thr Ala
115 120 125
Leu Ser Ser Pro His Lys Val Thr Ile Asn Gln Phe Tyr His Glu Val
130 135 140
Gly Ile Phe Leu Gly Ile Ala Leu Ile Ala Val Val Ile Gly Val Met
145 150 155
Asn Asn Phe Phe Val Ser His Tyr Val Phe Arg Trp Arg Thr Ala Met
      165 170
Asn Glu His Tyr Met Ala His Trp Gln His Leu Arg His Ile Glu Gly
 180 185 190
Ala Ala Gln Arg Val Gln Glu Asp Thr Met Arg Phe Ala Ser Thr Leu
195 200 205
Glu Asp Met Gly Val Ser Phe Ile Asn Ala Ile Met Thr Leu Ile Ala
 210 215 220
Phe Leu Pro Val Leu Val Thr Leu Ser Ser His Val Pro Glu Leu Pro
225 230 235
                                           240
Ile Val Gly His Leu Pro Tyr Gly Leu Val Ile Ala Ala Ile Val Trp
         245 250
Ser Leu Met Gly Thr Gly Leu Leu Ala Val Val Gly Ile Lys Leu Pro
   260 265
                                   270
Gly Leu Glu Phe Lys Asn Gln Arg Val Glu Ala Ala Tyr Arg Lys Glu
   275 280
                                  285
Leu Val Tyr Gly Glu Asp Asp Ala Asn Arg Ala Ser Pro Pro Thr Val
 290 295 300
Arg Glu Leu Phe Gly Ala Val Arg Arg Asn Tyr Phe Arg Leu Tyr Phe
305 310 315
His Tyr Met Tyr Phe Asn Ile Ala Arg Ile Leu Tyr Leu Gln Val Asp
          325
              330
Asn Val Phe Gly Leu Phe Leu Leu Phe Pro Ser Ile Val Ala Gly Thr
                    345 350
Ile Thr Leu Gly Leu Met Thr Gln Ile Thr Asn Val Phe Gly Gln Val
                   360
                                  365
Arg Gly Ser Phe Gln Tyr Leu Ile Ser Ser Trp Thr Thr Leu Val Glu
 370 375
                               380
Leu Met Ser Ile Tyr Lys Arg Leu Arg Ser Phe Glu Arg Glu Leu Asp
            390
                            395
```

Asp Lys Asp Val Gln Glu Val Thr His Thr Leu Gly 405

<212> PRT

<213> Enterobacter cloacae

(3

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<210> 8424
<211> 370
<212> PRT
<213> Enterobacter cloacae
<400> 8424
Lys Gly Ile Ala Met Pro Phe Ala Val Pro Arg Ala Leu Pro Leu Thr
        5
                         10
Leu Leu Ala Ala Phe Val Leu Ala Gly Cys Ala Glu Lys Gly Ala Ala
 20
                    25
Pro Leu Lys Glu Gly Glu Lys Pro Val Asp Val Ala Ser Val Val Arg
35 40
                       4.5
Gln Lys Met Pro Ala Ser Val Lys Asp Arg Ser Glu Trp Ala Asp Ala
50 55 60
Leu Ala Thr Thr Phe Lys Ser Gln Lys Ile Ala Pro Thr Glu Glu Asn
65 70 75 80
Ile Cys Ser Val Leu Ala Val Ala Gln Gln Glu Ser Met Tyr Gln Ser
      85 90 95
Asp Pro Val Val Pro Gly Leu Asn Lys Ile Ala Trp Lys Glu Ile Asp
 100 105 110
Arg Arg Ala Glu Ser Met His Ile Pro Val Phe Leu Val His Thr Ala
115 120 125
Leu Lys Ile Thr Ser Pro Asn Gly Lys Ser Tyr Ser Glu Arg Leu Asp
130 135 140
Thr Val Lys Thr Glu Lys Gln Leu Ser Ala Ile Phe Asp Asp Phe Ile
145 150 155 160
Asn Met Val Pro Met Gly Gln Lys Leu Phe Gly Ser Leu Asn Pro Val
          165 170 175
His Thr Gly Gly Pro Met Gln Val Ser Ile Ala Phe Ala Glu Lys His
       180 185 190
Thr Asp Gly Tyr Pro Trp Gly Ile Asp Gly Thr Val Arg Gln Glu Val
195 200 205
Phe Ser Leu Arg Gly Gly Leu Trp Phe Gly Thr Tyr His Leu Leu Asn
210 215 220
Tyr Pro Ala Asn Tyr Asp Lys Pro Leu Tyr Arg Phe Ala Asp Phe Asn 225 230 235 240
Ala Gly Trp Tyr Ala Ser Arg Asn Ala Ala Phe Gln Asn Ala Val Ser
          245 250 255
Arg Ala Ser Gly Val Lys Leu Ala Leu Asp Gly Asp Leu Ile Ala Tyr
    260 265 270
Gly Ser Ser Glu Ala Gly Thr Thr Glu Arg Ala Val Arg Lys Leu Ser
    275 280 285
Thr Lys Leu Glu Met Ser Asn Asn Asp Ile Arg Arg Gln Leu Glu Lys
 290 295
                               300
Gly Asp Ser Leu Ala Phe Glu Lys Thr Asp Leu Tyr Lys Gln Val Phe
305 310
                            315
Ala Leu Ala Glu Lys Lys Ser Gly Lys Ala Leu Pro Arg Ala Ile Leu
          325 330 335
Pro Gly Ile Gln Leu Glu Ser Pro Lys Ile Thr Arg Asn Leu Thr Thr
        340 345 350
Ala Trp Phe Ala Lys Arg Val Asn Asp Arg Arg Ala Arg Cys Met Gly
                   360
                                  365
T.e.11
  370
<210> 8425
<211> 132
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<210> 8426

<211> 475

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<400> 8425
Pro His Ala Ala Gln Arg Cys Val Lys Trp Phe Thr Glu Phe Gly His
                              10
Leu Asn Arg Gly Asp Met Leu Ile Ser Glu Gln Tyr Arg Cys Pro Asn
                          25
Glu Lys Arg Asn Phe Ser Ala Glu Phe Lys Arg Glu Ser Ala Gln Leu
     3.5
                40
                                     4.5
Val Leu Asp Gln Asn Tyr Thr Val Ala Ala Ala Ala Ser Ala Met Asp
                 55
                       60
Val Gly Leu Ser Thr Met Thr Arg Trp Val Lys Gln Leu Arg Asp Glu
              70 75
Arg Gln Gly Lys Ile Pro Lys Ala Ser Pro Ile Thr Pro Glu Gln Ile
           85 90
Glu Ile Arg Glu Leu Lys Lys Leu Gln Arg Ile Glu Met Glu Asn
         100 105 110
Asp Ile Leu Lys Lys Ala Thr Ala Leu Leu Met Ser Asp Ser Leu Asn
Ser Ser Arg
  130
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<212> PRT <213> Enterobacter cloacae <400> 8426 Met Ser Ile Arg Leu Glu Gly Asn Met Gln Thr Glu Gln Gln Asn Gly 1.0 Gln Leu Lys Arg Thr Met Lys Thr Arg His Leu Ile Met Leu Ser Leu 25 3.0 Gly Gly Val Ile Gly Thr Gly Leu Phe Phe Asn Thr Gly Tyr Ile Ile 4.0 Ser Thr Thr Gly Ala Ala Gly Thr Leu Leu Ala Tyr Leu Ile Gly Ala 55 Leu Val Val Trp Leu Val Met Gln Cys Leu Gly Glu Leu Ser Val Ala 7.0 Met Pro Glu Thr Gly Ala Phe His Val Tyr Ala Ala Arg Tyr Leu Gly 85 90 Pro Ala Thr Gly Tyr Thr Val Ala Trp Leu Tyr Trp Leu Thr Trp Thr 100 105 110 Val Ala Leu Gly Ser Ser Phe Thr Ala Ala Gly Phe Cys Met Gln Tyr 115 120 Trp Phe Pro Gln Val Pro Val Trp Thr Trp Cys Val Val Phe Cys Val 135 140 Val Ile Phe Ala Leu Asn Val Ile Ser Thr Arg Phe Phe Ala Glu Gly 150 155 160 Glu Phe Trp Phe Ser Leu Val Lys Val Ile Thr Ile Ile Ala Phe Ile 165 170 Ile Leu Gly Gly Ala Ala Ile Phe Gly Phe Ile Pro Met Gln Asp Gly 180 185 190 Ser Pro Ala Pro Gly Leu Ser Asn Ile Thr Ala Glu Gly Trp Phe Pro 195 200 205 His Gly Gly Leu Pro Ile Leu Met Thr Met Val Ala Val Asn Phe Ala 210 215 Phe Ser Gly Thr Glu Leu Ile Gly Ile Ala Ala Gly Glu Thr Glu Asn 230 235 Pro His Lys Val Ile Pro Val Ala Ile Arg Thr Thr Ile Ala Arg Leu 245 250 Ile Ile Phe Phe Ile Gly Thr Val Phe Val Leu Ala Ala Leu Ile Pro 260 265 Met Gln Gln Ala Gly Val Glu Lys Ser Pro Phe Val Leu Val Phe Glu

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280
Lys Val Gly Ile Pro Tyr Ala Ala Asp Ile Phe Asn Phe Val Ile Leu
               295
                                  300
Thr Ala Ile Leu Ser Ala Ala Asn Ser Gly Leu Tyr Ala Ser Gly Arg
            310
                        315
Met Leu Trp Ser Leu Ser Asn Glu Lys Thr Leu Pro Arg Cys Phe Ala
          325 330 335
Arg Val Asn Lys Asn Gly Val Pro Leu Thr Ala Leu Ser Val Ser Met
       340 345 350
Leu Gly Gly Val Leu Ala Leu Phe Ser Ser Val Val Ala Pro Asp Thr
     355 360 365
Val Phe Val Ala Leu Ser Ala Ile Ser Gly Phe Ala Val Val Ala Val
 370 375 380
Trp Ile Ser Ile Cys Ala Ser His Phe Val Phe Arg Arg Arg His Val
385 390 395
Gln Ser Gly Gln Pro Leu Ser Ala Leu Gln Tyr Arg Ala Pro Trp Tyr
         405 410 415
Pro Leu Val Pro Val Leu Gly Phe Ile Leu Cys Leu Val Ala Cys Val
      420 425 430
Gly Leu Trp Phe Asp Pro Ser Gln Arg Ile Ala Leu Tyr Cys Gly Leu
435 440 445
Pro Phe Val Ala Leu Cys Tyr Gly Ala Tyr Tyr Leu Thr Arg Asn Leu
450 455
Thr Thr Gln Glu Pro Glu His Val Ala Glu
<210> 8427
<211> 346
<212> PRT
<213> Enterobacter cloacae
<400> 8427
Arg Phe Phe Phe Ile Pro Leu Ser Lys Phe Ser Arg Arg Lys Tyr Cys
Ser His Asn Asn Lys Gly Ala Asp Ile Met Ala Ile Ser Ser Arg Ile
                       25
Thr Leu Leu Gly Ala Leu Ala Leu Trp Ala Phe Gln Ala Gln Ala Val
                     4.0
Asp Val Thr Val Ala Tyr Gln Thr Ser Ala Glu Pro Ala Lys Val Ala
                  55
                                  60
Gln Ala Asp Asn Thr Phe Ala Lys Ala Ser Gly Ala Asn Val Asp Trp
               70
                               75
Arg Lys Phe Asp Ser Gly Ala Ala Ile Val Arg Ala Leu Ala Ser Gly
            8.5
                            90
Asp Val Gln Ile Gly Asn Leu Gly Ser Ser Pro Leu Ala Val Ala Ala
         100 105
                                         110
Ser Gln Gln Val Pro Ile Glu Val Phe Leu Leu Ala Ser Gln Leu Gly
   115
                     120
Asn Ser Glu Ala Leu Val Val Lys Lys Ser Ile Thr Lys Pro Glu Asp
                  135
                                   140
Leu Ile Gly Lys Arg Ile Ala Val Pro Phe Ile Ser Thr Thr His Tyr
               150
                               155 160
Ser Leu Leu Ala Ala Leu Lys His Trp Gly Ile Lys Pro Gly Gln Val
           165
                            170
Gln Ile Ile Asn Leu Gln Pro Pro Ala Ile Ile Ala Ala Trp Gln Arg
         180
                         185
                                         190
Gly Asp Ile Asp Gly Ala Tyr Val Trp Ala Pro Ala Val Asn Glu Leu
     195
                     200
                                      205
Glu Lys Glu Gly Thr Val Leu Thr Asp Ser Glu Lys Val Gly Gln Trp
  210
               215
                                  220
Gly Ala Pro Thr Leu Asp Val Trp Val Val Arg Lys Asp Phe Ala Glu
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230
Lys His Pro Glu Val Val Lys Ala Phe Ala Lys Ser Ala Ile Asp Ala
       245
                      250
Gln Gln Pro Tyr Ile Ser Asn Pro Asp Glu Trp Leu Lys Gln Pro Thr
        260
                  265
                                       270
Asn Leu Glu Lys Leu Ser Arg Leu Ser Gly Val Pro Glu Ala Asp Val
   275
            280
Pro Gly Leu Val Lys Gly Asn Thr Tyr Leu Thr Pro Ala Gln Gln Val
 290 295
                         300
Gln Gln Leu Asn Gly Pro Val Ser Lys Ala Ile Val Asp Thr Ala Thr
305 310 315
Phe Leu Lys Glu Gln Gly Lys Val Pro Ala Val Ala Ala Asp Tyr Ser
      325 330
Gln Phe Val Thr Asp Arg Phe Val Lys
        340
<210> 8428
<211> 282
<212> PRT
<213> Enterobacter cloacae
<400> 8428
Ala Thr Gly Gly Val Leu Met Ser Ile Val Phe Ser Glu Lys Thr Arg
                         10
Arg Thr Arg Leu Ala Leu Arg Trp Pro Phe Ser Arg Gln Ile Thr Leu
Ser Val Ser Thr Leu Val Val Leu Leu Ala Val Trp Trp Ala Val Ala
35 40
                                   4.5
Ala Gln Gln Trp Val Ser Pro Leu Phe Leu Pro Pro Pro Gly Gln Val
50 55
Leu Glu Lys Leu Ile Thr Ile Ala Gly Pro Gln Gly Phe Met Asp Ala
              7.0
                            7.5
Thr Leu Trp Gln His Leu Gly Ala Ser Leu Thr Arg Ile Leu Val Ala
        85 90
Leu Leu Ala Ala Val Ile Ile Gly Val Pro Val Gly Ile Ala Met Gly
 100 105 110
Leu Ser Pro Thr Val Arg Gly Ile Leu Asp Pro Leu Ile Glu Leu Tyr
                    120 125
Arg Pro Val Pro Pro Leu Ala Tyr Leu Pro Leu Met Val Ile Trp Phe
 130 135
                                 140
Gly Ile Gly Glu Thr Ser Lys Ile Leu Leu Ile Tyr Leu Ala Ile Phe
145 150 155
Ala Pro Val Ala Met Ser Ala Leu Ala Gly Val Lys Ser Ala Gln Gln
     165 170 175
Val Arg Ile Arg Ala Ala Gln Ser Leu Gly Ala Ser Arg Ala Gln Val
        180 185 190
Leu Leu Phe Val Ile Leu Pro Gly Ala Leu Pro Glu Ile Leu Thr Gly
 195 200 205
Leu Arg Ile Gly Leu Gly Val Gly Trp Ser Thr Leu Val Ala Ala Glu
 210 215 220
Leu Ile Ala Ala Thr Arg Gly Leu Gly Phe Met Val Gln Ser Ala Gly
225 230
                             235
Glu Phe Leu Ala Thr Asp Val Val Leu Ala Gly Ile Ala Val Ile Ala
           245 250
Ala Ile Ala Phe Gly Leu Glu Leu Gly Leu Arg Ala Leu Gln Arg Arg
        260
                     265
Leu Thr Pro Trp His Gly Glu Ile Gln
                     280
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<210> 8429 <211> 797 <212> PRT <213> Enterobacter cloacae

<400> 8429 Trp Thr Asn Leu Leu Thr Ser Leu Arg Arg Asp Asp Pro Met Gln Thr 10 Trp Lys Lys Leu Val Val Ser Gln Leu Ala Leu Ala Cys Thr Leu 20 25 30 Ala Ile Ala Ser Gln Ala Asn Ala Lys Asp Ile Ser Gly Thr Thr Tyr 35 40 4.5 Asn Thr Phe Gly Tyr Asp Asn Thr Ala Ser Thr Pro Trp Tyr Tyr Gly 50 55 60 Tyr Ala Asp Trp Asn Tyr Ser Asp Ala Thr His Asp Gly Asp Ile Tyr 65 70 75 Pro Val Val Asn Lys Ser Thr Val Asn Gly Val Ile Ser Thr Tyr Tyr 85 90^{*} 95 Leu Asp Asp Gly Val Asn Gly Arg Ala Asn Ala Leu Ser Ile Ser Asn 100 105 110 Ser Thr Ile Asn Gly Met Ile Thr Ser Glu Cys Met Thr Thr Thr Cys 115 120 125 Ala Asp Gly Val Asp Thr Asp Gly Thr Ala His Thr Gln Tyr Asp Arg 130 135 140 Phe Ser Leu Thr Val Asp Asn Ser Thr Ile Asn Asp Thr Tyr Glu His 150 155 Tyr Ala Tyr Asp Val Val Asn Gly Glu Thr Thr Glu Thr His Tyr Leu 165 170 175 Asp Thr Tyr Asp Leu Gly Asn Ala Ile Thr Leu Asp Val Glu Ser Asp $180 \\ 180 \\ 185 \\ 190 \\$ Ile Val Ile Gln Asn Asn Ser His Val Ala Gly Ile Thr Leu Thr Gln 195 200 205 Gly Tyr Gln Asp Leu Asp Asn Thr Pro Tyr Asp Gly Val Glu Gly Val 210 215 220 Ala Asn Ser Ser Asn Val Phe Thr Asp Thr Leu Val Val Lys Asp Ser 225 230 235 Val Leu Thr Ser Gly Ala Tyr Ser Asp Leu Gly Thr Ser Gly Phe Tyr $245 \hspace{1cm} 250 \hspace{1cm} 255 \hspace{1cm}$ Gly Gln Thr Ala Lys Pro Ser Asp Tyr Gly Glu Thr Asn Ala Thr Ala 260 265 270 Ala Asp Asp Ala Ala Leu Ile Val Val Ala Gly Ala Ser Asp Asn Ala 280 Met Gln Thr Thr Ala Thr Phe Asp His Ser Thr Ile Thr Gly Asp Ile 295 300 Leu Phe Ser Ser Thr Phe Asp Asn Asn Phe Tyr Glu Asn Gly Asp Pro 310 315 Ala Thr Asp Thr Thr Asp Asp Gly Ile Tyr Asn Pro Thr Thr Asn Gly 325 330 335 Trp Asp Asp Thr Asp Lys Leu Asp Val Thr Leu Thr Asn Gly Ser Lys 340 345 350 Trp Val Gly Ala Ala Gln Ser Ser Val Glu Ala Ile Gly Thr Ala Gln 355 360 365 Met Tyr Gly Glu Gly Tyr Ser Asn Val Asp Trp His Ala Leu Ser Pro 370 375 380 Asn Ser Ile Trp Pro Asp Ser Thr Phe Asp Ser Asn Gly His Val Ala 390 395 Gly Glu Glu Val Tyr Gln Ser Gly Leu Phe Asn Val Ala Leu Asp Asn 405 415 410 Gly Ser Glu Trp Asp Thr Arg Lys Ile Ser Asn Ile Asp Ala Leu Thr 420 425 430 Val Asn Asn Gln Ser Gln Val Asn Val Glu Asn Ser Gly Leu Leu Ala 435 440

Asp Ser Ile Thr Leu Thr Asn Ala Ser Ser Leu Asn Ile Gly Asp Asn

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455
Gly Ala Val Ala Thr Asp Ser Leu Tyr Leu Asp Ser Tyr Ser Arg Ala
        470
                         475
Ala Leu Thr Glu Glu Thr Ala Glu Leu Tyr Ala Asn Thr Ile Thr Val
         485
                  490 495
Asp Asn Gly Ala Glu Leu Ala Leu Gly Leu Gly Gln Val Asp Thr His
        500 505 510
Asn Met Val Leu Thr Asp Gly Gly Val Leu Asn Val Ala Ser Arg Asp
     515 520 525
Tyr Val Leu Asn Ser Asp Leu Asn Asn Ala Arg Tyr Ile Thr Asn Asp
 530 535 540
Arg Asn Lys Ala Asp Tyr Asp Tyr Gly Val Val Ala Leu Asn Ser Asp
545 550 555 560
Gly His Leu Ala Val Asn Gly Asp Val Ala Gly Asn Tyr Lys Val Arg
      565 570 575
Ile Asp Asp Ala Thr Gly Ala Gly Ser Val Ala Asp Tyr Lys Asn Lys
      580 585 590
Glu Ile Ile Arg Val Ser Asp Asn Asn Ala Asp Thr Ala Ala Ser Phe
 595 600 605
Thr Ala Ala Asn Lys Ala Asp Leu Gly Ala Tyr Thr Tyr Gln Ala Gln
610 615 620
Gln Lys Gly Asp Thr Val Val Leu Gln Glu Glu Leu Thr Asp Tyr
625 630 635
Ala Asn Met Ala Leu Ser Ile Pro Ser Ala Asn Thr Asn Ile Trp Asn
   645 650 655
Leu Gln Gln Asp Thr Val Gly Thr Arg Leu Thr Asn Ser Arg His Gly
 660 665 670
Leu Ala Asp Asn Gly Gly Ala Trp Val Ser Tyr Phe Gly Gly Asn Phe
675 680 685
Asp Ala Asp Asn Gly Thr Val Ser Tyr Asp Gln Asp Val Ser Gly Ile
690 695 700
Met Val Gly Leu Asp Thr Gln Ile Asp Gly Asn Asn Ala Lys Trp Ile
705 710 715 720
Val Gly Gly Ala Ala Gly Phe Ala Lys Gly Asp Ile Ser Asp Arg Thr
          725 730 735
Gly Gln Val Asp Gln Asp Ser Gln Thr Ala Met Ile Tyr Ala Ser Ala
        740 745 750
Lys Phe Met Asn Asp Ile Phe Leu Asp Ser Ser Leu Ser Tyr Thr Arg
755 760 765
Phe Asn Asn Asp Leu Ser Ala Thr Met Ser Asn Gly Gln Tyr Val Asp
770 775 780
Gly Asn Thr Thr Glu Pro Val Gly Phe Arg Gly
<210> 8430
<211> 213
<212> PRT
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<213> Enterobacter cloacae

<400> 8430 Leu Glu Val Cys Met Asn Val Asn Ala Lys Pro Leu Ser Glu Leu Ser 10 Arg Leu Ile Lys Cys Leu Glu Ile Ala Gly Thr Pro Phe Lys Thr Glu 20 25 3.0 Pro Gln Gln Leu Ile Thr Thr Gly Asn Asn Asp Asp Glu Pro Leu Thr 40 45 Val Val Ile Gln Ser Gly Leu Thr Ala Val His Arg Lys Ser Asp Glu 55 60 Leu Leu Met Gly Ile Ala Arg Ala Pro Tyr Ile His Gly Leu Ser Ala 7.0 75 Trp Ile Asn Asp Asn Tyr Leu Glu Tyr Ser Leu Ile Ala Gln Thr Pro

90 Cys Thr Gly Phe Tyr Leu Pro Ala Ser Thr Ala Cys Glu Leu Ile Gln 100 105 Glu Ala His Val Trp Gln Glu Ala Phe Cys Trp Leu Ser Trp Leu Asn 115 120 125 His Leu Leu Gly Lys Arg Asp Ile Gln Leu Ile Gly Asn Asn Ser Tyr 135 140 Ser Gln Ile Arg Ala Met Leu Leu Asn Met Ala Glu Trp Asp Asp Ala 150 155 Leu Arg Ser Lys Ile Gly Val Met Asn His Ile Gln Arg Ser Thr Arg 165 170 175 Ile Ser Arg Ser Val Val Ala Glu Val Leu Ala Ala Leu Arg Gln Gly 180 185 190 Asn Tyr Ile Asn Met Ser Arg Gly Lys Leu Val Ser Ile Asn Arg Leu 195 200 Pro Thr Asp Tyr 210

<210> 8431 <211> 169

<212> PRT <213> Enterobacter cloacae

<400> 8431

Ser Asp Tyr Ala Leu Pro Leu Thr Leu Leu Trp Thr Gly Arg Arg Trp 1.0 Ala Tyr Leu Ala Ile Val Leu Asp Leu Phe Ala Arg Lys Pro Val Gly 20 25 Trp Ala Met Ser Phe Ser Pro Asp Ser Lys Leu Thr Ile Lys Ala Leu 35 40 Glu Met Ala Trp Glu Thr Arg Asp Lys Pro Ala Gly Val Met Phe Pro 55 50 Ser Asp Gln Gly Ser His Tyr Thr Ser Arg Gln Ile Arg Gln Leu Leu 70 7.5 Trp Arg Tyr Arg Ile Arg Gln Ser Met Ser Arg Arg Gly Asn Cys Trp 85 90 Asp Asn Ser Pro Met Glu Arg Phe Phe Arg Ser Leu Lys Asn Glu Trp 100 105 Val Pro Val Thr Gly Tyr Ile Asn Phe Ser Glu Ala Ala His Ala Ile 115 120 125 Thr Asp Tyr Ile Val Gly Tyr Tyr Ser Ser Val Arg Pro His Asp Tyr 130 135 140 Asn Gly Gly Leu Pro Pro Asn Glu Ser Glu Asn Arg Tyr Trp Lys Asn 145 150 155

<210> 8432 <211> 92 <212> PRT <213> Enterobacter cloacae

Ser Lys Ala Val Ala Ser Phe Gly 165

4224 Pro Ser Leu Pro Gly Gln Pro Ala Pro Phe Gln Pro Gly His Ser Pro 70 7.5 Val Asp Arg Lys Thr Gln Pro Asp Arg Ala Glu 85 <210> 8433 <211> 317 <212> PRT <213> Enterobacter cloacae <400> 8433 Pro Arg Arg Ser Leu Asn Met Ser Gln Asn Asn Pro Leu Thr Ala Leu 10 Leu Glu Asn Gln Pro Phe Val Val Leu Asp Gly Ala Met Ala Thr Glu 20 25 30 Leu Glu Ala Arg Gly Cys Asn Leu Ala Asp Ser Leu Trp Ser Ala Lys 35 40 4.5 Val Leu Met Glu Asn Pro Glu Leu Ile Arg Asp Val His Leu Asp Tyr 55 Tyr Arg Ala Gly Ala Gln Val Ala Ile Thr Ala Ser Tyr Gln Ala Thr 65 70 75 80 Pro Ala Gly Phe Ala Ala Arg Gly Leu Asp Glu Ser Gln Ser Arg Ala 85 90 95 Leu Ile Gly Lys Ser Val Glu Leu Ala Arg Lys Ala Arg Glu Val Tyr 100 105 110 Leu Ala Glu Asn Ala Asn Ala Gly Thr Leu Leu Val Ala Gly Ser Val 115 120 125 Gly Pro Tyr Gly Ala Tyr Leu Ala Asp Gly Ser Glu Tyr Arg Gly Asp 130 135 140 Tyr Val Arg Ser Ala Glu Glu Phe Thr Ala Phe His Arg Pro Arg Val 145 150 155 Glu Ala Leu Leu Asp Ala Gly Ala Asp Leu Leu Ala Cys Glu Thr Leu 165 170 175 Pro Ser Phe Thr Glu Ile Lys Ala Leu Ala Ala Leu Leu Thr Ala Tyr 180 185 190 Pro Arg Ala Arg Ala Trp Phe Ser Phe Thr Leu Arg Asp Ser Glu His 195 200 205 Leu Ser Asp Gly Thr Pro Leu Arg Asp Val Val Ser Ala Leu Glu Asn 210 215 220 Tyr Pro Gln Val Val Ala Leu Gly Ile Asn Cys Ile Ala Leu Glu Asn 225 230 235 240 Thr Thr Ser Ala Leu Thr His Leu His Ser Leu Thr Ser Leu Pro Leu 245 250 Val Val Tyr Pro Asn Ser Gly Glu His Tyr Asp Ala Val Ser Lys Thr 260 265 Trp His His His Gly Glu Ala Cys Glu Tor Leu Ala Gly Tyr Leu Pro 275 280 285 Gln Trp Leu Ala Ala Gly Ala Lys Leu Ile Gly Gly Cys Cys Arg Thr 290 295 300 Thr Pro Lys Asp Ile Ala Ala Leu Thr Val Gln Arg 310 <210> 8434 <211> 261 <212> PRT <213> Enterobacter cloacae <400> 8434 Asn Lys Gly Ala Ala Met Leu Asn Ile Thr Asn Leu Ser Ala Asp Tyr

1 5 10 15 Gly Gly Lys Pro Ala Leu Glu Ala Ile Asn Leu Thr Leu Asp Ser Gly

```
25
                                        3.0
Glu Leu Leu Val Val Leu Gly Pro Ser Gly Cys Gly Lys Thr Thr Leu
                     40
                                     4.5
Leu Asn Leu Ile Ala Gly Phe Val Pro Tyr Gln His Gly Ser Ile Gln
                  55
                            60
Leu Glu Gly Lys Arg Val Thr Gly Pro Gly Ala Glu Arg Gly Val Val
             70
                        7.5
Phe Gln Asn Glu Gly Leu Leu Pro Trp Arg Asn Val Gln Glu Asn Val
          85
                90 95
Ala Phe Gly Leu Gln Leu Ala Gly Val Ala Arg Glu Gln Arg Leu Asn
        100 105
                                        110
Thr Ala Arg Asp Met Leu Lys Lys Val Gly Leu Glu Gly Ala Glu Lys
    115 120
Arg Phe Ile Trp Gln Leu Ser Gly Gly Gln Arg Gln Arg Val Gly Ile
 130 135
                                  140
Ala Arg Ala Leu Ala Ala Asn Pro Gln Leu Leu Leu Asp Glu Pro
      150 155
Phe Gly Ala Leu Asp Ala Phe Thr Arg Glu Gln Met Gln Thr Leu Leu
           165 170
Leu Arg Leu Trp His Glu Thr Gly Lys Gln Val Leu Leu Ile Thr His
        180 185
                                  190
Asp Ile Glu Glu Ala Val Phe Met Ala Thr Glu Leu Val Leu Leu Ser
   195
                     200
                                     205
Pro Gly Pro Gly Arg Val Leu Glu Arg Leu Pro Leu Glu Phe Ala Arg
                  215
                                  220
Arg Tyr Val Ala Gly Glu Pro Val Arg Ser Ile Lys Ser Asp Pro Leu
               230
                               235
Phe Ile Glu Gln Arg Glu Tyr Val Leu Ser Arg Val Phe Glu Gln Arg
                           250
Glu Ala Phe Ser
         260
```

<211> 84 <212> PRT <213> Enterobacter cloacae

<210> 8435

<213> Enteropacter cloacae

<210> 8436 <211> 224 <212> PRT <213> Enterobacter cloacae

<400> 8436
Ser Ser Ala Glu Ile Trp Ile Asn Cys Asp Leu Phe His Lys Tyr Asp 1
5
10
15
Asp Trp Glu Asp Lys Thr Pro Lys Ser Ala Arg Pro His Leu Trp Arg 20
25
30

```
Tyr Val Ile Ala Arg Asn Leu Leu Ile Cys Arg Arg Ile Arg Leu Lys
                     40
Met Lys Thr Ile Ser Val Met Glu Ser Trp Lys Val Asn Leu Ile Ser
                  55
                                  60
Val Trp Phe Gly Cys Phe Phe Thr Gly Leu Ala Ile Ser Gln Ile Leu
              7.0
                              75
Pro Phe Leu Pro Leu Tyr Val Ser Gln Leu Gly Val Thr Ser His Glu
       85
                           90
Ala Leu Ser Met Trp Ser Gly Leu Thr Phe Ser Val Thr Phe Leu Val
   100 105 110
Ser Ala Ile Val Ser Pro Met Trp Gly Ser Leu Ala Asp Arg Lys Gly
     115 120 125
Arg Lys Leu Met Leu Leu Arg Ala Ser Leu Gly Met Ala Ile Ala Ile
 130 135 140
Leu Leu Gln Ala Phe Ala Thr Asn Val Trp Gln Leu Phe Ile Leu Arg
145 150 155
Ala Ile Met Gly Leu Thr Ser Gly Tyr Ile Pro Asn Ala Met Ala Leu
    165
                         170 175
Val Ala Ser Gln Val Pro Arg Glu Arg Ser Gly Trp Ala Leu Ser Thr
                      185
Leu Ser Thr Ala Gln Ile Ser Gly Val Ile Gly Gly Pro Leu Leu Gly
 195 200 205
Gly Phe Leu Ala Asp His Val Gly Leu Arg Ala Val Phe Ile Ile Thr
                  215
<210> 8437
<211> 389
```

<212> PRT <213> Enterobacter cloacae

<400> 8437 Gly Glu Asp Asp Arg Asp Ile Arg Asp Pro Met Glu Leu Met Asp Glu 10 Val Glu Asn Glu Leu Lys Ile Ala Cys Ala Pro Ile Thr Trp Pro Ile 20 30 Gly Cys Gly Lys Leu Phe Lys Gly Val Tyr His Leu Tyr Lys Asp Glu 4.0 Thr Tyr Leu Tyr Gln Thr Gly Lys Gly His Thr Ile Gln Glu Val Arg 55 Ile Val Lys Gly Leu Asp Asn Pro Asp Leu Asp Ala Ala Val Gly Glu 70 75 Glu Leu Ala Ala Gln Leu His Asp Glu Leu Glu Leu Val Lys Gly Ala 90 85 Ser His Glu Phe Asp Arg Glu Leu Phe Leu Ser Gly Glu Ile Thr Pro 105 100 Val Phe Phe Gly Thr Ala Leu Gly Asn Phe Gly Val Asp His Met Leu 120 125 Asp Gly Leu Val Glu Trp Ala Pro Gln Pro Met Pro Arg Lys Thr Asp 130 135 140 Thr Arg Glu Val Glu Ala Lys Glu Glu Lys Phe Ser Gly Phe Val Phe 150 155 160 Lys Ile Gln Ala Asn Met Asp Pro Lys His Arg Asp Arg Val Ala Phe 165 170 Met Arg Val Val Ser Gly Lys Tyr Glu Lys Gly Met Lys Leu Arg Gln 185 Val Arg Ile Gly Lys Asp Val Val Ile Ser Asp Ala Leu Thr Phe Met 200 Ala Gly Asp Arg Ser His Val Glu Glu Ala Tyr Pro Gly Asp Ile Ile 210 215 220 Gly Leu His Asn His Gly Thr Ile Gln Ile Gly Asp Thr Phe Thr Gln 225 230 235

```
Gly Glu Met Met Lys Phe Thr Gly Ile Pro Asn Phe Ala Pro Glu Leu
          245
                           250
Phe Arg Arg Ile Arg Leu Arg Asp Pro Leu Lys Gln Lys Gln Leu Leu
      260 265 270
Lys Gly Leu Val Gln Leu Ser Glu Glu Gly Ala Val Gln Val Phe Arg
     275 280
                          285
Pro Ile Ala Asn Asn Asp Leu Ile Val Gly Ala Val Gly Val Leu Gln
 290 295
                                  300
Phe Asp Val Val Val Ala Arg Leu Lys Ser Glu Tyr Asn Val Glu Ala
305 310 315 320
Ile Tyr Glu Ser Val Asn Val Ala Thr Ala Arg Trp Val Glu Cys Ser
      325 330 335
Asp Val Lys Lys Phe Glu Glu Pne Lys Arg Lys Asn Glu Val Gln Leu
       340 345 350
Ala Leu Asp Gly Gly Asp Asn Leu Thr Tyr Ile Ala Pro Thr Met Val
     355 360 365
Asn Leu Asn Leu Thr Gln Glu Arg Tyr Pro Asp Val Gln Phe Arg Lys
                  375
Thr Arg Glu His
<210> 8438
<211> 244
<212> PRT
<213> Enterobacter cloacae
<400> 8438
Lys Glu Leu Lys Met Ala Thr Pro His Ile Asn Ala Glu Met Gly Asp
                            10
Phe Ala Asp Val Val Leu Met Pro Gly Asp Pro Leu Arg Ala Lys His
                        25
                                         3.0
Ile Ala Glu Thr Phe Leu Glu Asp Val Arg Glu Val Asn Asn Val Arg
35
                     4.0
Gly Met Leu Gly Phe Thr Gly Thr Tyr Lys Gly Arg Lys Ile Ser Val
                55
Met Gly His Gly Met Gly Ile Pro Ser Cys Ser Ile Tyr Thr Lys Glu
               70
                             7.5
Leu Ile Thr Asp Phe Gly Val Lys Lys Ile Ile Arg Val Gly Ser Cys
                            90
           8.5
Gly Ala Val Arg Met Asp Val Lys Leu Arg Asp Val Val Ile Gly Met
        100 105
                                        110
Gly Ala Cys Thr Asp Ser Lys Val Asn Arg Ile Arg Phe Lys Asp His
     115 120
                                     125
Asp Phe Ala Ala Ile Ala Asp Phe Asp Met Val Arg Asn Ala Val Asp
                  135 140
Ala Ala Lys Ala Leu Gly Val Asp Ala Arg Val Gly Asn Leu Phe Ser
145
               150 155 160
Ala Asp Leu Phe Tyr Ser Pro Glu Gly Asp Met Phe Asp Val Met Glu
                           170
            165
                                175
Lys Tyr Gly Ile Leu Gly Val Glu Met Glu Ala Ala Gly Ile Tyr Gly
         180
                        185
                                        190
Val Ala Ala Glu Phe Gly Ala Lys Ala Leu Thr Ile Cys Thr Val Ser
                     200
                                   205
      195
Asp His Ile Arg Thr His Glu Gln Thr Thr Ala Ala Glu Arg Gln Thr
```

215

230

Thr Phe Asn Asp Met Ile Lys Ile Ala Leu Glu Ser Val Leu Leu Gly

```
<211> 463
<212> PRT
```

<213> Enterobacter cloacae

<400> 8439 Thr Val Ala Lys Ala Pro Lys Arg Ala Phe Val Cys Asn Glu Cys Gly Ala Asp Tyr Pro Arg Trp Gln Gly Gln Cys Ser Ala Cys His Ala Trp 2.5 Asn Thr Ile Thr Glu Val Arg Gly Val Ala Ala Ser Pro Ser Val Ala 35 40 4.5 Arg Asn Glu Arg Leu Ser Gly Tyr Ala Gly Asn Ala Gly Val Ser Lys 55 60 Val Gln Lys Leu Ser Asp Ile Ser Leu Glu Ala Leu Pro Arg Phe Ser 70 75 Thr Gly Phe Lys Glu Phe Asp Arg Val Leu Gly Gly Gly Val Val Pro 85 90 Gly Ser Ala Ile Leu Ile Gly Gly Asn Pro Gly Ala Gly Lys Ser Thr 100 105 110 Leu Leu Gln Thr Leu Cys Lys Leu Ala Glu Gln Met Lys Thr Leu 115 120 125 Tyr Val Thr Gly Glu Glu Ser Leu Gln Gln Val Ala Met Arg Ala His 130 135 140 Arg Leu Gly Leu Pro Thr Gly Asn Leu Asn Met Leu Ser Glu Thr Ser 145 150 155 Ile Glu Gln Ile Cys Met Ile Ala Glu Glu Glu Gln Pro Lys Leu Met 165 170 Val Ile Asp Ser Ile Gln Val Met His Met Ala Asp Ile Gln Ser Ser 180 185 190 Pro Gly Ser Val Ala Gln Val Arg Glu Thr Ala Ala Tyr Leu Thr Arg 195 200 205 Phe Ala Lys Thr Arg Gly Val Ala Ile Val Met Val Gly His Val Thr 210 215 220 Lys Asp Gly Ser Leu Ala Gly Pro Lys Val Leu Glu His Cys Ile Asp 225 230 235 Cys Ser Val Met Leu Asp Gly Asp Ala Asp Ser Arg Phe Arg Thr Leu 245 250 255 Arg Ser His Lys Asn Arg Phe Gly Ala Val Asn Glu Leu Gly Val Phe 260 265 270 Ala Met Thr Glu Gln Gly Leu Arg Glu Val Ser Asn Pro Ser Ala Ile 275 280 285 Phe Leu Ser Arg Gly Asp Glu Ile Thr Ser Gly Ser Ser Val Met Val 290 295 300 Leu Trp Glu Gly Thr Arg Pro Leu Leu Val Glu Ile Gln Ala Leu Val 305 310 315 320 Asp His Ser Met Met Gly Asn Pro Arg Arg Val Ala Val Gly Leu Glu 330 Gln Asn Arg Leu Ala Ile Leu Leu Ala Val Leu His Arg His Gly Gly 340 345 Leu Gln Met Ala Asp Gln Asp Val Phe Val Asn Val Val Gly Gly Val 360 365 Lys Val Thr Glu Thr Ser Ala Asp Leu Ala Leu Leu Leu Ala Met Val 375 380 Ser Ser Leu Arg Asp Arg Pro Leu Pro Gln Asp Leu Val Val Phe Gly 390 395 Glu Val Gly Leu Ala Gly Glu Ile Arg Pro Val Pro Ser Gly Gln Glu 405 410 Arg Ile Ser Glu Ala Ala Lys His Gly Phe Arg Arg Ala Ile Val Pro 420 425 430 Ala Ala Asn Val Pro Lys Lys Ile Pro Glu Gly Met Gln Val Phe Gly

```
Val Lys Lys Leu Ala Asp Ala Leu Asn Val Phe Asp Asp Leu
   450
                     455
<210> 8440
<211> 302
<212> PRT
<213> Enterobacter cloacae
<400> 8440
Thr Ile Met Phe Lys Gin Leu Gin Asp Met Ala Leu Phe Ala Leu Val
                               10
Ala Glu Met Gly Ser Phe Thr Ala Ala Ala Gln Lys Ala Glu Leu Pro
         20
                   25
Lys Ser Ser Val Ser Gln Arg Ile Ser Gln Leu Glu Gln Gln Val Glv
      35
                  40
                             4.5
Ile Arg Leu Leu Asn Arg Thr Thr Arg Arg Ile Ser Leu Thr Phe Ala
                    5.5
Gly Glu His Tyr Leu Val His Cys Arg Glu Met Leu Ala Ala Ser Glu
                70
                         75
Arg Ala Glu Tyr Ala Ile Gln Arg Leu Arg Glu Asn Pro Ser Gly Arg
                             90
Leu Arg Ile Thr Cys Pro Ala Gly Ile Gly Ala Thr Leu Leu Ala His
          100
                          105 110
Met Asn Ala Glu Phe Gln Leu Arg Tyr Pro Asp Val Ser Leu Asp Val
                      120
                             125
Ser Ile Ser Asp Asp Val Val Asp Leu Val Glu Ser Gly Phe Asp Val
                     135
                                       140
Ala Leu Arg Thr Gly Lys Pro Gln Asp Ser Ser Leu Ile Gly Arg Met
                 150
                                    155
Ile Gly His Cys Pro Arg Tyr Met Leu Ala Ser Pro Asp Tyr Leu Ala
              165
                                170
Arg Arg Glu Pro Leu Ile His Pro Arg Gln Leu Val Glu His Arg Cys
         180 185 190
Ile Thr His Arg Ala Trp Ser Glu Trp Leu Leu Arg Ser Glu Asn Glu
           200
                                           205
Asp Tyr Arg Tyr Leu Pro Asp Asn Ala His Met Thr Asp Asn Leu Val
 210 215
                                       220
Tyr Ala Arg Glu Cys Ala Ile Ala Gly Ala Gly Ile Thr Leu Leu Pro
                                    235
225
                 230
                                                      240
Ala Phe Leu Leu Glu Asp Lys Ile Glu Lys Gly Ala Leu Val Lys Val
              245
                                250
                                                   255
Leu Ser Ala Trp Ser Val Glu Gly Asn Asp Leu Trp Leu Ala Tyr Pro
          260
                            265
Ser Arg Lys Leu Asn Ser Pro Ala Leu Met Ser Tyr Ile Asp Phe Ala
                         280
                                           285
Met Gln Phe Asp Glu Val Lys Arg Tyr Tyr Val Gly Gly
                     295
<210> 8441
<211> 138
<212> PRT
<213> Enterobacter cloacae
<400> 8441
Ala Met Pro Ser Gly Arg Asp Val Thr Asp Arg Arg Gly Leu Cys Tyr
                                10
Ala Val Leu Ala Asn Glu Tyr Lys Arg Gln His Asn Met Thr Gln His
          20
                            25
Ser Pro Tyr Ser Ser Ala Met Ala Glu Gln Arg His Gln Glu Trp Leu
      35
Arg Phe Val Glu Leu Leu Arg Gln Ser Tyr Asp Lys Asp Leu His Leu
```

```
Pro Leu Gln Leu Met Leu Thr Pro Asp Glu Arg Glu Ala Leu Gly
                   70
Thr Arg Val Arg Ile Ile Glu Glu Leu Leu Arg Gly Glu Met Ser Gln
               85
                                  90
                                                     95
Arg Glu Leu Lys Asn Glu Leu Gly Ala Gly Ile Ala Thr Ile Thr Arg
          100
                 105
Gly Ser Asn Ser Leu Lys Ser Ala Pro Val Glu Leu Arg Gln Trp Leu
       115
                120
Glu Ala Val Leu Leu Lys Asn Ala Gly
   130
<210> 8442
<211> 144
<212> PRT
<213> Enterobacter cloacae
<400> 8442
Arg Gln Asn Tyr Gly Leu Val Val Asn Ala Arg Thr Gly Glu Leu Ala
                                 10
Arg Gly Lys Asp Ala Asn Arg Pro Leu Phe Thr Thr Asn Ile Ile Asn
          20
                           25
                                                 30
Ala Gly Val Val Arg His Tyr Arg Thr Gln Arg Leu Thr Arg Ala Asp
 35
                          40
                                             45
Phe Leu Gln Tyr Asp Leu Arg Gln Arg Gln Arg Gly Arg Thr Arg Phe
                      55
                                         60
Ala Ala Leu Leu Ala Ala Phe Asp Asp Asn Pro Ala Glu Gly Arg Ser
                  70
                                     7.5
Phe Val Asp Thr Ser Ile Asn Arg Asp Pro Glu Val Ser Val Trp Arg
             8.5
                                 90
                                                     95
Gly Gly Phe Cys Ile Arg His Ala Ile Ser Cys Ala Ser Ala Cys Phe
          100
                             105
                                                110
Leu Ala Ala Lys Arg Leu Phe Arg His Thr Ala Leu Asp Ala Asp Gly
               120
                                             125
Val Asn Met Ala Gly Ser Phe Ala Lys Asp Leu Phe Lys Cys Pro
                      135
<210> 8443
<211> 191
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(191)
<400> 8443
Arg Lys Lys Ser Met Leu Gln Val Tyr Leu Val Arg His Gly Glu Thr
Gin Trp Asn Ala Glu Arg Arg Ile Gln Gly Gln Ser Asp Ser Pro Leu
                              25
Thr Asp Lys Gly Val Gln Gln Ala Trp Gln Val Ala Glu Arg Ala Arg
      35
                          40
Thr Leu Gly Ile Thr His Val Ile Ser Ser Asp Leu Gly Arg Thr Gln
                      55
Gln Thr Ala Arg Ile Ile Ala Asp Ala Cys Gly Cys Asp Val Thr Leu
                  7.0
Glu Pro Arg Leu Arg Glu Leu Asp Met Gly Val Leu Glu Lys Arg Pro
                                 90
            8.5
                                                     95
Ile Asp Thr Leu Thr Glu Thr Glu Glu Gly Trp Arg Arg Thr Leu Val
```

```
Asn Gly Thr Glu Asp Gly Arg Ile Pro Glu Gly Glu Ser Met Gln Glu
       115
Leu Ser Val Arg Met His Ala Ala Leu Ala Glu Cys Leu Lys Leu Pro
                      135
                                         140
Ala Gly Ser Arg Pro Leu Leu Val Ser His Gly Ile Ala Leu Gly Cys
                 150
                                    155
Leu Val Ser Thr Ile Leu Gly Leu Pro Ala Tyr Ala Glu Arg Arg Leu
                   170
           165
                                      175
Arg Leu Arg Asn Cys Ser Ile Ser Arg Ile Asp Tyr His Glu Xaa
          180
                  185
<210> 8444
<211> 214
<212> PRT
<213> Enterobacter cloacae
<400> 8444
Trp Ala Lys His Arg Asn Lys Ser Met Asn Met Thr Arg Leu Lys Ile
                                10
Ser Lys Thr Leu Leu Ala Val Thr Leu Gly Ser Val Leu Val Ser Gly
          20
                             25
Ser Ala Leu Ala Glu Ser Ser Thr Met Asp Lys Ala Gln Ser Ser Ala
                         40
Asn Thr Ala Gly Glu Lys Ile Asp Ser Ser Met Asn Lys Val Gly Asn
                      55
Phe Met Asp Asp Ser Ser Ile Thr Ala Lys Val Lys Ala Ala Leu Val
                 70
                                    75
Asp His Asp Ser Ile Lys Ser Thr Asp Ile Ser Val Lys Thr Asp Asn
              8.5
                                 90
Lys Val Val Thr Leu Ser Gly Phe Val Glu Ser Gln Thr Gln Ala Glu
          100
                           105
                                               110
Glu Ala Val Lys Val Ala Lys Gly Val Glu Gly Val Ser Ser Val Ser
                      120
                                            125
Asp Lys Leu His Val Arg Asp Ser Lys Glu Ser Ser Val Lys Gly Tyr
 130
                  135
                                        140
Ala Gly Asp Ala Ala Thr Thr Ser Glu Ile Lys Ala Lys Leu Leu Ala
                 150
                                    155
Asp Asp Ile Val Pro Ser Arg Met Val Lys Val Glu Thr Thr Asp Gly
              165
                                 170
Val Val Gln Leu Ser Gly Thr Val Glu Asn Gln Ala Gln Ser Asp Arg
                           185
                                  190
Ala Glu Ser Ile Ala Lys Ala Ile Asp Gly Val Lys Ser Val Lys Asn
      195
                          200
Asp Leu Lys Thr Lys
   210
<210> 8445
<211> 109
<212> PRT
<213> Enterobacter cloacae
<400> 8445
Arg Gly Ser Gly Met Thr His Cys Phe Ile Asp Thr His Cys His Phe
Asp Phe Pro Pro Phe Ser Gly Glu Glu Thr Ser Ser Leu Ala Arg Ala
                             25
                                                30
Ala Glu Ala Gly Val Arg Ala Ile Ile Val Pro Ala Ile Glu Ala Ala
      35
                         40
                                            45
Arg Phe Asp Lys Val Leu Ala Leu Ala Arg Gly His Asp Ala Leu Tyr
                      5.5
```

Ala Ala Leu Gly Leu His Pro Ile Val Ile Glu His His Leu Asp Asp

```
4232
His Leu Asp Arg Leu Asp Ala Thr Leu Gln Asn Ala Asp Thr Lys Leu
              8.5
                              90
Val Ala Ile Gly Glu Ile Gly Leu Asp Leu Tyr Arg
           100
<210> 8446
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 8446
Asp Pro Gln Phe Glu Arg Gln Gln Thr Ile Leu Asp Ala Gln Leu Arg
                          10
Leu Ala Lys Arg His Asp Leu Pro Val Ile Leu His Ser Arg Arg Thr
    20
                            25
His Asp Lys Leu Ala Met His Leu Lys Arg Ile Asp Val Pro Arg Arg
       35
                         40
Gly Val Val His Gly Phe Ala Gly Ser Leu Gln Gln Ala Gln Arg Phe
 50
                   55
                              60
Ile Glu Leu Gly Tyr Lys Ile Gly Val Gly Gly Thr Ile Thr Tyr Pro
                 70
                            7.5
Arg Ala Ser Lys Thr Arg Asp Val Met Ala Gln Leu Pro Leu Thr Ser
             85
                       90
Leu Leu Glu Thr Asp Ala Pro Asp Met Pro Leu Asn Gly Phe Gln
    100 105 110
Gly Gln Pro Asn Arg Pro Glu Gln Ala Ala Arg Val Phe Asp Val Leu
    115
                        120
                                          125
Cys Glu Leu Arg Gln Glu Pro Glu Asp Val Ile Ala Ser Ala Leu Leu
                    135 140
Glu Asn Thr Arg Ala Val Phe Gly Ile Thr Leu
                 150
<210> 8447
<211> 413
<212> PRT
<213> Enterobacter cloacae
<400> 8447
Val Arg Arg Thr Ile Met Lys Arg Ala Phe Ile Met Val Leu Asp Ser
Phe Gly Ile Gly Ala Thr Glu Asp Ala Glu Arg Phe Gly Asp Val Gly
                            25
Ser Asp Thr Leu Gly His Ile Ala Glu Ala Cys Ala Lys Gly Glu Ala
                        40
Asp Asn Gly Arg Lys Gly Pro Leu Asn Leu Pro Asn Leu Thr Arg Leu
                     5.5
Gly Leu Val Lys Ala His Glu Gly Ser Thr Gly Lys Ile Ala Ala Gly
                 7.0
Met Asp Gly Asn Ala Glu Val Val Gly Ala Tyr Ala Trp Ala His Glu
              85
                                90
Leu Ser Ser Gly Lys Asp Thr Pro Ser Gly His Trp Glu Ile Ala Gly
          100
                             105
Val Pro Val Leu Phe Asp Trp Gly Tyr Phe Ser Asp His Glu Asn Ser
      115
                         120
Phe Pro Gln Glu Leu Leu Asp Lys Leu Val Lys Arg Ala Asn Leu Pro
                     135
                                       140
Gly Tyr Leu Gly Asn Cys His Ser Ser Gly Thr Val Ile Leu Asp Gln
                                    155
```

Leu Gly Glu Glu His Met Lys Thr Gly Lys Pro Ile Phe Tyr Thr Ser

170

Ala Asp Ser Val Phe Gln Ile Ala Cys His Glu Glu Thr Phe Gly Leu 185 180 190 Asp Lys Leu Tyr Glu Leu Cys Glu Ile Ala Arg Glu Glu Leu Thr Glu 195 200 205 Gly Gly Tyr Asn Ile Gly Arg Val Ile Ala Arg Pro Phe Ile Gly Asp 220 210 215 Lys Ala Gly Asn Phe Gln Arg Thr Gly Asn Arg His Asp Leu Ala Val 230 235 240 Glu Pro Pro Ala Pro Thr Val Leu Gln Lys Leu Val Asp Glu Lys Asp 245 250 255 Gly His Val Val Ser Val Gly Lys Ile Ala Asp Ile Tyr Ala Asn Cys 260 265 270 Gly Ile Thr Lys Lys Val Lys Ala Thr Gly Leu Asp Ala Leu Phe Asp 275 280 285 Ala Thr Ile Lys Glu Met Lys Glu Ala Gly Asp Lys Thr Ile Val Phe 290 295 300 Thr Asn Phe Val Asp Phe Asp Ser Ser Trp Gly His Arg Arg Asp Val 310 315 320 Ala Gly Tyr Ala Ala Gly Leu Glu Leu Phe Asp Arg Arg Leu Pro Glu 325 330 335 Leu Met Glu Leu Val Gly Glu Asp Asp Ile Leu Ile Leu Thr Ala Asp 345 350 340 His Gly Cys Asp Pro Thr Trp Thr Gly Thr Asp His Thr Arg Glu His 355 360 365 Ile Pro Val Leu Val Tyr Gly Pro Lys Val Lys Pro Gly Ser Leu Gly 375 380 His Arg Glu Thr Phe Ala Asp Ile Gly Gln Thr Ile Ala Lys Tyr Phe 385 390 395 Gly Thr Ser Asp Met Glu Tyr Gly Lys Ala Met Phe 405

<210> 8448

<211> 357 <212> PRT

<213> Enterobacter cloacae

<400> 8448

Asn Leu Arg Leu Asn Val Ala Arg Ser Asp Gly Tyr Arg Val Ala Ser 10 Cys Val Ile Phe Pro Leu Glu Pro Ser Gly Ala Asn Glu Ile Thr Gly 25 Ala Ser Met Pro Asn Ile Thr Trp Cys Asp Leu Pro Thr Asp Val Ser 40 Leu Trp Pro Gly Leu Pro Leu Ser Leu Ser Gly Asp Glu Val Met Pro 55 60 Leu Asp Tyr His Ala Gly Arg Ser Gly Trp Leu Leu Tyr Gly Arg Gly 65 70 75 Leu Asp Lys Gln Arg Leu Thr Gln Tyr Gln Thr Lys Leu Gly Ala Ala 85 90 Met Val Ile Val Ala Ala Trp Cys Val Glu Asp Tyr Gln Val Ile Arg 100 105 110 Leu Ala Gly Ser Leu Thr Gln Arg Ala Thr Arg Leu Ala His Asp Ala 115 120 125 Gly Leu Asp Val Ala Pro Leu Gly Lys Ile Pro His Leu Lys Thr Pro 135 Gly Leu Leu Val Met Asp Met Asp Ser Thr Ala Ile Gln Ile Glu Cys 150 145 155 160 Ile Asp Glu Ile Ala Lys Leu Ala Gly Ser Gly Glu Leu Val Ala Glu 165 170 Val Thr Glu Arg Ala Met Arg Gly Glu Leu Asp Phe Thr Ala Ser Leu 180 185

```
Arg Gln Arg Val Ala Thr Leu Lys Gly Ala Asp Ala Asn Ile Leu Arg
    195
                      200
Gln Val Arg Asp Glu Leu Pro Leu Met Pro Gly Leu Thr Gln Leu Val
                     215
                                       220
Leu Lys Leu Glu Thr Leu Gly Trp Lys Val Ala Ile Ala Ser Gly Gly
225
       230 235
Phe Thr Phe Phe Ala Asp Tyr Leu Arg Asp Lys Leu Arg Leu Thr Thr
        245 250 255
Val Val Ala As<br/>n Glu Leu Glu Ile Met Asp Gly Lys Leu Thr Gly Gl<br/>n 260 \hspace{1.5cm} 265 \hspace{1.5cm} 270 \hspace{1.5cm}
Val Ile Gly Asp Ile Val Asp Ala Gln Tyr Lys Ala Asn Thr Leu Thr
      275 280 285
Arg Leu Ala Glu Lys Tyr Ala Ile Pro Val Glu Gln Thr Val Ala Ile
  290 295
                                       300
Gly Asp Gly Ala Asn Asp Leu Pro Met Ile Lys Val Ala Gly Leu Gly 305 310 315 320
Ile Ala Tyr His Ala Lys Pro Lys Val Asn Glu Lys Thr Glu Val Thr
             325 330 335
Ile Arg His Ala Asp Leu Met Gly Val Phe Cys Ile Leu Ser Gly Ser
                   345
Ile Asn Gln Lys
      355
<210> 8449
<211> 590
<212> PRT
<213> Enterobacter cloacae
<400> 8449
Lys Thr Ala Thr Glu Val Ala Val Leu Leu Leu Phe Arg Asn Thr Leu
                                1.0
Val Leu Asn Thr Leu Arg Leu Gln Arg Val Cys Ala Gln Arg Ala Phe
 20
                             2.5
                                               30
Leu Val Leu Phe Val Phe Gly Glu Val Thr Phe Glu Glu Leu His Leu
35
                        40
                                    4.5
Thr Phe Val Leu Val Val Gln Asp Val Gly Arg Asp Thr Val Gln Glu
                     5.5
                                       60
Pro Ala Val Val Arg Asp Asn His Arg Ala Ala Arg Glu Leu Gln Gln
                  7.0
                      7.5
Gly Val Phe Gln Cys Ala Gln Gly Phe Asp Val Gln Val Val Gly Gly
              85
                                90
Phe Ile Glu Gln Gln Asn Val Ala Ala Asn Leu Glu Gln Phe Arg Gln
                             105
          100
                                               110
Val Gln Thr Thr Ala Phe Ala Ala Gly Gln Phe Ala His Ala Phe Ala
Leu Val Gly Ala Leu Glu Val Lys Ala Ala Asn Ile Gly Ala Ala Trp
 130
                     135
                                        140
His Leu Gly Val Ala Asp Thr His Asp Ile Gln Thr Ala Gly Asp Phe
                  150
Phe Pro His Gly Phe Ala Val Val His Arg Val Ala Glu Leu Val Asn
                                170 175
              165
Gly Gly Gln Leu His Gly Leu Thr Gln Gly Asp Arg Ala Ala Val Arg
          180
                             185
                                               190
Leu Phe Leu Thr Arg His His Ala Glu Gln Gly Gly Phe Thr Arg Ala
                         200
Val Arg Thr Asp Asp Ala Asp Asp Ser Ala Phe Arg Asn Gly Glu Gly
 210
                     215
                                       220
```

Gln Ile Val Asp Gln His Ala Val Ala Val Gly Leu Thr Gln Val Ser

His Phe Asn His Phe Ile Pro Gln Thr Ser Ser Arg Trp Asn Lys Gln

235

250

230

```
Phe Val Gly Phe Val Thr Phe Leu Val Phe Gly Val Val Gln Leu Phe
                 265
Glu Ala Cys Gln Thr Gly Phe Ala Leu Arg Leu Thr Ala Phe Arg Ala
           280 285
   275
Leu Thr His Pro Leu Gln Leu Phe Leu Asn Arg Leu Thr Ala Gly Gly
 290 295 300
Phe Leu Arg Arg Phe Leu Arg Gln Thr Leu Val Phe Leu Leu Gln Pro
   310 315 320
Gly Gly Val Val Ala Phe Pro Arg Asn Thr Phe Ala Ala Val Gln Leu
      325 330 335
Gln Asp Pro Ala Arg Asn Val Val Glu Glu Val Thr Val Val Gly Asn
     340 345 350
Arg Tyr His Gly Ala Phe Glu Val Met Gln Glu Ala Leu Gln Pro Arg
   355 360 365
His Gly Phe Gly Ile Gln Val Val Gly Arg Phe Val Glu Gln Gln His
 370 375 380
Val Trp Phe Phe Gln Gln Gln Ala Ala Gln Arg His Ala Ala Ala Phe
    390 395 400
Thr Thr Gly Gln Val Ser Asp Phe Arg Ile Pro Val Trp Gln Thr Gln
          405 410 415
Gly Ile Ser Arg Ala Leu Gln Leu His Val Gln Val Val Thr Ile Val
       420 425 430
Arg Leu Asp Asn Phe Leu Ile Phe Ala Leu Leu Ser Gly Gln Phe Val
   435 440 445
Glu Val Arg Ile Arg Leu Gly Val Phe Gly Ile His Phe Ile Gln Thr
              455
                              460
Phe Gln Gly Val Asn His Leu Gly Tyr Arg Phe Phe Asn Gly Phe Thr
   470 475
His Gly Val Leu Arg Val Gln Leu Arg Phe Leu Arg Gln Val Ala Asp
      485 490 495
Leu Asn Ala Arg Leu Arg Thr Gly Phe Thr Phe Asp Val Cys Ile Asp
       500 505 510
Ala Gly His Asp Ala Gln Gln Gly Gly Leu Thr Gly Thr Val Glu Thr
515 520
                                 525
Gln Asn Thr Asp Phe Cys Ala Arg Glu Glu Ala Gln Arg Asp Ile Phe
              535
                              540
Lys Asn Met Thr Phe Arg Arg Asp Asn Phe Ala Asp Thr Met His Gly
545 550 555 560
Ile Asn Glu Leu Ser His Val Gly Leu Arg Leu Phe Tyr Arg Asp Glu
         565 570
Asn Glu Phe Gln Pro Arg Ser Val Ala Phe Phe Thr Pro
                      585
<210> 8450
```

<210> 8450 <211> 371 <212> PRT

<213> Enterobacter cloacae

```
Tyr Ala Arg Lys Val Ile Met Arg Tyr Thr Thr Ser Lys Glu Phe Phe
         100
                         105
Asn Pro Val Arg Phe Val Arg Gly Gly Asn Leu Ile Asp Leu Asp Trp
      115
                      120
Leu Leu Asp Ala Thr Ser Ser Gln Met Pro Leu Ala Met Asp Thr Ala
                   135
                                   140
Ser Arg Leu Phe Asp Thr Gly Lys Glu Phe Trp Met Cys Ala Ser Arg
   150 155 160
Gly Asp Asp Tyr Ser Pro Gly Tyr Phe Ser Pro Gln Lys Glu Asn Trp 165 170 175
Leu Asp Ile Ile Arg Ala Ser Ser Ala Ile Pro Gly Phe Tyr Arg Thr
  180 185 190
Gly Ala Leu Leu Glu Gly Ile Ser Tyr Leu Asp Gly Gly Ile Ser Asp
 195 200 205
Ala Val Pro Val Gln Glu Ala Ala Arg Arg Gly Ala Lys Thr Ile Val
 210 215 220
Val Ile Arg Thr Val Pro Ser Gln Met Tyr Tyr Thr Pro Gln Trp Phe
225 230 235
Lys Arg Met Glu Arg Trp Leu Gly Asp Ser Ser Leu Gln Pro Leu Val
         245 250 255
Asn Ile Ala Lys Gln His Glu Thr Thr Tyr Gly Ala Met Gln Arg Phe
 260 265
Ile Glu Lys Pro Pro Gly Lys Leu Arg Ile Phe Glu Ile Tyr Pro Pro
275 280 285
Lys Pro Leu Leu Ser Met Ala Leu Gly Ser Arg Leu Pro Ala Leu Arg
290 295 300
Met Asp Tyr Lys Thr Gly Arg Leu Cys Gly Arg Tyr Phe Leu Ala Thr
             310 315
Val Gly Lys Met Leu Ala Glu Gln Pro Pro Leu His Arg His Lys Ser
          325 330 335
Ile Ile Leu Pro Pro Ala Val Val Ala Asn Asp Ala Val Ala Met Pro
       340 345 350
Leu Val Asp Ala Pro Gln Ala Asn Asp Gly Leu Leu Asp Asn Glu Asp
                      360
Leu Ala
  370
<210> 8451
<211> 316
<212> PRT
<213> Enterobacter cloacae
<400> 8451
Ser Ala Ile Asn Ala Leu Lys Phe Glu Glu Asp Leu Ile Thr Val Met
                             10
Gln Ile Cys Thr Gln Phe Ser Leu Thr Val Met Asn Val Glu Val Trp
                         25
                                          30
Met Arg Val Asn Val Arg Ile Leu Thr Asp Pro Gln Gly Lys Ile Tyr
                      40
                                4.5
Thr Ala Leu Pro Leu Glu Asn Val Met Thr Asp Leu Thr Ala Ser Ser
                  55
Leu Arg Ala Leu Lys Leu Met Asp Leu Thr Thr Leu Asn Asp Asp Asp
               70
                                75
Thr Asn Glu Lys Val Ile Ala Leu Cys His Gln Ala Lys Thr Pro Val
            85
                             90
Gly Asn Thr Ala Ala Val Cys Ile Tyr Pro Arg Phe Ile Pro Ile Ala
         100
                       105
Arg Lys Thr Leu Lys Glu Gln Gly Thr Pro Glu Val Arg Ile Ala Thr
               120
                                       125
Val Thr Asn Phe Pro His Gly Asn Asp Asp Ile Glu Ile Ala Leu Ala
                   135
                                    140
```

```
Glu Thr Arg Ala Ala Ile Ala Tyr Gly Ala Asp Glu Val Asp Val Val
                150
                             155
Phe Pro Tyr Arg Ala Leu Ile Ala Gly Asn Glu Gln Val Gly Phe Asp
             165
                             170
                                             175
Leu Val Lys Ala Cys Lys Asp Ala Cys Ala Ala Ala Asn Val Leu Leu
                                          190
                          185
Lys Val Ile Ile Glu Thr Gly Glu Leu Lys Glu Glu Ala Leu Ile Arg
                      200
                          205
      195
Lys Ala Ser Glu Ile Ser Ile Lys Ala Gly Ala Asp Phe Ile Lys Thr
                 215 220
Ser Thr Gly Lys Val Pro Val Asn Ala Thr Pro Glu Ser Ala Arg Ile
    230 235
Met Met Glu Val Ile Arg Asp Met Gly Val Ser Lys Thr Val Gly Phe
          245 250 255
Lys Pro Ala Gly Gly Val Arg Thr Ala Glu Asp Ala Gln Gln Phe Leu
       260 265 270
Ala Ile Ala Asp Glu Leu Phe Gly Ala Asp Trp Ala Asp Ser Arg His
     275 280 285
Tyr Arg Phe Gly Ala Ser Ser Leu Leu Ala Ser Leu Leu Lys Ala Leu
 290 295 300
Gly His Gly Asp Gly Lys Ser Ala Ser Ser Tyr
305 310
<210> 8452
<211> 474
<212> PRT
<213> Enterobacter cloacae
<400> 8452
Val Glu Leu Pro Gly Gly Ala Thr Leu Thr Arg Pro Lys Gly Ser Trp
                           10
Gly Gly Ser Thr Tyr Pro Pro Pro Phe Thr Arg Phe Arg Met Glu Val
                         2.5
                                         3.0
Thr Val Phe Leu Ala Gln Glu Ile Ile Arg Lys Lys Arg Asp Gly His
                      40
                                      45
Ala Leu Ser Asp Glu Glu Ile Arg Phe Phe Ile Asn Gly Ile Arg Asp
                                 60
Asn Thr Ile Ser Glu Gly Gln Ile Ala Ala Leu Ala Met Thr Ile Phe
             70
                    75
Phe His Asp Met Ser Met Pro Glu Arg Val Ser Leu Thr Met Ala Met
                90 95
            8.5
Arg Asp Ser Gly Thr Val Leu Asp Trp Lys Ser Leu Asn Leu Asn Gly
        100
                         105
Pro Ile Val Asp Lys His Ser Thr Gly Gly Val Gly Asp Val Thr Ser
      115
Leu Met Leu Gly Pro Met Val Ala Ala Cys Gly Gly Tyr Ile Pro Met
 130
                   135
                                   140
Ile Ser Gly Arg Gly Leu Gly His Thr Gly Gly Thr Leu Asp Lys Leu
                150
145
                                155
Glu Ala Ile Pro Gly Phe Asp Ile Phe Pro Asp Asp Asn Arg Phe Arg
                170
             165
Asp Ile Ile Lys Asp Val Gly Val Ala Ile Ile Gly Gln Thr Ser Ser
                185
         180
                                         190
Leu Ala Pro Ala Asp Lys Arg Phe Tyr Ala Thr Arg Asp Ile Thr Ala
      195
                      200
Thr Val Asp Ser Ile Pro Leu Ile Thr Ala Ser Ile Leu Ala Lys Lys
   210
                   215
                                   220
Leu Ala Glu Gly Leu Asp Ala Leu Val Met Asp Val Lys Val Gly Ser
                230
                                235
Gly Ala Phe Met Pro Thr Tyr Glu Leu Ser Glu Ala Leu Ala Glu Ala
                             250
```

```
Ile Val Gly Val Ser Asn Gly Ala Gly Val Arg Thr Thr Ala Leu Leu
        260
                      265
Thr Asp Met Asn Gln Val Leu Ala Ser Ser Ala Gly Asn Ala Val Glu
     275
                    280
                                    285
Val Arg Glu Ala Val Gln Phe Leu Thr Gly Glu Tyr Arg Asn Pro Arg
 290 295
                                 300
Leu Phe Asp Val Thr Met Ala Leu Cys Val Glu Met Leu Ile Ser Gly
              310 315 320
Lys Leu Ala Lys Asp Asp Ala Asp Ala Arg Ala Lys Leu Gln Ala Val
           325 330 335
Leu Asp Asn Gly Lys Ala Ala Glu Ile Phe Gly Arg Met Val Ala Ala
        340 345 350
Gln Lys Gly Pro Thr Asp Phe Val Glu Asn Tyr Ala Lys Tyr Leu Pro
     355 360 365
Thr Ala Met Leu Ser Lys Ala Val Tyr Ala Asp Ser Glu Gly Phe Val
                375
                                 380
Ser Ala Met Asp Thr Arg Ala Leu Gly Met Ala Val Val Ser Met Gly
              390 395
Gly Gly Arg Arg Gln Ala Ser Asp Thr Ile Asp Tyr Ser Val Gly Phe
           405 410
Thr Asp Met Ala Arg Leu Gly Asp Ser Val Asp Gly Gln Arg Pro Leu
        420
                      425
Ala Val Ile His Ala Lys Asp Glu Ala Ser Trp Gln Asp Ala Ala Lys
                         445
     435
                     440
Ala Val Lys Ala Ala Ile Ser Leu Asp Asp Lys Ala Pro Glu Thr Thr
               455
450
                                 460
Pro Thr Val Tyr Arg Arg Ile Thr Glu
               470
```

<210> 8453 <211> 86 <212> PRT

<213> Enterobacter cloacae

<400> 8453

Asn Ser Gly Ala Gly Gly Ser Leu Asn Asp Gly Gln Pro Ala Ala Arg

1 5 1 0 15

Gly Gly Arg Ser Gly Thr Glu Pro Pro Gly Asp Pro Ala Gly Gly Ala
25 30 30

Ala Pro Ser Arg Arg Ser Ala Asn Gly Gly Ser Gly Arg Val Arg Gln
35 40 40 45

Cys Gly Trp Trp Gly Glu Gly Tyr Gly Asn Gln Arg Gly Pro Gly Ala
50 55 56 66 60

Ala Ala Gly Asn Gly Phe Gln Pro Ala Arg Gln Thr Val Ala Ala Gly
65 70 70 85

Ser Gly Gly Ile Trp
85

<210> 8454 <211> 412

<211> 412 <212> PRT

<213> Enterobacter cloacae

<400> 8454

Phe Met Ser Ser Phe Asp Tyr IIe Lys Thr Ala IIe Arg Gln Lys Gly 1 5 10 0 15 Gly 15 Cys Thr Leu Gln Gln Val Ala Asp Ala Ser Gly Met Thr Lys Gly Tyr 20 20 25 30 20 Leu Ser Gln Leu Leu Asn Ala Lys IIe Lys Ser Pro Ser Ala Gln Lys 35 40 45 Leu Glu Ala Leu His Arg Phe Leu Gly Leu Glu Phe Pro Arg Met Gln

```
Lys Asn Ile Gly Val Val Phe Gly Lys Phe Tyr Pro Leu His Thr Gly
           70
His Ile Tyr Leu Ile Gln Arg Ala Cys Ser Gln Val Asp Glu Leu His
         8.5
                    90 95
Ile Ile Met Gly Tyr Asp Glu Thr Arg Asp Arg Gln Leu Phe Glu Asp
     100 105 110
Ser Ala Met Ser Gln Gln Pro Thr Val Pro Asp Arg Leu Arg Trp Leu
   115 120 125
Leu Gln Thr Phe Lys Tyr Gln Lys Asn Ile Arg Ile His Ala Phe Asn
130 135 140
Glu Glu Gly Met Glu Pro Tyr Pro His Gly Trp Asp Val Trp Ser Asn
    150 155 160
Gly Ile Lys Ala Phe Met Glu Glu Lys Gly Ile Ala Pro Asn Trp Ile
        165 170 175
Tyr Thr Ser Glu Glu Ser Asp Ala Pro Gln Phe Arg Glu His Leu Gly
       180 185 190
Ile Glu Thr Val Leu Ile Asp Pro Lys Arg Thr Phe Met Asn Ile Ser
    195 200 205
Gly Ala Gln Ile Arg Glu Asn Pro Phe Arg Tyr Trp Asp Tyr Ile Pro
210 215 220
Thr Glu Val Lys Pro Phe Phe Val Arg Thr Val Ala Ile Leu Gly Gly
225 230 235
Glu Ser Ser Gly Lys Ser Thr Leu Val Asn Lys Leu Ala Asn Ile Phe
         245 250 255
Asn Thr Thr Ser Ala Trp Glu Tyr Gly Arg Asp Tyr Val Phe Ser His
      260 265 270
Leu Gly Gly Asp Glu Met Ala Leu Gln Tyr Ser Asp Tyr Asp Lys Ile
275 280 285
Ala Leu Gly His Ala Gln Tyr Ile Asp Phe Ala Val Lys Tyr Ala Asn
 290
      295
                               300
Lys Val Ala Phe Ile Asp Thr Asp Phe Val Thr Thr Gin Ala Phe Cys
305 310 315 320
Lys Lys Tyr Glu Gly Arg Glu His Pro Phe Val Gln Ala Leu Ile Asp
        325
                         330 335
Glu Tyr Arg Phe Asp Leu Val Ile Leu Leu Glu Asn Asn Thr Pro Trp
      340
                      345
Val Ala Asp Gly Met Arg Ser Leu Gly Ser Ser Val Asp Arg Arg Glu
     355
                   360
                                 365
Phe Gln Thr Met Leu Val Glu Met Leu Asn Glu Asn Asn Val Glu Phe
              375 380
Val His Val Glu Glu Ser Asp Tyr Asp Thr Arg Phe Leu Arg Cys Val
385 390
                            395
Glu Leu Val Lys Glu Met Met Gly Glu Gln Gly
           405
```

<210> 8455 <211> 661 <212> PRT

<213> Enterobacter cloacae

75 70 Pro Tyr Leu Glu Tyr Arg Gln Ile Thr Asp Asp Leu Met Asn Gln Pro 85 90 Thr Val Thr Val Asn Asn Phe Ile Gln Ala Asn Pro Thr Leu Pro Pro 100 105 110 Ala Arg Thr Leu Lys Ser Arg Phe Val Asn Glu Leu Ala Arg Arg Glu 115 120 125 Asp Trp Arg Gly Leu Leu Ala Phe Ser Pro Asp Lys Pro Gly Ala Thr 130 135 140 Glu Ala Gln Cys Asn Tyr Tyr Tyr Ala Lys Trp Ala Thr Gly Gln Gln 145 150 155 160 Glu Glu Ala Trp Val Gly Ala Lys Lys Leu Trp Leu Thr Gly Lys Ser 165 170 175 Gln Pro Asn Ala Cys Asp Pro Leu Phe Ser Ala Trp Arg Ala Ser Gly 180 185 190 Gln Gln Asp Pro Leu Ser Tyr Leu Glu Arg Ile Arg Leu Ala Met Lys 195 200 205 Ala Gly Asn Thr Arg Leu Val Thr Val Leu Ala Gly Gln Met Pro Ala 210 215 220 Asp Tyr Gln Thr Ile Ala Ser Ala Val Ile Gly Leu Ala Asn Asp Pro 225 230 235 240 Asn Thr Val Leu Thr Phe Ala Arg Thr Thr Gly Ala Thr Asp Phe Thr 245 250 255 Arg Gln Met Ala Ala Val Ala Phe Ala Ser Val Ala Arg Asp Asp Val 260 265 270 Glu Asn Ala Arg Leu Met Ile Pro Gln Leu Val Gln Ala Gln Gln Leu 275 280 285 Asn Asp Asp Gln Thr Gln Glu Leu Arg Asp Ile Val Ala Trp Arg Leu 290 295 300 Met Gly Thr Asp Val Thr Asp Glu Gln Ala Arg Trp Arg Asp Asp Ala 305 310 315 320 Val Met Arg Ser Asn Ser Val Ser Leu Val Glu Arg Arg Val Arg Met 325 330 335 Ala Leu Gly Thr Gly Asp Arg Arg Gly Leu Asn Thr Trp Leu Ala Arg 340 345 350 Leu Pro Met Asp Ala Lys Glu Lys Asp Glu Trp Arg Tyr Trp Gln Ala 355 360 365 Asp Leu Leu Glu Arg Gly Arg Asp Asp Glu Ala Lys Glu Ile Leu 370 375 380 His Ser Leu Met Gln Gln Arg Gly Phe Tyr Pro Met Ala Ala Ala Gln 385 390 395 Arg Leu Gly Glu Glu Tyr Thr Leu Lys Ile Asp Lys Ala Pro Ala Asn 405 410 415 Ala Asn Pro Ala Leu Thr Gln Gly Pro Glu Met Ala Arg Val Arg Glu 420 425 430 Leu Met Tyr Trp Asn Leu Asp Asn Thr Ala Arg Ser Glu Trp Ala Asn 435 440 445 Leu Val Thr Ser Arg Thr Thr Glu Glu Lys Ala Gln Leu Ala Arg Tyr 455 460 450 Ala Ser Asp Asn Arg Trp Trp Asp Leu Ser Val Gln Ala Thr Ile Ala 465 470 475 Gly Lys Leu Trp Asp His Leu Glu Glu Arg Phe Pro Leu Ala Tyr Lys 485 490 495 Asp Leu Phe Asp Arg Tyr Thr Ser Gly Lys Asp Ile Pro Gln Ser Tyr 500 505 Ala Met Ala Ile Ala Arg Gln Glu Ser Ala Trp Asn Pro Lys Val Arg 515 520 Ser Pro Val Gly Ala Ser Gly Leu Met Gln Ile Met Pro Gly Thr Ala 535 540 Thr His Thr Val Lys Met Phe Asn Ile Pro Gly Tyr Ser Ser Pro Ser 550 555

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Gln Leu Leu Asp Pro Glu Thr Asn Ile Asn Ile Gly Thr Ser Tyr Leu
               565
Gln Tyr Val Tyr Gln Gln Phe Gly Asn Asn Arg Ile Phe Ala Ser Ala
           580
                              585
Ala Tyr Asn Ala Gly Pro Gly Arg Val Arg Thr Trp Leu Gly Asn Ser
       595
                         600
Ala Gly Arg Ile Asp Ala Val Ala Phe Val Glu Ser Ile Pro Phe Ser
 610
                    615
                                          620
Glu Thr Arg Gly Tyr Val Lys Asn Val Leu Ala Tyr Asp Ala Tyr Tyr
                630 635
Arg Tyr Phe Met Gly Gln Lys Asp Thr Leu Met Ser Asp Ala Glu Trp
                       650
              645
Gln Arg Arg Tyr
           660
<210> 8456
<211> 189
<212> PRT
<213> Enterobacter cloacae
<400> 8456
His Ala Phe Phe Pro Leu Tyr Cys Asp Glu Phe Phe Lys Ser Ser Leu
                                  10
Ile Met His His Val Val Ser Ala Thr Thr Asn Pro Ala Lys Ile Gln
                                                  30
Ala Ile Leu Arg Ala Phe Glu Glu Ile Phe Gly Glu Gly Ser Cys His
      35
                         40
                                              45
Ile Asp Ala Val Gly Val Glu Ser Gly Val Pro Glu Gln Pro Phe Gly
                      5.5
                                          60
Ser Glu Glu Thr Arg Ala Gly Ala Arg Asn Arg Val Ala Asn Ala Lys
                   70
                                     7.5
                                                         8.0
Ala Ala Ala Pro Asp Ala Asp Phe Trp Val Ala Ile Asp Ala Gly Ile
               8.5
                                  90
Asp Glu Gly Ala Thr Phe Ser Trp Val Val Ile Glu Ser Arg Glu Gln
           100
                              105
                                                  110
Arg Gly Glu Ala Arg Ser Ala Thr Leu Pro Leu Pro Glu Val Ile Leu
       115
                           120
                                              125
Glu Lys Val Arg Ala Gly Glu Ala Leu Gly Pro Val Met Ser His Tyr
 130
                                          140
Thr Gly Ile Asp Asp Ile Gly Arg Lys Glu Gly Ala Ile Gly Val Phe
                   150
                                     155
Thr Ala Gly Lys Leu Thr Arg Ser Ser Val Tyr His Gln Ala Val Ile
                                  170
               165
Leu Ala Leu Ser Pro Phe His Asn Ala Ile Tyr Arg
           180
                              185
<210> 8457
<211> 347
<212> PRT
<213> Enterobacter cloacae
<400> 8457
Thr Ser Leu Asn Lys Thr Asn Ala Ile Glu Glu His Thr Met Ser Val
                                  10
Lys Ala Ile Ala Val Asn Pro Glu Asn Pro Ser Thr Phe Val Glu Ile
           20
Thr Pro Pro Met Pro Gln Pro Gly Glu His Asp Leu Leu Val Glu Val
                           40
Lys Ala Val Ser Val Asn Pro Val Asp Thr Lys Val His Ala Gly Ile
                    55
```

Ala Lys Ser Gly Leu Lys Glu Pro Arg Ile Leu Gly Trp Asp Ala Ser

```
Gly Ile Val Lys Ala Val Gly Ala Gly Val Thr Gly Phe Lys Pro Gly
          85
                           90
Asp Glu Val Trp Tyr Ala Gly Asp Ile Thr Arg Pro Gly Ser Asn Thr
        100
             105
Thr His Gln Leu Ile Asp Ala Arg Ile Val Gly His Lys Pro Ala Ser
 115 120 125
Leu Asp Trp Ala Ala Ala Ala Leu Pro Leu Thr Ala Leu Thr Ala
 130 135 140
Trp Glu Gly Leu Phe Glu Arg Leu Lys Ile Gln Asp Ala Asp Ala Asp
145 150 155 160
Lys Thr Leu Leu Ile Ile Gly Gly Ala Gly Gly Val Gly Ser Leu Ala
165 170 175
Ile Pro Phe Ala Lys His Asn Ser Lys Val Lys Ile Val Ala Thr Ala
    180 185 190
Ser Arg Glu Asp Ser Ala Gln Trp Cys Arg Asp Arg Gly Ala Asp Ile
 195 200 205
Val Val Asn Tyr Arg Asp Leu Lys Gly Glu Met Ala Lys Gln Gly Leu
 210 215 220
Thr Phe Val Asp Tyr Ile Phe Ile Leu Asn Asp Thr Asp Gly His Trp
225 230 235
Asp Ala Val Ser Asp Leu Ile Ala Pro Gln Gly His Ile Cys Ser Ile
           245 250 255
Val Glu Asn Ala His Pro Leu Asn Gln Asp Lys Leu Lys Ser Lys Ser
      260 265 270
Ala Ala Leu His Trp Glu Phe Met Tyr Thr Arg Ser Met Tyr Gln Thr
275 280 285
Ala Asp Met Ala Arg Gln Gly Glu Ile Leu Asn Glu Val Ala Lys Leu
290 295 300
Val Asp Asn Gly Val Val Glu Ser Ser Leu Ser Glu Thr Leu His Gly
305 310
                              315 320
Leu Ser Val Glu Ser Ile Thr Glu Ala His Arg Lys Val Leu Glu Gly
         325
                           330
His Met Arg Gly Lys Val Val Val Glu Tyr
         340
<210> 8458
<211> 107
<212> PRT
<213> Enterobacter cloacae
<400> 8458
Ile Ser Leu Ile Ile Asn Pro Ile Lys Cys Glu Leu Cys Leu Leu Leu
                           1.0
Thr Glu Glu Val Phe Cys Gln Val Lys Gly Leu Ile Leu Met Ser Val
   20
                        25
Glu Ser Thr Ile Ala Gln Cys Ala Ile Ala Ala Pro Leu Leu Phe Ser
 35
                     4.0
Ala Leu Phe Ala Gln Ala Tyr Ala Ala Gly Met Val Pro Glu Thr Thr
                 55
                                 60
Leu Leu Val Ile Glu Glu Ser Thr His Ser Gly Thr Met Asn Val Lys
            70
                     75
Asn Thr Asp Thr Phe Pro Ala Leu Ile Tyr Thr Ile Ile Val Asp Leu
           85 90
Pro Asp Asp Thr Gly Val Thr Leu Asn Ala
         100
                      105
<210> 8459
<211> 543
<212> PRT
```

<213> Enterobacter cloacae

<400> 8459 Leu Asn Arg Arg Tyr Pro Leu Ser Asp Gin Ser Ala Thr Arg Leu Ala 1.0 Ser Tyr Asn Ser Phe Thr Ile Arg Arg Thr Thr Lys Glu Val Asn Met 20 25 Pro Asp Ala Leu Gln Gln Arg Cys Gln His Ile Val Thr Ser Pro Val 40 4.5 Leu Thr Pro Glu Gln Lys Arg His Phe Leu Ala Leu Glu Ala Glu Asn 55 60 Asn Leu Pro Tyr Pro Ala Leu Pro Glu Ala Ala Arg Ala Ala Leu Asp 70 75 Glu Gly Phe Ile Cys Asp Met Phe Glu Gly His Ala Pro Tyr Lys Pro 85 90 95 Arg Tyr Val Leu Pro Asp Tyr Ala Lys Phe Leu Ala Asn Gly Ser Glu 100 105 110 Trp Leu Glu Leu Glu Gly Ala Lys Asp Leu Asp Asp Ala Leu Ser Leu 115 120 125 Leu Thr Ile Leu Tyr His His Val Pro Ser Val Thr Ser Met Pro Val 135 140 Tyr Leu Gly Gln Leu Asp Glu Ile Leu Ser Pro Tyr Val Lys Ile Leu 150 155 Thr Gln Asp Glu Ile Asp Ser Arg Ile Lys Arg Phe Trp Arg Tyr Leu 165 170 175 Asp Arg Thr Leu Pro Asp Ala Phe Met His Ala Asn Ile Gly Pro Ala 185 190 180 Asp Thr Pro Val Thr Arg Ala Ile Leu Arg Ala Asp Ala Glu Leu Lys 195 200 205 Gln Val Ala Pro Asn Leu Thr Phe Ile Tyr Asp Pro Asp Val Thr Pro 210 215 220 Ser Asp Leu Leu Leu Ser Val Ala Lys Asn Ile Cys Glu Cys Ser Lys 230 235 Pro His Ile Ser Asn Gly Pro Val Asn Asp Lys Ile Phe Thr Lys Gly 245 250 255 Arg Tyr Gly Val Val Ser Cys Tyr Asn Ser Leu Pro Leu Ala Gly Gly 260 265 270 Gly Ser Thr Leu Val Arg Leu Asn Leu Lys Ala Ile Ala Glu His Ser 275 280 Arg Ser Pro Glu Asp Phe Phe Thr Arg Thr Leu Pro His Tyr Cys Gln 295 300 Gln Gln Ile Ala Ile Ile Asn Ala Arg Cys Asp Phe Leu Tyr Glu Gln 310 315 Ser Gly Phe Phe Glu Asn Ser Phe Leu Val Lys Glu Gly Leu Ile Asp 325 330 Ala Asp Arg Phe Val Pro Met Phe Gly Met Tyr Gly Leu Ala Glu Ala 340 345 350 Val Asn Val Leu Cys Gln Lys Ala Gly Ile Thr Gly Arg Tyr Gly Lys 355 360 365 Asn Glu Gln Ala Asn Ala Leu Gly Tyr Arg Ile Ser Glu Gln Leu Ala 375 380 Ala Phe Val Glu Asn Thr Pro Val Lys His Gly Trp Lys Gln Arg Ala 390 395 Met Leu His Ala Gln Ser Gly Ile Ser Ser Asp Ser Gly Thr Thr Pro 405 410 Gly Ala Arg Leu Pro Tyr Gly Asp Glu Pro Asp Pro Ile Ser His Leu 420 425 Leu Ala Val Ala Pro His His Lys His Tyr Ala Ser Gly Ile Ser Asp 435 440 Ile Leu Thr Leu Asp Glu Thr Val Lys Arg Asn Pro Gln Ala Val Val 455 Gln Leu Cys Leu Gly Ala Phe Arg Ala Gly Met Arg Glu Phe Thr Ala

470 475 Asn Val Ala Gly Asn Asp Leu Val Arg Val Thr Gly Tyr Met Val Arg 485 490 495 Leu Ser Asp Leu Glu Lys Tyr Arg Glu Ala Gly Ser Arg Thr Asn Thr 500 505 Thr Trp Leu Gly Glu Glu Ala Ala Arg Asn Thr Arg Ile Leu Glu Arg 515 520 Gln Pro Arg Val Ile Ser His Glu Gln Gln Met Arg Phe Ser 535 540 <210> 8460 <211> 588 <212> PRT <213> Enterobacter cloacae <400> 8460 His Ser Arg Arg Ser Trp Leu Gly Leu Gly Arg Glu Lys Gly Tyr Thr 10 Ser Arg Leu Lys Phe Ile Leu Ile Thr Ile Lys Glu Ala Lys Ser Asn 20 25 30Val Ala Gln Phe Val Tyr Thr Met His Arg Val Gly Lys Val Val Pro 35 40 Pro Lys Arg His Ile Leu Lys Asn Ile Ser Leu Ser Phe Phe Pro Gly 50 55 Ala Lys Ile Gly Val Leu Gly Leu Asn Gly Ala Gly Lys Ser Thr Leu 70 7.5 Leu Arg Ile Met Ala Gly Ile Asp Thr Asp Ile Glu Gly Glu Ala Arg 85 90 95 Pro Gln Pro Gly Ile Lys Ile Gly Tyr Leu Pro Gln Glu Pro Gln Leu 100 105 110 Asn Pro Glu His Thr Val Arg Glu Ser Val Glu Glu Ala Val Ser Glu 115 120 125 Val Val Asn Ala Leu Lys Gly Leu Asp Glu Val Tyr Ala Lys Tyr Ala 130 135 140 Glu Pro Asp Ala Asp Phe Asp Lys Leu Ala Ala Gln Gln Gly Lys Tyr 145 150 155 160 Glu Glu Ile Ile Gln Ala His Asp Gly His Asn Leu Asn Val Gln Leu 165 170 175 Glu Arg Ala Ala Asp Ala Leu Arg Leu Pro Asp Trp Asp Ala Lys Ile 180 185 190 Ala Asn Leu Ser Gly Gly Glu Arg Arg Arg Val Ala Leu Cys Arg Leu 195 200 205 Leu Leu Glu Lys Pro Asp Met Leu Leu Leu Asp Glu Pro Thr Asn His 210 215 220 Leu Asp Ala Glu Ser Val Ala Trp Leu Glu Arg Phe Leu His Asp Phe 230 235 Glu Gly Thr Val Val Ala Ile Thr His Asp Arg Tyr Phe Leu Asp Asn 245 250 255 Val Ala Gly Trp Ile Leu Glu Leu Asp Arg Gly Glu Gly Ile Pro Trp 260 265 270 Glu Gly Asn Tyr Ser Ser Trp Leu Glu Gln Lys Asp Gln Arg Leu Ala 280 285 Gln Glu Ala Ser Gln Glu Ala Ala Arg Arg Lys Ser Ile Glu Lys Glu 295 300 Leu Glu Trp Val Arg Gln Gly Ala Lys Gly Arg Gln Ser Lys Gly Lys 310 315 320 Ala Arg Leu Ala Arg Phe Glu Glu Leu Asn Asn Thr Glu Tyr Gln Lys 325 330 335 Arg Asn Glu Thr Asn Glu Leu Phe Ile Pro Pro Gly Ala Arg Leu Gly 340 345 350 Asp Lys Val Val Glu Val Thr Asn Leu Arg Lys Ser Tyr Gly Asp Arg

```
360
Val Leu Ile Asp Asp Leu Thr Phe Ser Val Pro Lys Gly Ala Ile Val
Gly Ile Ile Gly Pro Asn Gly Ala Gly Lys Ser Thr Leu Phe Arg Met
               390
                     395
Met Ser Gly Gln Glu Gln Pro Asp Ser Gly Ser Ile Thr Leu Gly Glu
           405
                    410
Thr Val Lys Leu Ala Ser Val Asp Gln Phe Arg Asp Ala Met Asp Asn
       420 425 430
Ser Lys Thr Val Trp Glu Glu Val Ser Gly Gly Leu Asp Ile Met Arg
    435
          440 445
Ile Gly Asn Thr Glu Met Pro Ser Arg Ala Tyr Val Gly Arg Phe Asn
 450 455 460
Phe Lys Gly Thr Asp Gln Gly Lys Arg Val Gly Glu Leu Ser Gly Gly
    470 475
Glu Arg Gly Arg Leu His Leu Ala Lys Leu Leu Gln Val Gly Gly Asn
          485 490
Val Leu Leu Leu Asp Glu Pro Thr Asn Asp Leu Asp Ile Glu Thr Leu
       500 505 510
Arg Ala Leu Glu Asn Ala Leu Leu Glu Phe Pro Gly Cys Ala Met Val
    515 520 525
Ile Ser His Asp Arg Trp Phe Leu Asp Arg Ile Ala Thr His Ile Leu
530 535 540
Asp Tyr Gln Asp Glu Gly Lys Val Glu Phe Phe Glu Gly Asn Phe Thr
    550 555 560
Glu Tyr Glu Glu Tyr Lys Lys Arg Thr Leu Gly Ala Asp Ala Leu Glu
          565 570
Pro Lys Arg Ile Lys Tyr Lys Arg Ile Ala Lys
<210> 8461
<211> 221
<212> PRT
<213> Enterobacter cloacae
<400> 8461
Ile Leu Ser Arg Trp Asn Met Ala Arg Ala Lys Leu Lys Phe Arg Leu
                            1.0
His Arg Ala Val Ile Val Leu Ile Cys Leu Ala Leu Leu Val Ala Leu
         20
                         25
Met Gln Gly Ala Ser Trp Phe Ser Gln Asn His Gln Arg Gln Arg Asn
                     4.0
Pro Gln Phe Glu Glu Leu Gly Arg Thr Leu Ala Arg Gln Val Thr Leu
                  5.5
                                 60
Asn Val Ala Pro Ser Met Arg Thr Glu Thr Pro Asp Asp Lys Arg Ile
             7.0
                                75
Ala Leu Val Leu Arg Gln Leu Thr Glu Asn Ser Arg Ile Leu Asp Ala
            8.5
                            90
Gly Val Tyr Asp Glu Gln Gly Asp Leu Ile Ala Arg Ala Gly Glu His
         100
                         105
Val Asp Val Arg Asp Arg Leu Ala Leu Asp Gly Lys Lys Ala Gly Gly
      115 120
Tyr Phe Asn Gln Gln Ile Val Glu Pro Ile Gln Gly Lys Asn Gly Pro
  130
                                   140
                  135
Leu Gly Tyr Leu Arg Leu Thr Leu Asp Thr His Thr Leu Pro Thr Glu
               150
                                155
145
Ala Lys Gln Val Asp Asn Thr Thr Asn Ile Leu Arg Leu Met Leu Leu
            165
                            170
Leu Ser Leu Ala Ile Gly Val Val Leu Ala Arg Thr Leu Leu Gln Gly
                      185
Lys Arg Thr Arg Trp Gln Gln Ser Pro Phe Leu Leu Thr Ala Ser Lys
```

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195
                      200
Ser Val Pro Glu Glu Glu Glu Ser Glu Lys Lys Glu
   210
<210> 8462
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 8462
Ser Arg Arg Met Ile Arg Lys Arg Asn Ser Ala Met Ser Thr Leu Arg
                  10
Leu Leu Ile Ser Asp Ser Tyr Asp Pro Trp Phe Asn Leu Ala Val Glu
 20
             25
Glu Cys Ile Phe Arg Gln Met Pro Ala Thr Gln Arg Val Leu Phe Leu
                     40
                                     45
Trp Arg Asn Ala Asp Thr Val Val Ile Gly Arg Ala Gln Asn Pro Trp
       55
Lys Glu Cys Asn Thr Arg Arg Met Glu Glu Asp Asn Val Arg Leu Ala
             70
                         7.5
Arg Arg Ser Ser Gly Gly Gly Ala Val Phe His Asp Leu Gly Asn Thr
          85
                            90 95
Cys Phe Thr Phe Met Ala Gly Lys Pro Glu Tyr Asp Lys Thr Ile Ser
         100
                       105 110
Thr Ser Ile Val Leu Asn Ala Leu Asn Ser Leu Gly Val Thr Ala Glu
115 120 125
Ala Ser Gly Arg Asn Asp Leu Val Val Lys Thr Pro Asp Gly Asp Arg
  130
                  135 140
Lys Val Ser Gly Ser Ala Tyr Arg Glu Thr Met Asp Arg Gly Phe His
145
     150
                               155 160
His Gly Thr Leu Leu Leu Asn Ala Asp Leu Ser Arg Leu Ala Asn Tyr
            165
                            170
Leu Asn Pro Asp Lys Lys Leu Gln Ala Lys Gly Ile Thr Ser Val
         180
                       185
                                         190
Arg Gly Arg Val Ala Asn Leu Val Glu Leu Leu Pro Gly Ile Thr His
 195
                      200 205
Glu Gln Ile Cys Asp Ala Ile Arg Glu Ala Phe Phe Glu His Tyr Gly
 210
                  215 220
Glu Arg Val Glu Ala Glu Val Ile Ser Pro Asp Lys Thr Pro Asp Leu
                230
                               235
Pro Asn Phe Ala Glu Thr Phe Ala Arg Gln Ser Ser Trp Glu Trp Asn
            245
                            250 255
Phe Gly Gln Ala Pro Ala Phe Ser His Leu Leu Asp Glu Arg Phe Thr
         260
                         265 270
Trp Gly Gly Val Glu Leu His Phe Asp Val Glu Lys Gly His Ile Thr
      275
                     280
                          285
Arg Thr Gln Val Phe Thr Asp Ser Leu Asn Pro Ala Pro Leu Glu Ala
   290
                   295
                                   300
Leu Ala Ala Arg Leu Gln Gly Cys Leu Tyr His Ala Asp Ser Leu Gln
               310
                               315
Gln Ala Cys Glu Ala Leu Trp Val Asp Phe Pro Asp His Glu Arg Glu
            325
                            330
Leu Arg Asp Leu Ser Gln Trp Ile Ala Gly Ala Val Arg
         340
                         345
<210> 8463
<211> 232
<212> PRT
<213> Enterobacter cloacae
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<400> 8463

Gly Leu Thr Met Lys Lys Ile Ile Ile Ala Thr Ala Val Ala Met Thr Leu Ser Ala Thr Ala His Ala Asp Ser Thr Ala Val Leu Lys Leu Lys 20 25 Gly Val Leu Thr Asn Asn Ala Cys Thr Pro Thr Leu Ser Asp Gly Ala 35 40 45 Val Val Asp Phe Gly Thr Lys Tyr Ile Ser Ser Leu Ser Ala Thr Ala 55 Asp Asn Gln Leu Gly Tyr Lys Asp Ile Ser Leu Thr Ile Asn Cys Ser 65 70 75 80 Ala Ala Thr Lys Val Ala Trp Ser Ile Thr Asp Asp His Ala Asp Ser 85 90 Met Lys Lys Met Thr Ile Asp Asn Ala Thr Phe Ala Gly Asp Gln Ala 100 105 110 Trp Ser Ser Thr Asn Gln Tyr Gly Val Gly Lys Thr Ala Gly Gly Val 115 120 125 Asn Ile Gly Ala Tyr Ser Val Gly Met Asn Ser Asn Val Thr Val Asp 130 135 140 Gly Asn Val Lys Ala Leu Gly Tyr Ser Ala Ile Ala Asp Asp Pro Met 145 150 155 Trp Leu Leu Ala Asn Thr Gly Ser Gln Leu Val Thr His Ser Asp Gly 165 170 175 Phe Met Asn Ala Val Phe Pro Leu Arg Val Ala Leu Ala Val Gln Lys 195 200 Thr Asp Thr Leu Ala Ile Thr Asp Asp Thr Pro Ile Asp Gly Gln Ala 210 215 220 Thr Ile Thr Leu His Tyr Leu

230

<210> 8464 <211> 233

<212> PRT

<213> Enterobacter cloacae

<400> 8464

Gly Thr Thr Met Lys Lys Ile Leu Val Ala Thr Ala Val Ala Leu Ala 10 Leu Ser Ala Thr Ala Ala Asn Ala Ala Ser Thr Ala Val Leu Lys Val 25 3.0 Thr Gly Leu Leu Ser Val Ala Ala Cys Thr Pro Gln Leu Ser Gly Gly Gly Glu Val Asp Tyr Gly Leu Ile His Leu Ala Asp Leu Ser Ala Thr Ser Val Asn Gln Leu Gly Gln Lys Asp Ile Ser Leu Thr Ile Thr Cys 75 70 Pro Val Ala Thr Lys Ala Gly Trp Thr Ile Ser Asp Asp Arg Ala Asp 90 8.5 Thr His Pro Gly Ala Ser Val Ile Thr Ile Asn Thr Ala Asp Ala Ala 100 105 Gly Gly Asn Val Ser Asp Thr Thr Gln Ser Tyr Gly Val Gly Lys Thr 120 125 Ala Gly Gly Val Lys Ile Gly Ala Tyr Ser Ile Phe Ala Asp Val Ala 135 Asn Val Thr Ala Asp Gly Val Lys Ser Asp Val Ile Ser Gly Thr Val 150 145 155 Asp Ser Pro Ser Trp Gln Lys Thr Ala Thr Gly Ile Ile Lys Asn Ala 165 170 175 Asn Met Glu Met Met Thr Val Ala Ala Ser Gly Thr Thr Ala Pro Leu 185

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Pro Phe Thr Thr Ala Val Phe Pro Leu Lys Thr Ser Leu Ala Ile Gln
      195
                     200
                                      205
Asn Thr Ala Ala Leu Ala Ile Thr Asp Asp Thr Asn Leu Asp Gly Gln
                    215
Ala Thr Ile Thr Val Lys Tyr Leu
              230
<210> 8465
<211> 288
<212> PRT
<213> Enterobacter cloacae
<400> 8465
Val Met Asn Ser Arg Cys Ala Leu Val Ser Gln Val Ile Pro Phe Ser
                              10
Cys Val Asp Gly Pro Gly Ser Arg Leu Ala Leu Phe Leu Gln Gly Cys
         20
                          25
                                  30
Asn Leu Arg Cys Lys Thr Cys His Asn Pro Trp Thr Ile Gly Arg Cys
 35
                       4.0
                                      4.5
Asn Asp Cys Gly Asp Cys Val Pro His Cys Pro His Asp Ala Leu Thr
                   5.5
                         60
Ile Gln Ala Gly Arg Val Trp Trp Gln Glu Ser His Cys Gln Gln Cys
               70
                               75
Asp Thr Cys Leu His Leu Cys Gln Gln Gln Ala Thr Pro Met Ala Gln
            85
                       90
Arg Tyr Ser Val Glu Glu Ile Leu Ser Arg Val Leu Thr Ser Ala Pro
          100
                          105
                                             110
Phe Ile Glu Gly Val Thr Val Ser Gly Gly Glu Ala Thr Thr Gln Leu
      115
                        120
Pro Phe Leu Val Ala Leu Phe Thr Ala Ile Lys Ala Asp Pro Ser Leu
                    135
                                      140
Arg His Leu Thr Cys Leu Val Asp Ser Asn Gly Leu Leu Ser Glu Thr
145
                150
                                155
Gly Trp Gln Lys Leu Phe Pro Val Phe Asp Gly Ala Met Val Asp Leu
             165
                  170
                                                175
Lys Ala Trp Gly Asn Glu His His Arg Phe Leu Thr Gly Arg Glu Asn
          180 185
Thr Leu Ile Lys Gln Ser Ile Arg Trp Leu Ala Asp Arg His Arg Leu
                       200 205
Thr Glu Leu Arg Leu Leu Val Ile Pro Asp Arg Cys Asp Tyr Leu Gln
  210 215
                                     220
His Leu Pro Ser Leu Thr Ala Phe Ile His Thr Leu Glu Asn Val Pro
225
              230
                                  235
Val Arg Ile Asn Ala Phe His Ala His Gly Val Tyr Gly Glu Ala Ala
             245
                               250
Arg Trp Arg Ser Ala Thr Pro Glu Asp Ile Glu Pro Leu Ala Gln Ala
          260
                           265
Leu Glu Arg Gln Gln Ile Thr Val Ile Arg Pro Ala Leu Tyr Leu
                        280
<210> 8466
<211> 105
<212> PRT
<213> Enterobacter cloacae
<400> 8466
Arg Arg Ile Asp Leu Asn Glu Leu Leu Val Ala His Pro Ser Ser Thr
                              10
Tyr Phe Val Lys Ala Ala Gly Asp Ser Met Ile Glu Gly Gly Ile Asn
          20
                           25
Asn Gly Asp Leu Leu Val Val Asp Ser Ser Arg Lys Pro Glu His Gly
```

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Asp Ile Val Ile Ala Ala Val Glu Gly Glu Phe Thr Val Lys Arg Leu
                      55
Gln Leu Arg Pro Asn Ile Gln Leu Asn Pro Met Asn Ser Ala Tyr Ser
                70
                                      75
Pro Ile Ile Val Gly Ser Asp Asp Thr Leu Asp Ile Phe Gly Val Val
             8.5
Thr Tyr Ile Val Lys Ser Ala Ser
                               105
<210> 8467
<211> 190
<212> PRT
<213> Enterobacter cloacae
<400> 8467
Ser Arg His Tyr Ile Ser Pro Cys Ala Ala Ala Pro Arg Met Arg Arg
                                  1.0
Ser Thr Gly Met Arg Val Leu Ser Pro Gln Val Ala Ile Arg Tyr Met
                              25
Ser Arg Val Ala Ala Trp Arg Leu Arg Arg Lys Thr Ser Ala Met Pro
 3.5
                          4.0
Ile Arg Ala Pro Cys Arg Ser Arg Phe Pro Pro Gly Ile Ala Leu Pro
                       55
                                          60
Glu Ser Gly Leu Arg Arg Val Ser Ala Pro Leu Leu Arg Leu Leu Ser
                   70
                                      75
Ile Trp Pro Ala His Arg Lys Ala Met Gln Cys Ile Pro Pro Ser Lys
              8.5
                                  90
Arg Arg Cys Arg Met His Val Asn Val Arg Ile Thr Thr Phe Arg Tyr
           100
                              105
                                                  110
Thr Phe Ala Met Pro Pro Thr Lys Leu Met Lys Glu Met Gly Tyr Gly
       115
                           120
                                              125
Gln Glu Tyr Arg Tyr Ala His Asp Glu Pro Asn Ala Tyr Ala Ala Gly
 130
                       135
                                          140
Glu Glu Tyr Phe Pro Gln Glu Met Ala Gln Thr Arg Tyr Tyr His Pro
                  150
                                      155
Thr Asn Arg Gly Leu Glu Gly Lys Ile Gly Glu Lys Leu Ala Trp Leu
              165
                                  170
Ala Gly Gln Asp Gln Asn Ser Pro Ile Lys Arg Tyr Arg
                               185
<210> 8468
<211> 817
<212> PRT
<213> Enterobacter cloacae
<400> 8468
Val Phe Met Lys Ile Lys Ala Pro Glu Ala Leu Met Ala Ala Glu Val
Thr Arg Arg Gly Leu Met Lys Thr Thr Ala Ile Gly Gly Leu Ala Val
                                                  30
           20
Ala Ser Ser Ala Phe Thr Leu Pro Phe Thr Arg Leu Ala Ser Ala Ala
       35
                          40
Glu Ala Leu Ser Pro Ala Ser Ala Pro Glu Lys Val Val Trp Ser Ala
                       55
Cys Thr Val Asn Cys Gly Ser Arg Cys Pro Leu Arg Met His Val Val
                   70
                                     75
Asp Gly Glu Ile Lys Tyr Val Glu Thr Asp Asn Thr Gly Asp Asp Asn
               85
                                  90
Tyr Glu Gly Leu His Gln Val Arg Ala Cys Leu Arg Gly Arg Ser Met
```

105

Arg Arg Arg Val Tyr Asn Pro Asp Arg Leu Lys Tyr Pro Met Lys Arg 120 Val Gly Lys Arg Gly Glu Gly Lys Phe Glu Arg Ile Ser Trp Asp Glu 135 140 Ala Tyr Asp Ile Ile Ala Thr Asn Met Gln Arg Leu Ile Lys Glu Tyr 150 155 160 Gly Asn Glu Ser Ile Tyr Leu Asn Tyr Gly Thr Gly Thr Leu Gly Gly 165 170 175 Thr Met Thr Arg Ser Trp Pro Pro Gly Lys Thr Leu Val Ala Arg Leu 180 185 Met Asn Cys Cys Gly Gly Tyr Leu Asn His Tyr Gly Asp Tyr Ser Ser 195 200 205 Ala Gln Ile Ala Ala Gly Leu Asn Tyr Thr Tyr Gly Gly Trp Ala Asp 210 215 220 Gly Asn Ser Pro Ser Asp Ile Glu Asn Ser Lys Leu Val Val Leu Phe 225 230 235 240 Gly Asn Asn Pro Gly Glu Thr Arg Met Ser Gly Gly Gly Val Thr Tyr 245 250 Tyr Leu Glu Gln Ala Arg Ala Lys Ser Asn Ala Arg Met Ile Ile Val 260 265 270 Asp Pro Arg Tyr Thr Asp Thr Gly Ala Gly Arg Glu Asp Glu Trp Ile 275 280 285 Pro Ile Arg Pro Gly Thr Asp Ala Ala Leu Val Asn Ala Leu Ala Tyr 295 300 Val Met Ile Thr Glu Asn Leu Val Asp Gln Pro Phe Leu Asp Lys Tyr 310 315 Cys Val Gly Tyr Asp Glu Lys Thr Leu Pro Ala Ser Ala Pro Ala Asn 325 330 335 Gly His Tyr Lys Ala Tyr Ile Leu Gly Gln Gly Ser Asp Gly Val Ala 340 345 350 Lys Thr Pro Glu Trp Ala Ser Thr Ile Thr Gly Ile Pro Val Glu Arg 355 360 365 Ile Val Gln Leu Ala Arg Glu Ile Gly Ser Thr Lys Pro Ala Tyr Ile 370 375 380 Ser Gln Gly Trp Gly Pro Gln Arg His Ser Asn Gly Glu Ile Ala Thr 390 395 Arg Ala Ile Ser Met Leu Ser Ile Leu Thr Gly Asn Val Gly Ile His 405 410 415 Gly Gly Asn Ser Gly Ala Arg Glu Gly Ser Tyr Glu Val Pro Phe Glu 425 420 430 Arg Met Pro Thr Leu Asp Asn Pro Val Gln Thr Ser Ile Ser Met Phe 440 445 Met Trp Thr Asp Ala Ile Glu Arg Gly Pro Glu Met Thr Ala Leu Arg 450 455 460 Asp Gly Val Arg Gly Lys Asp Lys Leu Asp Val Pro Ile Lys Met Ile 470 475 Trp Asn Tyr Ala Gly Asn Cys Leu Ile Asn Gln His Ser Glu Ile Asn 485 490 Arg Thr His Glu Ile Leu Gln Asp Asp Lys Lys Cys Glu Met Ile Val 500 505 510 Val Ile Asp Cys His Met Thr Ser Ser Ala Lys Tyr Ala Asp Ile Leu 520 515 525 Leu Pro Asp Cys Thr Ala Ser Glu Gln Met Asp Phe Ala Leu Asp Ala 535 530 540 Ser Cys Gly Asn Met Ser Tyr Val Ile Phe Thr Asp Gln Ala Ile Lys 545 550 555 Pro Arg Phe Glu Cys Lys Thr Ile Tyr Glu Met Thr Ser Glu Leu Ala 565 570 Lys Arg Leu Gly Val Glu Gln Gln Phe Thr Glu Gly Arg Thr Gln Glu 585 Gly Trp Met Arg His Leu His Glu Leu Ser Arg Lys Ala Ile Pro Asp

600 Leu Pro Asp Phe Asp Thr Phe Arg Lys Gln Gly Met Tyr Lys Gln Arg 615 620 Asp Pro Glu Gly His His Val Ala Tyr Lys Ala Phe Arg Asp Asp Pro 630 635 Gln Ala Asn Pro Leu Thr Thr Pro Ser Gly Lys Ile Glu Ile Tyr Ser 645 650 655 Glu Glu Leu Ala Lys Ile Ala Ala Thr Trp Glu Leu Pro Glu Gly Asp 660 665 Val Ile Asp Pro Leu Pro Ile Tyr Thr Pro Gly Phe Glu Asn Tyr Asn 675 680 685 Asp Pro Leu Thr Glu Lys Phe Pro Leu Gln Leu Thr Gly Phe His Tyr 690 695 700 Lys Ala Arg Val His Ser Thr Tyr Gly Asn Val Asp Val Leu Lys Ala 710 715 Ala Cys Arg Gln Glu Met Trp Ile Asn Pro Met Asp Ala Lys Ala Arg 725 730 735 Gly Ile Ser Asn Gly Asp Arg Val Arg Ile Phe Asn Gly Arg Gly Glu 740 745 750 Val His Ile Glu Ala Lys Val Thr Pro Arg Met Met Pro Gly Val Val 755 760 765 Ala Leu Gly Glu Gly Ala Trp Tyr Asn Pro Asp Ala Asn Arg Ile Asp Gln Ala Gly Cys Ile Asn Val Leu Thr Thr Gln Arg Pro Ser Pro Leu 785 790 795 800 Ala Lys Gly Asn Pro Ser His Thr Asn Leu Val Gln Val Glu Lys Ala 805 810

<210> 8469 <211> 384 <212> PRT

<213> Enterobacter cloacae

<400> 8469

Ser Met Thr Thr Tyr Thr Arg Pro Val Leu Leu Leu Cys Gly Leu 10 Leu Leu Thr Leu Ala Ile Ala Val Leu Asn Thr Leu Val Pro Leu 25 Trp Leu Ala His Glu Asn Leu Pro Thr Trp Gln Val Gly Met Val Ser 40 Ser Ser Phe Phe Thr Gly Asn Leu Leu Gly Thr Leu Leu Thr Gly Ser 55 60 Leu Ile Lys Arg Phe Gly Phe Asn Arg Ser Tyr Tyr Leu Ala Ser Leu 7.0 75 Ile Phe Ala Val Gly Cys Ala Gly Leu Gly Leu Met Val Gly Phe Trp 85 90 Ser Trp Met Val Trp Arg Phe Ile Ala Gly Val Gly Cys Ala Met Ile 100 105 110 Trp Val Val Val Glu Ser Ala Leu Met Cys Ser Gly Thr Ser Arg Asn 120 115 Arg Gly Arg Leu Leu Ala Ala Tyr Met Met Val Tyr Tyr Val Gly Thr 135 140 Val Leu Gly Gln Leu Met Val Ser Lys Leu Pro Thr Asp Leu Met Ser 150 155 160 Val Leu Pro Trp Val Thr Gly Met Val Leu Ala Ala Ile Leu Pro Leu 165 170 175 Leu Phe Thr Arg Ile Val Asn Gln Asn Ser Glu His Gln Glu Ala Thr 185 His Val Trp Pro Met Leu Arg Leu Arg Gln Ala Arg Leu Gly Val Asn

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Gly Cys Ile Ile Ser Gly Ile Val Leu Gly Ser Leu Tyr Gly Leu Met
                  215
                                  220
Pro Leu Tyr Leu Asn His Gln Gly Val Ser Asp Ser Gly Ile Gly Phe
         230
                               235
Trp Met Ala Val Met Val Ser Ala Gly Ile Val Gly Gln Trp Pro Ile
       245 250
                                    255
Gly Arg Leu Ala Asp Arg Phe Gly Arg Leu Leu Val Leu Arg Val Gln
      260 265 270
Val Phe Val Val Ile Met Gly Cys Leu Ala Met Leu Ser Asn Ala Ala
  275 280
                          285
Met Ala Pro Ala Leu Phe Ile Leu Gly Ala Ala Gly Phe Thr Leu Tyr
 290 295 300
Pro Val Ala Met Ala Trp Ala Cys Glu Lys Val Glu His His Gln Leu
305 310 315
Val Ala Met Asn Gln Ala Leu Leu Leu Ser Tyr Thr Ile Gly Ser Leu
       325 330 335
Leu Gly Pro Thr Phe Thr Ala Met Leu Met Gln Asn Tyr Ser Asp Asn
       340 345 350
Leu Leu Phe Ile Met Ile Ala Ser Val Ser Phe Ile Tyr Leu Leu Met
 355 360 365
Leu Leu Arg Lys Val Gly Glu His Pro Thr Pro Val Ala His Ala
<210> 8470
<211> 256
<212> PRT
<213> Enterobacter cloacae
<400> 8470
Arg Val Leu Ser Pro Ala Lys Ile Asn Gly Trp Ala Met Leu Ile Ser
                            10
Ser Asn Leu Leu Arg His Arg Lys Met Lys Ala Phe Asp Leu Gln
Arg Met Ala Phe Asp Lys Val Pro Pro Glu Phe Leu Gly Glu Val Ala
                     4.0
Leu Arg Ser Leu Tyr Thr Phe Val Leu Val Phe Leu Phe Leu Lys Ile
50 55
                                 60
Thr Gly Arg Arg Gly Val Arg Gln Met Ser Leu Phe Glu Val Leu Ile
             70
                   75
Ile Leu Thr Leu Gly Ser Ala Ala Gly Asp Val Ala Phe Tyr Asp Asp
                            90
          8.5
Val Pro Met Val Pro Val Phe Ile Val Phe Val Thr Leu Ala Leu Leu
        100 105 110
Tyr Arg Leu Val Met Trp Leu Met Ser Lys Ser Glu Lys Leu Glu Asp
                      120
                            125
Leu Leu Glu Gly Lys Pro Val Val Ile Val Glu Asp Gly Gln Leu Ala
                  135
                                  140
Trp Glu Asn Val Gln Ser Ala Asn Met Thr Glu Phe Glu Phe Phe Met
145 150
                               155
Glu Leu Arg Leu Ser Ser Val Glu Gln Leu Gly Gln Val Arg Leu Ala
           165
                            170
Ile Met Glu Thr Asn Gly Gln Ile Ser Val Tyr Tyr Tyr Pro Asp Asp
         180
                         185
                                         190
Glu Val Lys Pro Gly Leu Cys Ile Leu Pro Asp Met Leu Ile Glu Arg
                     200
     195
                                      205
Tyr Lys Thr Val Pro Glu Ala Gly Glu Tyr Ala Cys Ile Lys Cys Ser
                  215
                                   220
His Val Val Wat Gln Ala Gly Asp His Gln Leu Cys Pro Arg Cys
225 230
                            235
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Thr Asn Pro Glu Trp Thr Lys Val Ser Arg Ala Lys Arg Ile Thr

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<210> 8471
<211> 365
<212> PRT
<213> Enterobacter cloacae
<400> 8471
Gly Glu Met Ala Gln Val Phe Asn Phe Ser Ser Gly Pro Ala Met Leu
                 10
Pro Thr Asp Val Leu Lys Gln Ala Gln Gln Glu Leu Cys Asp Trp Asn
                        25
                                         30
Gly Leu Gly Thr Ser Val Met Glu Val Ser His Arg Gly Lys Ala Phe
   35 40
Ile Lys Val Ala Glu Glu Ala Glu Lys Asp Phe Arg Asp Leu Leu Asn
                  5.5
                          60
Ile Pro Ser Asn Tyr Lys Val Leu Phe Cys His Gly Gly Gly Arg Gly 65 70 75 80
               70
Gln Phe Ala Gly Ile Pro Leu Asn Leu Leu Gly Asp Lys Thr Thr Ala
          85 90 95
Asp Tyr Val Asp Ala Gly Tyr Trp Ala Ala Ser Ala Val Lys Glu Ala
 100 105 110
His Lys Tyr Cys Thr Pro Asn Val Ile Asp Ala Lys Val Thr Val Asp
115 120 125
Gly Leu Arg Ala Val Lys Pro Met Ser Glu Trp Gln Leu Ser Asp Asn
               135 140
130
Ala Ala Tyr Leu His Tyr Cys Pro Asn Glu Thr Ile Asp Gly Ile Ala
145 150 155 160
Ile His Glu Glu Pro Asp Phe Gly Glu Asn Val Ile Val Thr Ala Asp
          165 170 175
Leu Ser Ser Thr Ile Leu Ser Thr Pro Leu Asp Val Ser Arg Tyr Gly
        180 185 190
Val Ile Tyr Ala Gly Ala Gln Lys Asn Ile Gly Pro Ala Gly Leu Thr
195 200 205
Ile Val Ile Val Arg Glu Asp Leu Leu Gly Lys Ala His Lys Ser Cys
210 215
                                  220
Pro Ser Ile Leu Asp Tyr Thr Val Leu Asp Asp Asp Asp Ser Met Phe 225 \phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}
Asn Thr Pro Pro Thr Phe Ala Trp Tyr Leu Ser Gly Leu Val Phe Lys
            245
                          250 255
Trp Leu Lys Leu Lys Gly Gly Val Ala Gln Met Asp Lys Ile Asn Gln
         260
                         265
Gln Lys Ala Glu Leu Leu Tyr Gly Val Ile Asp Lys Ser Asp Phe Tyr
      275 280 285
Arg Asn Asp Val Ala Lys Thr Asn Arg Ser Arg Met Asn Val Pro Phe
                  295
                                  300
Gln Leu Ala Asp Ser Asn Leu Asp Asn Val Phe Leu Glu Glu Ser Phe
305
                310
                                315
Ala Ala Gly Leu His Ala Leu Lys Gly His Arg Val Val Gly Gly Met $325$ $330 $335
Arg Ala Ser Ile Tyr Asn Ala Met Pro Leu Glu Gly Val Lys Ala Leu
              345
   340
Thr Asp Phe Met Ile Asp Phe Glu Arg Arg His Gly
                      360
<210> 8472
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<211> 156

<212> PRT

<213> Enterobacter cloacae

<400> 8472

Tyr Ala Leu Arg Arg Ser Phe Val Ser Ser Val Asp Glu Asp Gln Lys Asp Gly Arg Ile Ser Thr Val Glu Leu Ser Lys Arg Val Gly Leu Ser 20 25 30 Pro Thr Pro Cys Leu Glu Arg Val Arg Arg Leu Glu Arg Gln Gly Phe 40 35 Ile Gln Gly Tyr Thr Ala Leu Leu Asn Pro His Tyr Leu Asp Ala Ser 5.0 55 60 Leu Leu Val Phe Val Glu Ile Thr Leu Asn Arg Gly Ala Pro Asp Val 7.0 75 Phe Glu Gln Phe Asn Ala Ala Val Gln Lys Leu Glu Glu Ile Gln Glu 85 90 Cys His Leu Val Ser Gly Asp Phe Asp Tyr Leu Leu Lys Thr Arg Val 100 105 Pro Asp Met Ser Ala Tyr Arg Lys Leu Leu Gly Glu Thr Leu Leu Arg 115 120 125 Leu Pro Gly Val Asn Asp Thr Arg Thr Tyr Val Val Met Glu Glu Val 130 135 Lys Gln Ser Asn Arg Leu Val Ile Lys Thr Arg 150 <210> 8473 <211> 1235 <212> PRT <213> Enterobacter cloacae <400> 8473 His Thr Gly Arg Thr Cys Leu Ile Pro Gly Glu Pro Phe Leu Ser Gln 10 Glu Tyr Thr Glu Asp Lys Glu Val Thr Leu Ser Lys Leu Ser Ser Gly 2.0 25 Arg Arg Leu Leu Glu Ala Leu Leu Ile Val Ile Ala Leu Phe Ala Val 35 40 4.5 Trp Leu Met Ala Ala Leu Leu Ser Phe Asn Pro Ser Asp Pro Ser Trp 55 Ser Gln Thr Ala Trp His Glu Pro Ile His Asn Leu Gly Gly Val Pro 7.0 7.5 Gly Ala Trp Leu Ala Asp Thr Leu Phe Phe Ile Phe Gly Val Met Ala 85 90 Tyr Thr Leu Pro Val Ile Ile Ile Gly Gly Cys Trp Phe Ala Trp Arg 105 100 His Arg Gln Asn Asp Asp Tyr Ile Asp Tyr Phe Ala Val Ser Leu Arg 120 115 Leu Ile Gly Ala Leu Ala Leu Ile Leu Thr Ser Cys Gly Leu Ala Ala 135 130 Ile Asn Ala Asp Asp Ile Trp Tyr Phe Ala Ser Gly Gly Val Ile Gly 150 160 155 Ser Leu Leu Ser Ser Ala Leu Gln Pro Met Leu His Ser Ser Gly Gly 170 165 175 Thr Leu Ala Leu Leu Cys Ile Trp Ala Ala Gly Leu Thr Leu Phe Thr 190 180 185 Gly Trp Ser Trp Val Ser Ile Ala Glu Lys Ile Gly Ser Phe Ile Leu 200 195 205 Thr Leu Leu Thr Phe Ala Ser Asn Arg Thr Arg Arg Asp Asp Thr Trp 215 Val Asp Glu Asp Glu Tyr Glu Asp Glu Tyr Glu Glu Glu Asp Glu Ala 225 230 235 Pro Val Gln Arg Arg Glu Ser Arg Arg Ala Arg Ile Leu Arg Gly Ala 245 250 255 Leu Ala Arg Arg Gln Arg Val Ala Glu Lys Phe Ala Asn Pro Leu Gly

265

Arg Lys Thr Asp Ala Ala Leu Phe Ser Gly Lys Arg Met Asp Glu Asp 280 275 Glu Gln Ile Glu Tyr Arg Gly Ala Ala Val Asp Pro Asp Asp Val Leu 295 Phe Ser Gly His Arg Ala Thr Pro Gly Glu Tyr Asp Glu Tyr Asp Pro 310 305 315 Leu Leu His Gly His Ser Val Thr Glu Pro Val Ala Ala Ala Ala Ala 325 330 Ala Thr Thr Ala Ala Gln Ala His Val Ala Pro Val Glu Ala Val Met 340 345 350 Pro Ser Ser Pro Val Pro Ala Pro Glu Ser Ala Ile Gln Gln Pro Gln 355 360 365 Val Asp Trp Gln Thr Ala Pro Gly Val His Thr Pro Glu Pro Thr Ile 375 380 Ala Pro Glu Pro Glu Ser Tyr Ile Pro Val Gln Gln Glu Gln Cys Gln 390 395 Gln Ser Tyr Gln Pro Ser Glu Pro Ala Ser Glu Pro Gln Gln Pro Tyr 405 410 415 Gln Ala Tyr Thr Pro Glu Pro Ala Val Pro Glu Gln Pro Tyr Val Ala 420 425 430 Pro Val Ser Glu Pro Glu Val Val Glu Glu Ala Lys Pro Ser Arg Pro 435 440 445 Pro Leu Tyr Tyr Phe Glu Glu Val Glu Glu Arg Arg Ala Arg Glu Arg 450 455 460 Glu Gln Leu Ala Ala Trp Tyr Gln Pro Val Pro Glu Pro Val Gln Glu 470 475 Pro Val Val Lys Ala Pro Ser Ala Ser Val Ala Pro Val Asp Pro Ala 490 495 485 Pro Ala Val Ala Ser Gly Ala Glu Thr Val Lys Gln Ala Thr Ala Ala 510 500 505 Ala Ala Ala Ser Ala Pro Leu Phe Ser Pro Ala Thr Asp Ser Ala Pro 515 520 525 Arg Pro Gln Val Lys Glu Gly Ile Gly Pro Gln Leu Pro Arg Pro Asn 530 535 540 Arg Val Arg Val Pro Thr Arg Arg Glu Leu Ala Ser Tyr Gly Ile Lys 550 555 Leu Pro Ser Gln Arg Met Ala Glu Glu Lys Ala Arg Gly Ser Asp Tyr 565 570 575 Glu Asp Asp Ala Asp Glu Leu His Gln Asp Glu Leu Ala Arg Gln Phe 580 585 Ala Ala Gln Gln Asn Gln Arg Tyr Gly Asp Glu Tyr Gln His Asp Val 595 600 Pro Ser His Gln Glu Asp Asp Asp Ala Ala Glu Ala Glu Leu Ala Arg 610 615 620 Gin Phe Ala Ala Thr Gin Gin Gin Arg Tyr Ser Gly Glu Gin Pro Ser 630 635 Gly Ala Asn Pro Phe Ser Leu Ser Asp Phe Glu Phe Ser Pro Met Lys 645 650 Asp Leu Val Asp Asp Gly Pro Ser Glu Pro Leu Phe Thr Pro Ser Val 665 660 670 Met Pro Glu Ala Glu Pro Val Arg Gln Ser Pro Pro Pro Gln Val Tyr 680 675 685 Ala Gln Pro Gln Gln Pro Ala Pro Gln Ala Tyr Ala Gln Pro Gln Thr 695 Pro Ala Gln Pro Pro Gln Pro Gln Phe Gln Gln Pro Ala Pro Gln Pro 715 710 Gln Glu Ser Leu Ile His Pro Leu Leu Met Arg Asn Gly Asp Ser Arg 730 Pro Leu Gln Arg Pro Ser Thr Pro Leu Pro Ser Leu Asp Leu Leu Thr 740 745 Pro Pro Pro Ala Glu Val Glu Pro Val Asp Thr Phe Ala Leu Glu Gln

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760
Met Ala Arg Leu Val Glu Ala Arg Leu Ala Asp Phe Arg Ile Lys Ala
                              780
                775
Asp Val Val Asn Tyr Ser Pro Gly Pro Val Ile Thr Arg Phe Glu Leu
      790
                      795
Asn Leu Ala Pro Gly Val Lys Ala Ala Arg Ile Ser Asn Leu Ser Arg
        805 810
Asp Leu Ala Arg Ser Leu Ser Thr Val Ala Val Arg Val Val Glu Val
     820 825 830
Ile Pro Gly Lys Pro Tyr Val Gly Leu Glu Leu Pro Asn Lys Lys Arg
 835 840 845
Gln Thr Val Tyr Leu Arg Glu Val Leu Asp Asn Thr Lys Phe Arg Asp
 850 855 860
Asn Pro Ser Pro Leu Thr Val Val Leu Gly Lys Asp Ile Ala Gly Asp
865 870 875 880
Pro Val Val Ala Asp Leu Ala Lys Met Pro His Leu Leu Val Ala Gly
      885 890 895
Thr Thr Gly Ser Gly Lys Ser Val Gly Val Asn Ala Met Ile Leu Ser
           905 910
Met Leu Tyr Lys Ala Gln Pro Glu Asp Val Arg Phe Ile Met Ile Asp
915 920 925
Pro Lys Met Leu Glu Leu Ser Val Tyr Glu Gly Ile Pro His Leu Leu
930 935 940
Thr Glu Val Val Thr Asp Met Lys Asp Ala Ala Asn Ala Leu Arg Trp
945 950 955 960
Ser Val Asn Glu Met Glu Arg Arg Tyr Lys Leu Met Ser Ala Leu Gly
          965 970
Val Arg Asn Leu Ala Gly Tyr Asn Glu Lys Ile Ala Glu Ala Ala Arg
 980 985
Met Gly Arg Pro Ile Pro Asp Pro Tyr Trp Lys Pro Gly Asp Ser Met
995 1000 1005
Asp Ala Gln His Pro Val Leu Glu Lys Leu Pro Tyr Ile Val Val Leu
1010 1015 1020
Val Asp Glu Phe Ala Asp Leu Met Met Thr Val Gly Lys Lys Val Glu
1025 1030 1035 1040
Glu Leu Ile Ala Arg Leu Ala Gln Lys Ala Arg Ala Ala Gly Ile His
          1045 1050 1055
Leu Val Leu Ala Thr Gln Arg Pro Ser Val Asp Val Ile Thr Gly Leu
       1060 1065 1070
Ile Lys Ala Asn Ile Pro Thr Arg Ile Ala Phe Thr Val Ser Ser Lys
1075 1080 1085
Ile Asp Ser Arg Thr Ile Leu Asp Gln Gly Gly Ala Glu Ser Leu Leu
 1090 1095 1100
Gly Met Gly Asp Met Leu Tyr Ser Gly Pro Asn Ser Thr Ser Pro Val
1105 1110 1115 1120
Arg Val His Gly Ala Phe Val Arg Asp Gln Glu Val His Ala Val Val
          1125 1130 1135
Gln Asp Trp Lys Ala Arg Gly Arg Pro Gln Tyr Val Asp Gly Ile Thr
       1140 1145 1150
Ser Asp Ser Glu Ser Glu Gly Gly Gly Gly Phe Asp Gly Glu
    1155 1160
                                 1165
Glu Leu Asp Pro Leu Phe Asp Gin Ala Val Asn Phe Val Thr Glu Lys
 1170 1175 1180
Arg Lys Ala Ser Ile Ser Gly Val Gln Arg Gln Phe Arg Ile Gly Tyr
   1190 1195 1200
1185
Asn Arg Ala Ala Arg Ile Ile Glu Gln Met Glu Ala Gln Gly Ile Val
          1205 1210
Ser Glu Gln Gly His Asn Gly Asn Arg Glu Val Leu Ala Pro Pro Pro
        1220 1225
Phe Asp
```

145 Pro Thr Arg Ser

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<210> 8474
<211> 207
<212> PRT
<213> Enterobacter cloacae
<400> 8474
Pro Met Thr Thr Gln Tyr Gly Phe Phe Ile Asp Ser Ser Arg Cys Thr
                               10
Gly Cys Lys Thr Cys Glu Leu Ala Cys Lys Asp Tyr Lys Asp Leu Thr
        20
                           25
Pro Glu Val Ser Phe Arg Arg Ile Tyr Glu Tyr Ala Gly Gly Asp Trp
      3.5
                     4.0
                                         4.5
Gln Glu Asp Asn Gly Val Trp His Gln Asn Val Phe Ala Tyr Tyr Leu
                  55
                                     60
Ser Ile Ala Cys Asn His Cys Glu Asp Pro Ala Cys Thr Lys Val Cys
                      75
              7.0
Pro Ser Gly Ala Met His Lys Arg Asp Asp Gly Phe Val Val Val Asp
                              90
            85
Glu Asp Val Cys Ile Gly Cys Arg Tyr Cys His Met Ala Cys Pro Tyr
         100
              105
Gly Ala Pro Gln Tyr Asn Ala Ala Lys Gly His Met Thr Lys Cys Asp
     115 120 125
Gly Cys His Ser Arg Val Ala Asp Gly Lys Lys Pro Ile Cys Val Glu
 130 135 140
Ser Cys Pro Leu Arg Ala Leu Asp Phe Gly Pro Ile Glu Glu Leu Arg
145 150 160
Lys Lys His Gly Gln Leu Ala Ala Val Ala Pro Leu Pro Ser Ala His
            165 170 175
Phe Thr Lys Pro Ser Ile Val Ile Lys Pro Asn Ala Asn Ser Arg Pro
         180 185 190
Thr Gly Asp Thr Thr Gly Tyr Leu Ala Asn Pro Lys Glu Val
                        200
<210> 8475
<211> 165
<212> PRT
<213> Enterobacter cloacae
<400> 8475
Cys Gly Ile Ser Leu Arg Phe Leu Thr Leu Ile Leu Phe His Phe Phe
                              10
Tyr Thr Leu Leu Gln Ser Phe Arg Asn Leu His Ala Lys Val Thr Val
                           25
Ala His Val Gly Ala Tyr Asn Ala Arg Arg Ser Cys Lys Arg Tyr Ala
      35
                     4.0
                                         4.5
Leu Ile Lys Glu Lys Lys Met Thr Ala Ile Ala Pro Val Ile Thr Ile
                    55
Asp Gly Pro Ser Gly Ala Gly Lys Gly Thr Leu Cys Lys Ala Met Ala
                70
                                   75
Glu Ala Leu Gln Trp His Leu Leu Asp Ser Gly Ala Ile Tyr Arg Val
             85
                               90
Leu Ala Leu Ala Ala Leu His His His Val Asp Val Ala Ser Glu Glu
          100
                           105
                                             110
Ala Leu Val Pro Leu Ala Ala His Leu Asp Val Arg Phe Val Ser Thr
      115
                        120
Asp Gly Asn Leu Glu Val Ile Leu Glu Gly Glu Asp Val Ser Gly Glu
  130
                    135 140
Ile Arg Thr Gln Glu Val Ala Asn Ala Ala Ser Gln Val Ala Ala Phe
                150
                                  155
                                                    160
```

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<210> 8476
<211> 109
<212> PRT
<213> Enterobacter cloacae
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<400> 8476 Ala Val Gln Leu Met Gly Leu Lys Gly Thr Gly Gly Ile Met Thr Lys 10 Ser Glu Leu Ile Glu Arg Leu Ala Ser Gln Gln Pro His Ile Pro Ala 20 25 30 Lys Ala Val Glu Asp Ala Val Lys Glu Met Leu Glu His Met Ala Thr 3.5 40 4.5 Thr Leu Ala Gln Gly Glu Arg Ile Glu Ile Arg Gly Phe Gly Ser Phe 55 60 Ser Leu His Tyr Arg Ala Pro Arg Thr Gly Arg Asn Pro Lys Thr Gly 7.0 7.5 Asp Lys Val Glu Leu Glu Gly Lys Tyr Val Pro His Phe Lys Pro Gly 8.5 90 Lys Glu Leu Arg Asp Arg Ala Asn Ile Tyr Gly Asn

100

<210> 8477
<211> 331
<212> PRT
<213> Enterobacter cloacae

<400> 8477 Asn Ala Val Arg Ser Met Ile Ala Arg Ile Trp Ser Gly Glu Ser Pro 10 Leu Trp Val Leu Leu Leu Pro Leu Ser Trp Leu Tyr Gly Leu Val Ser 2.5 Gly Ala Ile Arg Leu Leu Tyr Arg Leu Gly Ile Lys Arg Ala Trp Arg 35 4.0 Ala Pro Val Pro Val Val Val Gly Asn Leu Thr Ala Gly Gly Asn 55 Gly Lys Thr Pro Val Val Ile Trp Leu Val Glu Gln Leu Gln Arg Arg 65 7.0 7.5 Gly Ile Arg Pro Gly Val Val Ser Arg Gly Tyr Gly Gly Lys Ala Ala 85 90 Gln Tyr Pro Leu Val Leu Ser Pro Ala Thr Thr Thr Ala Glu Ala Gly 105 100 110 Asp Glu Pro Val Leu Ile Tyr Gln Arg Thr Gly Ala Pro Val Ala Val 125 115 Ser Pro Val Arg Ser Asp Ala Val Lys Ala Leu Leu Ala Glu His Asn 135 130 140 Val Gln Ile Ile Ile Thr Asp Asp Gly Leu Gln His Tyr Ala Leu Ala 150 155 Arg Asp Lys Glu Ile Val Val Ile Asp Gly Val Arg Arg Phe Gly Asn 170 165 Gly Trp Trp Leu Pro Ala Gly Pro Met Arg Glu Arg Ala Ser Arg Leu 190 180 185 Lys Thr Val Asp Ala Val Ile Val Asn Gly Gly Glu Ala Arg Ala Val 195 200 205 Glu Ile Pro Met Leu Leu Arg Pro Gly Gln Ala Val Asn Met Leu Thr 215 Gly Glu Arg Lys Asp Val Ala Gln Leu Glu His Leu Val Ala Met Ala 225 230 235 Gly Ile Gly His Pro Pro Arg Phe Phe Ala Thr Leu Glu Gln Cys Gly 245 250

```
Ala Arg Leu Glu Lys Arg Val Pro Leu Ala Asp His Gln Ala Leu Val
         260
                       265
Ala Glu Glu Val Glu Arg Leu Ala Ala Pro Gly Gln Thr Leu Ile Met
                      280
                                       285
Thr Glu Lys Asp Ala Val Lys Cys Arg Ala Phe Ala Lys Glu Asn Trp
                  295
                                   300
Trp Tyr Leu Pro Val Asp Ala Glu Leu Ser Gly Glu Gln Pro Glu His
                    315
305 310
Leu Leu Lys Glu Leu Leu Ala Leu Val Gln
   325
<210> 8478
<211> 260
<212> PRT
<213> Enterobacter cloacae
<400> 8478
Ser Pro Phe Thr Gly Gly Arg Arg Asp Gln Thr Met Ser Phe Val Val
1 5
                           10
Ile Ile Pro Ala Arg Tyr Ala Ser Thr Arg Leu Pro Gly Lys Pro Leu
       2.0
                 25
                                          3.0
Val Asp Ile Asn Gly Lys Pro Met Ile Val His Val Leu Glu Arg Ala
                40
                             4.5
Arg Glu Ser Gly Ala Gly Arg Val Ile Val Ala Thr Asp His Pro Asp
                 55
Val Ala Arg Ala Val Glu Ala Ala Gly Gly Glu Val Cys Met Thr Arg
             7.0
                              75
Ala Asp His Gln Ser Gly Thr Glu Arg Leu Ala Glu Val Val Glu Lys
            85
                             90
Cys Gly Phe Ser Asp Glu Thr Val Ile Val Asn Val Gin Gly Asp Glu
        100 105 110
Pro Met Ile Pro Ala Ala Ile Ile Arg Gln Val Ala Asp Asn Leu Ala
 115 120 125
Arg Arg Gln Val Gly Met Ala Thr Leu Ala Val Pro Ile His His Ala
 130 135
                                   140
Glu Glu Ala Phe Asn Pro Asn Ala Val Lys Val Val Met Asp Ala Glu
145 150 155
Gly Tyr Ala Leu Tyr Phe Ser Arg Ala Thr Ile Pro Trp Asp Arg Asp
            165 170 175
Arg Phe Ala Gln Ser Lys Glu Thr Ile Gly Glu Thr Phe Leu Arg His
        180 185 190
Ile Gly Ile Tyr Gly Tyr Arg Ala Gly Phe Ile Arg Arg Tyr Val Ala
      195 200 205
Trp Ala Pro Ser Pro Leu Glu His Ile Glu Met Leu Glu Gln Leu Arg
                  215
                                   220
Val Leu Trp Tyr Gly Glu Lys Ile His Val Ala Val Ala Gln Glu Ile
                    235 240
                230
Pro Gly Thr Gly Val Asp Thr Pro Glu Asp Leu Glu Arg Val Arg Val
             245
                            250
Glu Met Arg
         260
<210> 8479
<211> 208
<212> PRT
<213> Enterobacter cloacae
<400> 8479
Gly Ile Thr Met Lys Lys Ile Ala Ile Ala Cys Ala Leu Leu Ser Ser
Phe Val Ala Ser Ser Val Trp Ala Asp Ala Ala Ser Asp Leu Lys Ser
```

Arg Leu Asp Lys Val Ser Ser Phe His Ala Ser Phe Thr Gln Lys Val 40 Thr Asp Gly Ser Gly Asn Ala Val Gln Glu Gly Gln Gly Asp Leu Trp 5.5 Val Lys Arg Pro Asn Leu Phe Asn Trp His Met Thr Gln Pro Asp Glu 70 75 Ser Val Leu Val Ser Asp Gly Lys Thr Leu Trp Phe Tyr Asn Pro Phe 90 8.5 Val Glu Gln Ala Thr Ala Thr Trp Leu Lys Asp Ala Thr Ser Asn Thr 100 105 110 Pro Phe Met Leu Ile Ala Arg Asn Gln Ser Ser Asp Trp Gln Gln Tyr 115 120 125 Asn Ile Lys Gln Asn Gly Asp Glu Phe Val Leu Thr Pro Lys Gly Ser 130 135 140 Asn Gly Asn Leu Lys Gln Phe Thr Ile Asn Val Ser Ser Asn Gly Thr 145 150 155 Ile Asn Gln Phe Gly Ala Val Glu Gln Asp Asp Gln Arg Ser Ser Tyr 165 170 175 Gin Leu Lys Ser Gin Gin Asn Gly Ala Val Asp Ala Ser Lys Phe Thr 180 185 190 Phe Thr Pro Pro Gln Gly Val Thr Val Asp Asp Gln Arg Asn Lys <210> 8480 <211> 394 <212> PRT <213> Enterobacter cloacae <400> 8480 Val Ser Asn Leu Ser Leu Asp Phe Ser Asp Asn Ala Phe Gln Pro Leu 10 1.5 Ala Ala Arg Met Arg Pro Glu Asn Leu Ala Gln Tyr Ile Gly Gln Gln 25 His Leu Leu Ala Ala Gly Lys Pro Leu Pro Arg Ala Ile Glu Ala Gly 40 His Leu His Ser Met Ile Leu Trp Gly Pro Pro Gly Thr Gly Lys Thr 5.5 60 Thr Leu Ala Glu Val Ile Ala Arg Tyr Ala Asn Ala Asp Val Glu Arg 70 7.5 Ile Ser Ala Val Thr Ser Gly Val Lys Glu Ile Arg Glu Ala Ile Glu 85 90 Arg Ala Arg Gln Asn Arg Asn Ala Gly Arg Arg Thr Ile Leu Phe Val 100 105 110 Asp Glu Val His Arg Phe Asn Lys Ser Gln Gln Asp Ala Phe Leu Pro 115 120 125 His Ile Glu Asp Gly Thr Ile Phe Phe Ile Gly Ala Thr Thr Glu Asn 135 140 Pro Ser Phe Glu Leu Asn Ser Ala Leu Leu Ser Arg Ala Arg Val Tyr 145 150 155 Leu Leu Lys Ser Leu Thr Thr Glu Asp Ile Glu Lys Val Leu Thr Gln 165 170 175 Ala Met Glu Asp Lys Ala Arg Gly Tyr Gly Gly Gln Asp Ile Val Leu 180 185 190 Pro Asp Glu Thr Arg Arg Ala Ile Ala Glu Leu Val Asn Gly Asp Ala 195 200 205 Arg Arg Ala Met Asn Thr Leu Glu Met Met Ala Asp Met Ala Glu Val 210 215 220 Asp Asp Ala Gly Lys Arg Val Leu Lys Gln Glu Leu Leu Thr Glu Ile 235

230

Ala Gly Glu Arg Ser Ala Arg Phe Asp Asn Lys Gly Asp Arg Phe Tyr

```
250
Asp Leu Ile Ser Ala Leu His Lys Ser Val Arg Gly Ser Ala Pro Asp
                       265
                                         270
        260
Ala Ala Leu Tyr Trp Tyr Ala Arg Ile Ile Thr Ala Gly Gly Asp Pro
                   280
     275
Leu Tyr Val Ala Arg Arg Cys Leu Ala Ile Ala Ser Glu Asp Val Gly
                                  300
                  295
Asn Ala Asp Pro Arg Ala Met Gln Val Ala Leu Ser Ala Trp Asp Cys
          310
                               315
Phe Thr Arg Val Gly Pro Ala Glu Gly Glu Arg Ala Ile Ala Gln Ala
          325 330
Ile Val Tyr Leu Ala Cys Ala Pro Lys Ser Asn Ala Val Tyr Thr Ala
        340 345 350
Phe Lys Ala Ala Met Ser Asp Ala Arg Glu Arg Pro Asp Tyr Asp Val
    355 360 365
Pro Val His Leu Arg Asn Ala Pro Tyr Lys Ala Asp Glu Arg Asp Gly
370 375
Leu Arg Ala Gly Val Ser Leu Arg Pro
<210> 8481
<211> 438
<212> PRT
<213> Enterobacter cloacae
<400> 8481
Phe Asp Lys His Arg Ile Ser Met Leu Asp Pro Asn Leu Leu Arg Asn
                      10
Glu Pro Asp Ala Val Ala Glu Lys Leu Ala Arg Arg Gly Phe Lys Leu
                25
Asp Val Asp Lys Leu Arg Ala Leu Glu Glu Arg Arg Lys Val Leu Gln
          40
Val Gln Thr Glu Asn Leu Gln Ala Glu Arg Asn Ser Arg Ser Lys Ser
50 55
                                  60
Ile Gly Gln Ala Lys Ala Arg Gly Glu Asp Ile Glu Pro Leu Arg Leu
               70
                       75
Glu Val Asn Lys Leu Gly Glu Glu Leu Asp Gln Ala Lys Ala Glu Leu
                   90
            8.5
Asp Val Leu Gln Ala Glu Ile Arg Asp Ile Ala Leu Ala Ile Pro Asn
         100
                         105
                                        110
Ile Pro Asp Asp Ser Val Pro Val Gly Lys Asp Glu Asn Asp Asn Val
      115
                     120 125
Glu Val Lys Arg Trp Gly Thr Pro Arg Glu Phe Asp Phe Glu Val Arg
                 135 140
Asp His Val Thr Leu Gly Glu Met His Ala Gly Leu Asp Phe Ala Ala
      150 155 160
Ala Val Lys Leu Thr Gly Ser Arg Phe Val Val Met Lys Gly Gln Ile
            165 170 175
Ala His Leu His Arg Ala Leu Ala Gln Phe Met Leu Asp Leu His Thr
                        185 190
         180
Glu Gln His Gly Tyr Ser Glu Thr Tyr Val Pro Tyr Leu Val Asn His
      195
                      200
                                    205
Asp Thr Leu Tyr Gly Thr Gly Gln Leu Pro Lys Phe Ala Gly Asp Leu
                  215
                                  220
Phe His Thr Arg Pro Leu Asp Glu Glu Ala Asp Ser Ser Asn Tyr Ala
               230
                             235
Leu Ile Pro Thr Ala Glu Val Pro Leu Thr Asn Leu Val Arg Asp Glu
            245 250
Ile Ile Asp Glu Asp Asp Leu Pro Ile Lys Leu Thr Ala His Ser Pro
                265
         260
Cys Phe Arg Ser Glu Ala Gly Ser Tyr Gly Arg Asp Thr Arg Gly Leu
```

```
Ile Arg Met His Gln Phe Asp Lys Val Glu Met Val Gln Ile Val Arg
            295
                                  300
Pro Glu Glu Ser Met Asp Ala Leu Glu Glu Met Thr Gly His Ala Glu
            310
                               315
Lys Val Leu Glu Leu Leu Gly Leu Pro Tyr Arg Arg Met Ala Leu Cys
           325 330
Thr Gly Asp Met Gly Phe Gly Ala Cys Lys Thr Phe Asp Leu Glu Val
        340 345 350
Trp Val Pro Ala Gln Asn Thr Tyr Arg Glu Ile Ser Ser Cys Ser Asn
     355 360 365
Val Trp Asp Phe Gln Ala Arg Arg Met Gln Ala Arg Cys Arg Ser Lys
 370 375 380
Ser Asp Lys Lys Thr Arg Leu Val His Thr Leu Asn Gly Ser Gly Leu
      390 395
Ala Val Gly Arg Thr Leu Val Ala Val Leu Glu Asn Tyr Gln Gln Ala
           405 410 415
Asp Gly Arg Ile Glu Ile Pro Glu Val Leu Arg Pro Tyr Met Lys Gly
         420 425
Gln Gln Phe Ile Glv
      435
<210> 8482
<211> 312
<212> PRT
<213> Enterobacter cloacae
<400> 8482
Leu Asn Leu Thr Pro Thr Ala Val Arg Arg Gly Thr Pro Pro Ala Thr
                          10
Trp Gln Thr Arg Arg Arg Cys Glu Met Gly Ser Gly Trp His Glu Trp
                      2.5
Pro Leu Met Ile Phe Thr Val Phe Gly Gln Cys Val Ala Gly Gly Phe
                     40
Ile Val Leu Ala Leu Ala Leu Leu Lys Gly Asn Leu Asn Thr Glu Gln
                 5.5
Gln Gln Arg Leu Val Leu Ser Met Phe Gly Leu Trp Val Leu Met Gly
            70
                              7.5
Ile Gly Phe Ile Ala Ser Thr Leu His Leu Gly Ser Pro Met Arg Ala
                            90
Phe Asn Ser Leu Asn Arg Val Gly Ala Ser Ser Leu Ser Asn Glu Ile
        100 105
Ala Ser Gly Ala Ile Phe Phe Ala Val Gly Gly Leu Gly Trp Leu Leu
    115 120
Ala Ala Val Lys Lys Leu Pro Ser Gly Leu Arg Ala Leu Trp Leu Ile
  130
                135 140
Val Thr Met Val Leu Gly Val Val Phe Val Trp Met Met Val Arg Val
             150 155
Tyr Asn Thr Ile Asp Thr Val Thr Thr Trp Tyr Ser Val Trp Thr Pro
            165
                            170 175
Met Ser Phe Phe Leu Thr Met Phe Ile Gly Gly Pro Leu Leu Gly Tyr
        180
                        185
Leu Leu Leu Arg Val Ala Gly Ile Asn Gly Trp Ala Met Arg Leu Leu
                     200
                                     205
     195
Pro Ala Val Ser Leu Leu Ala Leu Val Ile Ser Thr Val Val Ala Leu
 210
                  215
                                  220
Met Gln Gly Ala Glu Leu Ala Thr Ile His Ser Ser Ile Gln Gln Ala
               230
                              235
```

Ser Ala Leu Val Pro Asp Tyr Gly Ser Leu Met Ala Trp Arg Val Val

Leu Leu Thr Ala Ala Leu Val Cys Trp Ile Ala Pro Gln Leu Lys Gly

250

```
265
Tyr Ser Pro Ala Leu Pro Leu Leu Ser Leu Ala Phe Val Leu Val Leu
                               285
                 280
      275
Ala Gly Glu Leu Ile Gly Arg Gly Val Phe Tyr Gly Leu His Met Thr
 290
              295
                                    300
Val Gly Leu Ala Ile Ala Ser
<210> 8483
<211> 432
<212> PRT
<213> Enterobacter cloacae
<400> 8483
Glu Leu Ser Phe Met Glu Ser Leu Thr Leu Gln Pro Ile Ala Arg Val
         5
                       10
Asp Gly Thr Ile Asn Leu Pro Gly Ser Lys Ser Val Ser Asn Arg Ala
                         25
Leu Leu Leu Ala Ala Leu Ala Asn Gly Thr Thr Val Leu Thr Asn Leu
            40
                              4.5
Leu Asp Ser Asp Asp Val Arg His Met Leu Asn Ala Leu Lys Ala Leu
          55
                        60
Gly Val Gln Tyr Ala Leu Ser Asp Asp Arg Thr Arg Cys Glu Val Thr
                70
                                7.5
Gly Asn Gly Gly Ala Leu His Ser Ala Glu Ala Leu Glu Leu Phe Leu
            85
                 90
Gly Asn Ala Gly Thr Ala Met Arg Pro Leu Ala Ala Ala Leu Cys Leu
         100
                          105 110
Gly Ser Asn Asp Ile Val Leu Thr Gly Glu Pro Arg Met Lys Glu Arg
                    120
    115
Pro Ile Gly His Leu Val Asp Ala Leu Arg Gln Gly Gly Ala Gln Ile
                   135
                                    140
Asp Tyr Leu Glu Gln Glu Asn Tyr Pro Pro Leu Arg Leu Arg Gly Gly 145 150 155 160
Phe Thr Gly Gly Asn Val Glu Val Asp Gly Ser Val Ser Ser Gln Phe 165 170 175
Leu Thr Ala Leu Leu Met Thr Ala Pro Leu Ala Pro Gln Asp Thr Val
         180 185
Ile Ser Ile Lys Gly Asp Leu Val Ser Lys Pro Tyr Ile Asp Ile Thr
      195 200
                                      205
Leu His Leu Met Asn Thr Phe Gly Val Glu Val Glu Asn Gln Ser Tyr
                   215
   210
                                    220
Gln Arg Phe Val Val Arg Gly Ala Gln Gln Tyr Gln Ser Pro Gly His
                230
                                 235
Tyr Leu Val Glu Gly Asp Ala Ser Ser Ala Ser Tyr Phe Leu Ala Ala
             245
                             250 255
Gly Ala Ile Lys Gly Gly Thr Val Lys Val Thr Gly Ile Gly Arg Asn
          260
                          265
                                           270
Ser Val Gln Gly Asp Ile Arg Phe Ala Asp Val Leu Glu Lys Met Gly
                       280
                                        285
Ala Val Val Thr Trp Gly Asp Asp Phe Ile Ser Cys Thr His Gly Glu
   290
                   295
                                    300
Leu Asn Ala Ile Asp Met Asp Met Asn His Ile Pro Asp Ala Ala Met
                                315
                310
Thr Ile Ala Thr Ala Ala Leu Phe Ala Lys Gly Thr Thr Thr Leu Arg
             325
                             330
Asn Ile Tyr Asn Trp Arg Val Lys Glu Thr Asp Arg Leu Phe Ala Met
                          345
          340
                                           350
Ala Thr Glu Leu Arg Lys Val Gly Ala Glu Val Glu Glu Gly Glu Asp
                       360
                                       365
Tyr Ile Arg Val Thr Pro Pro Ala Lys Leu Gln Phe Ala Glu Ile Gly
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375 Thr Tyr Asn Asp His Arg Met Ala Met Cys Phe Ser Leu Val Ala Leu 390 395 Ser Asp Thr Pro Val Thr Ile Leu Asp Pro Lys Cys Thr Ala Lys Thr 410 405 Phe Pro Asp Tyr Phe Glu Gln Leu Thr Arg Ile Ser Thr Leu Ala 425 420 <210> 8484 <211> 148 <212> PRT <213> Enterobacter cloacae <400> 8484 Ser Trp Lys Gly Lys Met Ser Ala Val Lys Ser Val Pro Arg Lys Trp 10 Pro Met Arg Pro Leu Arg Trp Arg Leu Ser Pro Arg Val Arg Glu Ala 20 25 Leu Leu Arg Arg Gln Arg Gly Phe Arg Glu Ala Pro Gly Leu Ile Ala 35 4.0 Asp Gly Arg Asp Met Gly Thr Val Val Phe Pro Asp Ala Pro Val Lys 50 55 60 Ile Phe Leu Asp Ala Ser Ser Glu Glu Arg Ala His Arg Arg Met Leu 70 75 Gln Leu Gln Glu Lys Gly Phe Ser Val Asn Phe Asp Arg Leu Leu Ser 85 90 Glu Ile Lys Glu Arg Asp Asp Arg Asp Arg Asn Arg Ala Val Ala Pro 105 110 Leu Val Pro Ala Gln Asp Ala Leu Val Leu Asp Ser Thr Ser Leu Thr 115 120 125 Ile Glu Gln Val Ile Glu Lys Ala Leu Gln Tyr Ala Arg Gln Lys Leu 135 Ala Leu Ala <210> 8485 <211> 561 <212> PRT <213> Enterobacter cloacae <400> 8485 Arg Leu Asn Met Thr Glu Ser Phe Ala Gln Leu Phe Glu Glu Ser Leu 10 Lys Glu Ile Glu Thr Arg Pro Gly Ser Ile Val Arg Gly Val Val Val Ala Ile Asp Lys Asp Val Val Leu Val Asp Ala Gly Leu Lys Ser Glu 40 Ser Ala Ile Pro Ala Glu Gln Phe Lys Asn Ala Gln Gly Glu Leu Glu 55 Ile Gln Val Gly Asp Glu Val Asp Val Ala Leu Asp Ala Val Glu Asp 70 75 Gly Phe Gly Glu Thr Leu Leu Ser Arg Glu Lys Ala Lys Arg His Glu 8.5 Ala Trp Ile Thr Leu Glu Lys Ala Tyr Glu Glu Ala Glu Thr Val Val 100 105 Gly Val Ile Asn Gly Lys Val Lys Gly Gly Phe Thr Val Glu Leu Asn 125 120 115 Gly Ile Arg Ala Phe Leu Pro Gly Ser Leu Val Asp Val Arg Pro Val 135 140 Arg Asp Thr Leu His Leu Glu Gly Lys Glu Leu Glu Phe Lys Val Ile

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Lys Leu Asp Gln Lys Arg Asn Asn Val Val Val Ser Arg Arg Ala Val
                          170
           165
Ile Glu Ser Glu Asn Ser Ala Glu Arg Asp Gln Leu Leu Glu Asn Leu
        180
                       185
                                     190
Gln Glu Gly Met Glu Val Lys Gly Ile Val Lys Asn Leu Thr Asp Tyr
     195
                    200
Gly Ala Phe Val Asp Leu Gly Gly Val Asp Gly Leu Leu His Ile Thr
                                220
 210
                 215
Asp Met Ala Trp Lys Arg Val Lys His Pro Ser Glu Ile Val Asn Val
225 230 235 240
Gly Asp Glu Ile Thr Val Lys Val Leu Lys Phe Asp Arg Glu Arg Thr
         245 250 255
Arg Val Ser Leu Gly Leu Lys Gln Leu Gly Glu Asp Pro Trp Val Ala
        260 265 270
Ile Ala Lys Arg Tyr Pro Glu Gly Thr Lys Leu Thr Gly Arg Val Thr
      275 280
                         285
Asn Leu Thr Asp Tyr Gly Cys Phe Val Glu Ile Glu Glu Gly Val Glu
 290 295 300
Gly Leu Val His Val Ser Glu Met Asp Trp Thr Asn Lys Asn Ile His
305 310
                             315 320
Pro Ser Lys Val Val Asn Val Gly Asp Val Val Glu Val Met Val Leu 325 330 335
Asp Ile Asp Glu Glu Arg Arg Ile Ser Leu Gly Leu Lys Gln Cys
       340 345 350
Lys Asn Asn Pro Trp Gln Gln Phe Ala Glu Thr His Asn Lys Gly Asp
                    360 365
Arg Val Glu Gly Lys Ile Lys Ser Ile Thr Asp Phe Gly Ile Phe Ile 370 375 380
Gly Leu Asp Gly Gly Ile Asp Gly Leu Val His Leu Ser Asp Ile Ser
             390
                             395 400
Trp Asn Val Ala Gly Glu Glu Ala Val Arg Glu Tyr Lys Lys Gly Asp
           405
                          410 415
Glu Ile Ala Ala Val Val Leu Gln Val Asp Ala Glu Arg Glu Arg Ile
        420 425 430
Ser Leu Gly Val Lys Gln Leu Ala Glu Asp Pro Phe Asn Asn Trp Val
                    440 445
 435
Ala Leu Asn Lys Lys Gly Ala Ile Val Asn Gly Lys Val Thr Ala Val
 450 455 460
Asp Ala Lys Gly Ala Thr Val Glu Leu Ala Asp Gly Val Glu Gly Tyr
              470
                             475
465
Leu Arg Ala Ser Glu Ala Ser Arg Asp Arg Val Glu Asp Ala Thr Leu
           485 490 495
Val Leu Ser Val Gly Asp Asp Val Glu Ala Lys Phe Thr Gly Val Asp
        500 505 510
Arg Lys Asn Arg Ala Ile Ser Leu Ser Val Arg Ala Lys Asp Glu Ala
      515
                    520 525
Asp Glu Lys Asp Ala Ile Ala Thr Val Asn Lys Gln Glu Asp Ala Asn
 530
               535 540
Phe Ser Asn Asn Ala Met Ala Glu Ala Phe Lys Ala Ala Lys Gly Glu
```

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<210> 8486
<211> 760
<212> PRT
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550

<400> 8486

<213> Enterobacter cloacae

Asn Met Glu Val Lys Met Gly Ile His Val Ile Ser Met Cys Ala Ile

Leu Ala Ile Ile Pro Leu Tyr Trp Leu Pro Val Leu Pro Asp Leu His 20 25 Ile Val Trp Leu Leu Ile Ala Ala Gly Ile Ala Leu Ser Val Gln Gln 40 Arg Lys Trp Leu Arg Phe Ser Gly Leu Ala Leu Leu Phe Met Cys Trp 55 Gly Ile Leu Ala Ala Gln Glu Ser Val Trp Pro Met Asn His Leu Thr 70 75 Lys Val Pro Gln Gln Ala Glu Val Val Ile Thr Ala Thr Asp Gly Ala 90 85 Thr Met His Gln Gly Arg Ile Val Ser Leu Asn Gly Glu Arg Val Trp 100 105 Ala Ala Met Gly Val Ala Leu Tyr Gly Asn Tyr Leu Pro Gln Asn Val 115 120 125 Cys Val Gly Gln Arg Trp Ala Met Thr Leu Arg Leu Arg Ala Val His 130 135 140 Gly Glu Leu Asn Asp Gly Gly Tyr Asp Ser Gln Lys Asn Ala Phe Val 145 150 155 Arg His Gln Thr Leu Ser Gly Arg Phe Thr His Ala Ala Leu Val Asp 165 170 175 Glu Gly Cys Ser Leu Arg Ala Gln Tyr Leu Thr Ser Leu Gln Ser Thr 180 185 190 Leu Ser Ala Tyr Gln Trp Gly Pro Val Ile Leu Gly Leu Gly Met Gly 195 200 205 Glu Arg Leu Ser Val Ser Arg Glu Ile Lys Asn Leu Met Arg Glu Thr 210 215 220 Gly Thr Met His Leu Met Ala Ile Ser Gly Leu His Ile Ala Leu Ala 225 230 235 240 Ala Ser Val Ile Trp Phe Leu Ala Arg Gly Ile Gln Phe Phe Leu Pro 245 250 255 Gly Arg Trp Ile Ile Trp Gln Ile Pro Leu Leu Ala Gly Leu Ile Phe 260 265 270 Ala Ala Phe Tyr Ala Trp Leu Thr Gly Leu Gln Pro Pro Ala Leu Arg 275 280 285 Thr Val Ile Ala Leu Val Val Leu Ala Val Leu Lys Met Ser Gly Arg 290 295 300 Gln Trp Ser Pro Trp Gln Val Trp Leu Thr Cys Val Ala Ala Ile Leu 310 315 Val Phe Asp Pro Leu Ala Val Leu Ser Gln Ser Leu Ala Leu Ser Ala 325 330 335 Phe Ala Val Ala Ala Leu Ile Phe Trp Tyr Gln Trp Leu Pro Leu Pro 340 345 350 Leu Trp Gln Arg Gly Arg Cys Leu Arg Pro Leu Val Thr Leu Leu Tyr 360 365 Leu Gln Val Gly Met Leu Leu Leu Leu Pro Leu Gln Val Leu Ile 370 375 380 Phe His Gly Phe Ser Leu Ser Ser Leu Ala Ala Asn Leu Phe Ala Val 390 395 Pro Leu Val Thr Phe Ile Ser Val Pro Leu Ile Leu Leu Gly Met Phe 405 410 Leu His Leu Phe Pro Val Ala Thr Leu Glu Ser Ile Val Trp Leu Ala 425 430 420 Ala Asp Lys Ser Leu Ala Gly Leu Phe Trp Leu Leu Met Arg Leu Pro 435 440 445 Asn Gly Trp Gln Asp Val Asp Glu Arg Trp Gln Tyr Leu Thr Leu Leu 450 455 460 Pro Trp Leu Leu Ile Ile Gly Trp Arg Phe Arg Ala Phe Ser Ala Val 470 475 Pro Ala Val Cys Leu Ala Gly Ser Val Val Leu Ala Phe Pro Leu Trp 485 490 His Arg Ala Lys Thr Asp Ser Trp Ser Leu His Met Leu Asp Val Gly

```
5.05
Gln Gly Leu Ala Met Val Ile Glu Arg His Gly Lys Ala Ile Leu Tyr
                       520
      515
Asp Thr Gly Leu Ala Trp Pro Gly Gly Asp Ser Gly Gln Gln Leu Ile
                   535
                                     540
Ile Pro Trp Leu Arg Trp His His Leu Arg Pro Glu Gly Val Ile Leu
                                 555
                550
Ser His Glu His Leu Asp His Ala Gly Gly Leu Ala Ser Leu Lys Ala
          565
                             570
Ala Trp Pro Ala Met Trp Ile Arg Ser Pro Leu Ser Trp Ala Gly His
                          585
                                            590
Leu Pro Cys Phe Arg Gly Glu Arg Trp Gln Trp Gln Gly Leu Thr Phe
                       600
                                        605
      595
Ser Val His Trp Pro Pro Glu Asn Thr Ser Ala Lys Gly Asn Asn Arg
                   615
Ser Cys Val Val Lys Ile Asp Asp Gly Glu Gln Ser Val Leu Leu Thr
625 630
                                 635
Gly Asp Ile Glu Arg Gln Ala Glu Leu Ala Met Leu Ser His Arg Trp
           645
                              650
Arg Gln Leu Ala Ser Thr Leu Ile Gln Val Pro His His Gly Ser Asn
   660
                          665 670
Thr Ser Ser Ser Thr Pro Leu Leu Gln Arg Val Glu Gly Gln Val Ser
 675 680
Leu Ala Ser Met Ala Arg Tyr Asn Ala Trp Arg Phe Pro Ser Ile Lys
 690 695
                                    700
Val Val Arg Arg Tyr Arg Thr Glu Gly Tyr Leu Trp Leu Asp Thr Pro
705 710 715
Gln Ser Gly Gln Ile Ser Val Thr Phe Ser His Gln Ser Arg Gln Ile
           725 730 735
Arg Arg Leu Arg Glu His Tyr Leu Pro Arg Trp Tyr His Gln Trp Phe
                        745
        740
Gly Ala Pro Val Asp Asn Gly
```

<210> 8487 <211> 583 <212> PRT

<213> Enterobacter cloacae

<400> 8487 Met His Asn Asp Lys Asp Leu Ser Thr Trp Gln Thr Phe Arg Arg Leu 1.0 Trp Pro Met Ile Ala Pro Phe Lys Ala Gly Leu Ile Val Ala Gly Val 3.0 25 Ala Leu Ile Leu Asn Ala Ala Ser Asp Thr Phe Met Leu Ser Leu Leu 4.0 4.5 Lys Pro Leu Leu Asp Asp Gly Phe Gly Lys Thr Asp Arg Ser Val Leu 55 60 Leu Trp Met Pro Leu Val Val Ile Gly Leu Met Ile Leu Arg Gly Ile 70 75 Ser Ser Tyr Val Ser Ser Tyr Cys Ile Ser Trp Val Ser Gly Lys Val 85 90 Val Met Thr Met Arg Arg Arg Leu Phe Ser His Met Met Gly Met Pro 100 105 110 Val Ser Phe Phe Asp Lys Gln Ser Thr Gly Thr Leu Leu Ser Arg Ile 125 115 Thr Tyr Asp Ser Glu Gln Val Ala Ser Ser Ser Ser Ser Ala Leu Ile 135 130 140 Thr Val Val Arg Glu Gly Ala Ser Ile Ile Gly Leu Phe Ala Met Met 150 155 Phe Tyr Tyr Ser Trp Gln Leu Ser Leu Ile Leu Ile Val Leu Ala Pro

```
165
                         170
Ile Val Ser Ile Ala Ile Arg Val Val Ser Lys Arg Phe Arg Asn Ile
                      185
                               190
Ser Lys Asn Met Gln Asn Thr Met Gly Gln Val Thr Thr Ser Ala Glu
                  200
                                  205
Gln Met Leu Lys Gly His Lys Glu Val Leu Ile Phe Gly Gly Gln Glu
        215
                               220
Val Glu Thr Lys Arg Phe Asp Lys Val Ser Asn Arg Met Arg Leu Gln
             230
                            235
Gly Met Lys Met Val Ser Ala Ser Ser Ile Ser Asp Pro Ile Ile Gln
          245
                         250
Leu Ile Ala Ser Leu Ala Leu Ala Phe Val Leu Tyr Ala Ala Ser Phe
             265
        260
                             270
Pro Ser Val Met Glu Thr Leu Thr Ala Gly Thr Ile Thr Val Val Phe
           280
                        285
Ser Ser Met Ile Ala Leu Met Arg Pro Leu Lys Ser Leu Thr Asn Val
       295 300
Asn Ala Gln Phe Gln Arg Gly Met Ala Ala Cys Gln Thr Leu Phe Ser
305 310 315 320
Ile Leu Asp Ser Glu Gln Glu Lys Asp Glu Gly Thr Arg Val Ile Glu
          325 330
Arg Ala Lys Gly Asp Leu Glu Phe Arg Asn Val Thr Phe Thr Tyr Pro
 340 345 350
Gly Arg Glu Val Pro Ala Leu Arg Asp Ile Ser Leu Ser Ile Pro Ala
355 360 365
Gly Lys Thr Val Ala Leu Val Gly Arg Ser Gly Ser Gly Lys Ser Thr
370
      375 380
Ile Ala Ser Leu Ile Thr Arg Phe Tyr Asp Ile Asp Gln Gly Glu Ile
385 390 395
Leu Leu Asp Gly His Asp Leu Arg Glu Tyr Thr Leu Gln Ser Leu Arg
     405 410
Asn Gln Val Ala Leu Val Ser Gln Asn Val His Leu Phe Asn Asp Thr
 420 425 430
Val Ala Asn Asn Ile Ala Tyr Ala Arg Thr Glu Glu Tyr Ser Arg Glu
435 440 445
Glu Ile Glu Asn Ala Ala Arg Met Ala Tyr Ala Met Asp Phe Ile Asn
 450 455 460
Lys Met Asp Asn Gly Leu Asp Thr Ile Ile Gly Glu Asn Gly Val Leu
465 470 475 480
Leu Ser Gly Gly Gln Arg Gln Arg Ile Ala Ile Ala Arg Ala Leu Leu
          485 490
Arg Asn Ser Pro Ile Leu Ile Leu Asp Glu Ala Thr Ser Ala Leu Asp
   500 505 510
Thr Glu Ser Glu Arg Ala Ile Gln Ser Ala Leu Asp Glu Leu Gln Lys
515 520 525
Asn Arg Thr Ser Leu Val Ile Ala His Arg Leu Ser Thr Ile Glu Gln
 530 535 540
Ala Asp Glu Ile Val Val Val Glu Asp Gly Val Ile Val Glu Arg Gly
545 550 555
Ser His Ala Asp Leu Leu Glu Gln Arg Gly Val Tyr Ala Gln Leu His
         565
                        570
Lys Met Gln Phe Gly Gln
        580
```

<210> 8488

<211> 415 <212> PRT

<213> Enterobacter cloacae

<400> 8488

Leu Thr Gly Lys Arg Met Ser Leu Pro Gln Leu Ser Leu Ala Ala Ala

```
1.0
Arg Asn Leu His Leu Ala Ala Gln Gly Leu Leu Lys Lys Pro Arg Arg
       20
                      25
Arg Ala Gln Pro Ala Asp Ile Leu Ser Thr Val Gln Arg Met Ser Leu
                   40 45
Leu Gln Ile Asp Thr Ile Asn Ile Val Ala Arg Ser Pro Tyr Leu Val
50 55 60
Leu Phe Ser Arg Leu Gly Asn Tyr Pro Pro Gln Trp Leu Asp Asn Ala
65 70 75
Leu Ser Gln Gly Glu Leu Met Glu Tyr Trp Ala His Glu Ala Cys Phe
           85 90
Leu Pro Arg Ser Asp Phe Ala Leu Val Arg His Arg Met Leu Ala Pro
       100 105 110
Asp Lys Met Gly Trp Lys Tyr Arg Gln Glu Trp Met Val Glu His Ala
                    120 125
Asp Glu Ile Glu Gln Leu Ile Ala His Ile Gln Lys Asn Gly Pro Val
 130 135 140
Arg Ser Ala Asp Phe Glu His Pro Arg Lys Gly Ala Ser Gly Trp Trp
145 150 155
Glu Trp Lys Pro His Lys Arg His Leu Glu Gly Leu Phe Thr Ser Gly
          165
                 170
Lys Val Met Val Val Glu Arg Arg Asn Phe Gln Arg Val Tyr Asp Leu
         180
                         185
                             190
Thr His Arg Val Met Pro His Trp Asp Asp Thr His Asp Leu Leu Ser
      195
                      200
                                      205
Gln Asp Val Ala Glu Ala Ile Met Leu Gly Asn Ser Ala Arg Ser Leu
                         220
                   215
Gly Ile Phe Arg Pro Gln Trp Leu Ala Asp Tyr Tyr Arg Leu Arg Gln
225 230
                               235
Pro Arg Leu Lys Pro Leu Leu Glu Thr Tro Gln Arg Glu Gln Arg Val
            245 250
Met Pro Val Ser Val Glu Ser Leu Gly Glu Met Trp Leu His Ala Asp
         260
                      265
                                   270
Leu Phe Pro Leu Leu Ala Gln Ala Gln Glu Gly Lys Leu Gln Ala Thr
275
                     280
                                       285
His Ser Ala Val Leu Ser Pro Phe Asp Pro Val Val Trp Asp Arg Lys
   290
                   295
                                   300
Arg Ala Glu Gln Leu Phe Asp Pne Ser Tyr Arg Leu Glu Cys Tyr Thr
305
            310
                                315
Pro Ala Pro Arg Arg Gln Tyr Gly Tyr Phe Val Leu Pro Leu Leu His
            325
                            330
Lys Gly Gln Leu Val Gly Arg Met Asp Ala Lys Met His Arg Lys Thr
         340
                         345
Gly Met Leu Glu Ile Ile Ala Leu Trp Leu Glu Glu Gly Ile Lys Val
      355
                      360
Thr Ala Gly Leu Glu Lys Gly Leu Thr Thr Ala Leu Ser Glu Phe Ala
                   375
Arg Trp Gln Gly Ala His Glu Ile Val Leu Gly Arg Val Pro Val Glu
385
               390
                               395
Leu Phe Ala Thr Cys Arg Asp Gly Trp Glu Thr Asp Thr Pro
<210> 8489
```

<211> 76 <212> PRT

<213> Enterobacter cloacae

<400> 8489

Lys Gly Asn Val Ile Ser Phe Ser Asp Tyr Pro Tyr Gly Gly Thr Met 10 Asp His Arg Leu Leu Glu Ile Ile Ala Cys Pro Val Cys Asn Gly Lys

```
20
                            25
Leu Tyr Tyr Ser Gln Asp Lys Gln Glu Leu Ile Cys Lys Leu Asp Ser
 35
              40
                               4.5
Leu Ala Phe Pro Leu Arg Asp Gly Ile Pro Val Leu Leu Glu Asn Glu
              55
Ala Arg Ser Leu Val Ala Glu Glu Ile Lys Pro
<210> 8490
<211> 300
<212> PRT
<213> Enterobacter cloacae
<400> 8490
Ser His Met Glu Gln Leu Arg Ala Glu Leu Ser His Leu Leu Gly Glu
                               10
Lys Leu Ser Arg Val Glu Cys Val Asn Glu Lys Ala Asp Ser Ala Leu
Trp Ser Leu Tyr Asp Ser Gln Gly Asn Pro Met Pro Leu Met Ala Arg
 35
                        40
                                          45
Ser Phe Thr Ser Pro Gly Val Ala Arg Gln Leu Ala Trp Lys Met Ser
                    5.5
                                      60
Met Leu Ala Arg Glu Gly Thr Val Arg Met Pro Thr Val Tyr Gly Val
              70
                                 75
                                                     80
Met Thr His Glu Glu His Pro Ala Pro Asp Val Leu Leu Ile Glu Arg
                               90
             85
Leu Arg Gly Val Ser Val Glu Ala Pro Thr Arg Thr Pro Glu Arg Trp
                            105
          100
                                              110
Glu Gln Leu Lys Asp Gln Ile Val Glu Ala Leu Leu Ala Trp His Arg
115
                        120
                                125
Gln Asp Ser Arg Gly Leu Val Gly Ala Val Asp Ser Thr Gln Glu Asn
          135
 130
                                       140
Leu Trp Pro Leu Trp Tyr Arg Gln Arg Val Glu Val Leu Trp Gly Thr
145
                150
                                   155
Leu Asn Gln Phe Asn Asn Thr Gly Leu Thr Met Gln Asp Lys Arg Ile
              165
                               170
Leu Phe Arg Thr Arg Glu Cys Leu Pro Thr Leu Phe Glu Gly Phe Asn
          180
                            185
                                    190
Asp Asn Cys Val Leu Val His Gly Asn Phe Thr Leu Arg Ser Met Leu
 195
                        200
                              205
Lys Asp Ser Arg Ser Asp Gln Leu Leu Ala Met Val Gly Pro Gly Ile
  210
                    215
                                       220
Met Leu Trp Ala Pro Arg Glu Tyr Glu Leu Phe Arg Leu Ser Glu Gly
225
                 230
                                   235
Gly Ala Ala Glu Asp Leu Leu Trp His Tyr Leu Gln Arg Ala Pro Val
              245
                               250 255
Ala Glu Ala Phe Leu Trp Arg Arg Trp Leu Tyr Leu Leu Trp Asp Glu
          260
                            265
                                             270
Val Ala Gln Leu Val Asn Thr Gly Arg Phe Asn Arg Ala Ser Phe Asp
     275
                        280
Leu Ala Ala Lys Ser Leu Leu Pro Trp Leu Ala
  290
                     295
<210> 8491
<211> 259
<212> PRT
<213> Enterobacter cloacae
<400> 8491
Ala Pro Gly Trp Ala Lys Phe Gly Asp Ile Thr Ala Met Ser Ile Ile
```

```
Gly Arg Ile His Ser Phe Glu Ser Cys Gly Thr Val Asp Gly Pro Gly
         20
Ile Arg Phe Ile Thr Phe Phe Gln Gly Cys Leu Met Arg Cys Leu Tyr
                      4.0
                                      45
Cys His Asn Arg Asp Thr Trp Asp Thr His Gly Gly Lys Glu Val Thr
                  55
                                   60
Val Glu Asp Leu Met Lys Glu Val Val Thr Tyr Arg His Phe Met Asn
                             7.5
                70
Ala Ser Gly Gly Gly Val Thr Ala Ser Gly Gly Glu Ala Ile Leu Gln
          85 90
Ala Glu Phe Val Arg Asp Trp Phe Arg Ala Cys His Lys Glu Gly Ile
         100 105
His Thr Cys Leu Asp Thr Asn Gly Phe Val Arg Arg Tyr Asp Pro Val
   115 120 125
Ile Asp Glu Leu Leu Glu Val Thr Asp Leu Val Met Leu Asp Leu Lys
 130
                  135 140
Gln Met Asn Asp Glu Ile His Gln Asn Leu Val Gly Val Ser Asn His
               150 155
Arg Thr Leu Glu Phe Ala Lys Tyr Ile Ala Asn Lys Gly Val Lys Thr
      165
                            170 175
Trp Ile Arg Tyr Val Val Val Pro Gly Trp Ser Asp Asp Asp Ser
       180
                         185
                             190
Ala His Arg Leu Gly Glu Phe Thr Arg Asp Met Gly Asn Val Glu Lys
      195 200
                                      205
Ile Glu Leu Leu Pro Tyr His Glu Leu Gly Lys His Lys Trp Val Ala
                   215
                                   220
Met Gly Glu Glu Tyr Lys Leu Asp Gly Val Lys Pro Pro Lys Lys Glu
             230 235
Thr Met Glu Arg Val Lys Gly Ile Leu Glu Gln Tyr Gly His Lys Val
            245
                            250
Met Tyr
```

<210> 8492 <211> 100 <212> PRT <213> Enterobacter cloacae

<400> 8492 Arg Gly Gly Met Gly Arg Ala Thr Ser Leu Pro Asp Ala Val Cys

10 Squ Asp Asp Val Pro Phe Leu Leu Val Thr Ser Ala Ser His Leu Pro 20 25 30

Arg Ala Met Ile Phe Phe Glu Lys Gln Gly Leu His Pro Leu Pro Ala 35 40

Pro Ala Asn Gln Met Ala Ile Asp Ala Pro Leu Asn Pro Trp Glu Arg 50 56

Ile Ile Pro Ser Pro Val Trp Leu Met His Ser Asp Arg Val Gly Tyr 65 70 75 80

Glu Thr Leu Gly Arg Leu Trp Gln Trp Leu Lys Gly Ser Ser Gly Lys 80 95 95

Pro Gly Gln Glu 100

<210> 8493 <211> 656 <212> PRT <213> Enterobacter cloacae

<400> 8493

Arg Leu Arg Asn Ala Thr Ser Pro Lys Asn Ser Gly Gly Thr Leu Ser

Asn Ala Ile Arg Trp Arg Ser Asn Ala Phe Ile Phe Leu Cys Leu Asn 25 3.0 Ser Arg Leu Leu Ile Ser Ile Ala Glm Pro Phe Ile Phe Ala Gly 4.0 45 Asp Ser Thr Arg His Ala Lys Pro Val Ser Leu Arg Ala Leu Arg Thr 55 60 Ile Lys Val Asn Ala Met Thr Gin Thr Phe Ile Pro Gly Lys Asp Ala 70 75 Ala Leu Glu Asp Ser Ile Ala Arg Phe Gln Gln Lys Leu Thr Asp Leu 85 90 95 Gly Phe Asn Ile Glu Glu Ala Ser Trp Leu Asn Pro Val Pro His Val 100 105 110 Trp Ser Val His Ile Arg Asp Lys Asp Cys Ala Leu Cys Phe Thr Asn 115 120 125 Gly Lys Gly Ala Thr Lys Lys Ala Ala Leu Ala Ser Ala Leu Gly Glu 130 135 140 Tyr Phe Glu Arg Leu Ser Thr Asn Tyr Phe Phe Ala Asp Phe Trp Leu 145 150 155 Gly Glu Thr Ile Ala Asn Gly Pro Phe Val His Tyr Pro Asn Glu Lys 165 170 175 Trp Phe Pro Leu Thr Glu Asn Asp Glu Leu Pro Glu Gly Ile Leu Asp 180 185 190 Ala Arg Leu Arg Ala Phe Tyr Asp Pro Glu Asn Glu Leu Thr Gly Ser 195 200 205 Met Leu Ile Asp Leu Gln Ser Gly Asn Glu Asp Arg Gly Ile Cys Thr 210 215 220 Leu Pro Phe Thr Arg Gln Ser Asp Glu Gln Thr Val Tyr Ile Pro Met 225 230 235 Asn Ile Val Gly Asn Leu Tyr Val Ser Asn Gly Met Ser Ala Gly Asn 245 250 Thr Arg Asn Glu Ala Arg Val Gln Gly Leu Ser Glu Val Phe Glu Arg 260 265 His Ile Lys Asn Arg Ile Ile Ala Glu Ser Ile Ser Leu Pro Glu Ile 275 280 285 Pro Ala Asp Val Leu Ala Arg Tyr Pro Gly Val Val Glu Ser Ile Ala 295 300 Lys Leu Glu Ala Glu Gly Phe Pro Ile Phe Ala Tyr Asp Gly Ser Leu 305 310 315 Gly Gly Lys Tyr Pro Val Ile Cys Val Val Leu Phe Asn Pro Ala Asn 325 330 Gly Thr Cys Phe Ala Ser Phe Gly Ala His Pro Asp Phe Gly Val Ala 340 345 350 Leu Glu Arg Thr Val Thr Glu Leu Leu Gln Gly Arg Ser Leu Lys Asp 355 360 Leu Asp Val Phe Thr Pro Pro Thr Phe Asp Asp Glu Glu Val Ala Glu 375 370 His Thr Asn Leu Glu Thr His Phe Ile Asp Ser Ser Gly Leu Ile Ser 385 390 395 Trp Asp Met Phe Lys Gln Asp Ala Asp Tyr Pro Phe Val Asp Trp Ser 405 410 415 Phe Ala Gly Thr Thr Glu Glu Glu Phe Ala Thr Leu Met Ala Ile Phe 425 His Ala Glu Asp Gln Glu Val Tyr Ile Ala Asp Tyr Glu His Leu Gly 435 440 Val Tyr Ala Cys Arg Ile Ile Val Pro Gly Met Ser Asp Ile Tyr Pro 450 455 460 Ala Glu Asp Leu Trp Leu Ala Asn Asn Ser Met Gly Ala His Leu Arg 465 470 475 Glu Thr Leu Leu Ala Leu Pro Gly Ser Glu Trp Asp Lys Glu Asp Tyr 485 490

Leu Asn Leu Ile Ala Gln Leu Asp Glu Glu Gly His Asp Asp Phe Thr 500 505 510 Arg Val Arg Glu Leu Leu Gly Leu Ala Thr Gly Lys Asp Asn Gly Trp 515 520 525 Tyr Thr Leu Arg Ile Gly Glu Leu Lys Ala Met Leu Ala Leu Ala Gly 530 535 540 Gly Asp Leu Asp Gln Ala Leu Ala Trp Thr Glu Trp Thr Met Glu Phe 550 555 Asn Gln Ser Val Phe Ser Ala Glu Arg Thr Asn Tyr Tyr Arg Cys Leu 565 570 Gln Thr Leu Leu Leu Ser Gln Glu Asp Asp Arg Gln Pro Leu Gln 580 585 590 Tyr Leu Asn Ala Phe Val Arg Met Tyr Gly Ala Asp Ala Val Glu Ala 595 600 605 Ala Ser Ala Ala Leu Ser Gly Glu Glu Pro Phe Tyr Gly Leu Gln Ala 610 615 620 Val Asp Ser Asp Leu Gln Ala Phe Pro Ala His Gln Ser Leu Leu Asn 625 630 635 640 Ala Tyr Glu Lys Leu Gln Lys Ala Lys Ala Ala Tyr Trp Ser Lys 645 650 655

<210> 8494 <211> 323 <212> PRT

<213> Enterobacter cloacae

<400> 8494 Asn His Thr His Cys Gly Pro Ile Ser Gln Ala Arg Tyr Asp Leu Tyr 10 Gin Phe Leu Phe Tyr Asn Ala Leu Leu Val Ser Arg Arg Leu Asn 20 25 Lys Glu Arg Val Ser Val Lys Ala Asp Asn Pro Phe Asp Leu Leu Leu 35 4.0 Pro Ala Ala Met Ala Lys Val Ala Glu Glu Ala Gly Val Tyr Lys Ala 55 60 Thr Lys His Pro Met Thr Thr Phe Phe Leu Ala Ile Thr Ala Gly Val 70 7.5 Phe Ile Ser Ile Ala Phe Val Phe Tyr Ile Thr Ala Thr Thr Gly Thr 85 90 Ala Gly Met Pro Phe Gly Ile Ala Lys Leu Ile Gly Gly Ile Cys Phe 100 105 Ser Leu Gly Leu Ile Leu Cys Val Ile Cys Gly Ala Asp Leu Phe Thr 115 120 125 Ser Thr Val Leu Ile Val Val Ala Lys Ala Ser Gly Arg Ile Thr Trp 135 130 140 Gly Gln Leu Gly Arg Asn Trp Leu Asn Val Tyr Val Gly Asn Leu Ile 145 150 155 Gly Cys Leu Leu Phe Val Leu Leu Met Trp Leu Ser Gly Glu Tyr Met 170 165 175 Thr Ala Asn Gly Gly Trp Gly Leu Asn Val Leu Gln Thr Ala Asp His 180 185 190 Lys Met His His Thr Phe Ile Glu Ala Val Ala Leu Gly Ile Leu Ala 195 200 205 Asn Leu Met Val Cys Leu Ala Val Trp Met Ser Tyr Ser Gly Arg Ser 210 215 220 Leu Met Asp Lys Ala Met Ile Met Val Leu Pro Val Ala Met Phe Val 230 235 Ala Ser Gly Phe Glu His Ser Ile Ala Asn Met Phe Met Ile Pro Met 245 250 255 Gly Ile Val Ile Arg Asn Phe Ala Ser Pro Glu Phe Trp Thr Ala Val 260 265

Gly Ser Thr Pro Glu Ser Phe Ser His Leu Thr Ile Met Asn Phe Ile 275Thr Asp Asn Leu Ile Pro Val Thr Ile Gly Asn Ile Ile Gly Gly Gly 295Leu Leu Val Gly Leu Thr Tyr Trp Val Ile Tyr Leu Arg Gly Gly Asp 305 310His His

<210> 8495 <211> 766 <212> PRT <213> Enterobacter cloacae

<400> 8495 Glu Gly Arg Cys Tyr Met Ser Glu Leu Asn Glu Lys Leu Ala Thr Ala 1.0 Trp Glu Gly Phe Thr Lys Gly Asp Trp Gln Asn Glu Val Asn Val Arg Asp Phe Ile Gln Lys Asn Tyr Thr Pro Tyr Glu Gly Asp Glu Ser Phe 4.0 Leu Ala Gly Ala Thr Asp Ala Thr Thr Lys Leu Trp Asp Ser Val Met Glu Gly Val Lys Leu Glu Asn Arg Thr His Ala Pro Val Asp Phe Asp 7.0 Thr Ser Val Ala Ser Thr Ile Thr Ser His Asp Ala Gly Tyr Ile Asn Lys Ala Leu Glu Lys Ile Val Gly Leu Gln Thr Glu Ala Pro Leu Lys Arg Ala Ile Ile Pro Phe Gly Gly Ile Lys Met Val Glu Gly Ser Cys Lys Ala Tyr Asn Arg Glu Leu Asp Pro Met Leu Lys Lys Ile Phe Thr Glu Tyr Arg Lys Thr His Asn Gln Gly Val Phe Asp Val Tyr Thr Lys Asp Ile Leu Asn Cys Arg Lys Ser Gly Val Leu Thr Gly Leu Pro Asp Ala Tyr Gly Arg Gly Arg Ile Ile Gly Asp Tyr Arg Arg Val Ala Leu Tyr Gly Ile Asp Phe Leu Met Lys Asp Lys Tyr Ala Gln Phe Val Ser Leu Gln Ser Asp Leu Glu Asn Gly Val Asn Leu Glu Ala Thr Ile Arg Leu Arg Glu Glu Ile Ala Glu Gln His Arg Ala Leu Gly Gln Ile Lys Glu Met Ala Ala Lys Tyr Gly Cys Asp Ile Ser Gly Pro Ala Thr Asn Ala Gln Glu Ala Ile Gln Trp Thr Tyr Phe Gly Tyr Leu Ala Ala Val Lys Ser Gln Asn Gly Ala Ala Met Ser Phe Gly Arg Val Ser Thr Phe Leu Asp Ala Tyr Ile Glu Arg Asp Leu Lys Ala Gly Lys Ile Thr Glu Gln Asp Ala Gln Glu Met Ile Asp His Leu Val Met Lys Leu Arg Met Val Arg Phe Leu Arg Thr Pro Glu Tyr Asp Glu Leu Phe Ser Gly Asp Pro Ile Trp Ala Thr Glu Ser Ile Gly Gly Met Gly Val Asp Gly Arg Thr Leu Val Thr Lys Asn Ser Phe Arg Phe Leu Asn Thr Leu Tyr Thr

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Met Gly Pro Ser Pro Glu Pro Asn Ile Thr Val Leu Trp Ser Glu Lys
                                380
Leu Pro Leu Asn Phe Lys Lys Phe Ala Ala Lys Val Ser Ile Asp Thr
              390 395
Ser Ser Leu Gln Tyr Glu Asn Asp Asp Leu Met Arg Pro Asp Phe Asn
         405 410 415
Asn Asp Asp Tyr Ala Ile Ala Cys Cys Val Ser Pro Met Val Val Gly
        420 425 430
Lys Gln Met Gln Phe Phe Gly Ala Arg Ala Asn Leu Ala Lys Thr Met
    435 440 445
Leu Tyr Ala Ile Asn Gly Gly Val Asp Glu Lys Leu Lys Met Gln Val
  450 455 460
Gly Pro Lys Ser Glu Pro Ile Lys Gly Asp Val Leu Asn Tyr Asp Glu
    470 475
Val Met Asp Arg Met Asp His Phe Met Asp Trp Leu Ala Lys Gln Tyr
       485
                          490
                              495
Val Thr Ala Leu Asn Val Ile His Tyr Met His Asp Lys Tyr Ser Tyr
        500
                       505 510
Glu Ala Ser Leu Met Ala Leu His Asp Arg Asp Val Val Arg Thr Met
 515
                        525
                    520
Ala Cys Gly Ile Ala Gly Leu Ser Val Ala Ala Asp Ser Leu Ser Ala
 530
                535
                                540
Ile Lys Tyr Ala Lys Val Lys Pro Ile Arg Asp Glu Asp Gly Leu Ala
             550
                             555
Ile Asp Phe Glu Ile Glu Gly Glu Tyr Pro Gln Phe Gly Asn Asp
           565
                          570
Ala Arg Val Asp Asp Met Ala Val Asp Leu Val Glu Arg Phe Met Lys
        580
                       585
Lys Ile Gln Lys Leu Thr Thr Tyr Arg Asn Ala Ile Pro Thr Gln Ser
 595 600
                          605
Val Leu Thr Ile Thr Ser Asn Val Val Tyr Gly Lys Lys Thr Gly Asn
 610 615
                                620
Thr Pro Asp Gly Arg Arg Ala Gly Ala Pro Phe Gly Pro Gly Ala Asn
625 630
                             635
Pro Met His Gly Arg Asp Gln Lys Gly Ala Val Ala Ser Leu Thr Ser
           645
                          650 655
Val Ala Lys Leu Pro Phe Ala Tyr Ala Lys Asp Gly Ile Ser Tyr Thr
                       665
                                      670
Phe Ser Ile Val Pro Asn Ala Leu Gly Lys Asp Asp Glu Val Arg Lys
                    680
                                  685
Thr Asn Leu Ala Gly Leu Met Asp Gly Tyr Phe His His Glu Ala Ser
                 695
                                700
Ile Glu Gly Gly Gln His Leu Asn Val Asn Val Met Asn Arg Glu Met
              710
                             715
Leu Leu Asp Ala Met Glu His Pro Glu Lys Tyr Pro Gln Leu Thr Ile
           725
                          730 735
Arg Val Ser Gly Tyr Ala Val Arg Phe Asn Ser Leu Thr Lys Glu Gln
            745 750
        74Ô
Gln Gln Asp Val Ile Thr Arg Thr Phe Tor Gln Ser Met
                   760
<210> 8496
<211> 106
<212> PRT
```

<213> Enterobacter cloacae

<400> 8496

Arg Leu Arg Thr Asp Ala Ala Leu Pro Val Pro Gly Gly Cys Pro Pro 10 His Ala Leu Ser Val Pro Asp Ala Gln Ser Ala Leu Pro Leu Ser Tyr 20 25

```
Gln Arg Ser Ser Ser Gly Arg Gln Ile His Pro Pro Ala Pro Arg Cys
                           40
                                          4.5
 Lys Ala Val Phe Pro Ala Pro Asp Ala Gly His Pro Cys Cys His Pro
                      55
                                         60
Ala Ser Ser Met Gly Pro Glu Ser Asp Gly Pro Tyr Ala Pro Pro Arg
                   7.0
                          7.5
Arg Phe Ser Arg Tyr Asn Arg Pro Gly Tyr Ala Arg Pro Ala Pro Thr
               85 90
Ser Ala Cys Ser Asp Ala Pro Phe His
      100
<210> 8497
<211> 563
<212> PRT
<213> Enterobacter cloacae
<400> 8497
His Lys Ile Leu Phe Leu Gln Ile Tyr Asp Gly Glu Leu Thr Met Asn
Gly Ala Gln Trp Val Val His Ala Leu Arg Ala Gln Gly Val Glu Thr
          2.0
                                                 30
Val Phe Gly Tyr Pro Gly Gly Ala Ile Met Pro Ile Tyr Asp Ala Leu
                          40
Tyr Asp Gly Gly Val Glu His Leu Leu Cys Arg His Glu Gln Gly Ala
                      55
Ala Met Ala Ala Ile Gly Tyr Ala Arg Ala Thr Gly Lys Thr Gly Val
Cys Met Ala Thr Ser Gly Pro Gly Ala Thr Asn Leu Ile Thr Gly Leu
                                  90
Ala Asp Ala Leu Leu Asp Ser Val Pro Val Val Ala Ile Thr Gly Gln
          100
                              105
Val Ala Ser Pro Phe Ile Gly Thr Asp Ala Phe Gln Glu Val Asp Val
                          120
Leu Gly Leu Ser Leu Ala Cys Thr Lys His Ser Phe Leu Val Gln Ser
 130 135
                                          140
Leu Glu Glu Leu Pro Arg Val Met Ala Glu Ala Phe Glu Val Ala Ser
     150
                                     155
Ser Gly Arg Pro Gly Pro Val Leu Val Asp Ile Pro Lys Asp Ile Gln
              165
                                  170
Val Ala Leu Gly Glu Leu Glu Pro His Phe Ser Thr Val Glu Ser Asp
         180
                              185
                                                 190
Asn Ala Phe Pro His Ala Glu Val Glu Glu Ala Arg Gln Met Ile Ala
                          200
Gln Ala Lys Gln Pro Met Leu Tyr Val Gly Gly Gly Val Gly Met Ala
                      215
Gln Ala Val Pro Ala Leu Arg Glu Phe Ile Ala Ala Thr Gln Met Pro
                   230
Ala Thr Cys Thr Leu Lys Gly Leu Gly Ala Val Asp Ala Asp Tyr Pro
              245
                                  250
                                                 255
Tyr Tyr Leu Gly Met Leu Gly Met His Gly Thr Lys Ala Ala Asn Leu
           260
                              265
Ala Val Gln Glu Cys Asp Leu Leu Ile Ala Val Gly Ala Arg Phe Asp
       275
                          280
                                             285
Asp Arg Val Thr Gly Lys Leu Asn Thr Phe Ala Pro Asn Ala Lys Val
                   295
                                        300
Ile His Met Asp Ile Asp Pro Ala Glu Met Asn Lys Leu Arg Gln Ala
                  310
                                     315
His Val Ala Leu Gln Gly Asp Leu Asn Ala Leu Leu Pro Ala Leu Glu
               325
                                 330
Gln Pro Leu Asp Ile Asn Pro Trp Arg Gln His Thr Ala Asp Met Arg
           340
                              345
```

Ala Glu His Ala Trp Arg Tyr Asp His Pro Gly Glu Ala Ile Tyr Ala 355 360 Pro Leu Leu Lys Gln Leu Ser Asp Arg Lys Pro Ala Asp Ser Val 375 370 380 Val Thr Thr Asp Val Gly Gln His Gln Met Trp Ser Ala Gln His Met 390 395 Thr Tyr Thr Arg Pro Glu Asn Phe Ile Thr Ser Ser Gly Leu Gly Thr 405 410 415 Met Gly Phe Gly Leu Pro Ala Ala Val Gly Ala Gln Val Ala Arg Pro 420 425 430 Asn Asp Thr Val Ile Cys Ile Ser Gly Asp Gly Ser Phe Met Met Asn 435 440 445 Val Gln Glu Leu Gly Thr Val Lys Arg Lys Gln Leu Pro Leu Lys Ile 450 455 460 Val Leu Leu Asp Asn Gln Arg Leu Gly Met Val Arg Gln Trp Gln Gln 470 475 Leu Phe Phe Gln Glu Arg Tyr Ser Glu Thr Thr Leu Thr Asp Asn Pro 490 485 Asp Phe Leu Thr Leu Ala Ser Ala Phe Gly Ile Pro Gly Gln His Ile 500 505 510 Thr Arg Lys Asp Gln Val Glu Ala Ala Leu Asp Thr Met Leu Ser Ser 515 520 525 Glu Gly Pro Tyr Leu Leu His Val Ser Ile Asp Glu Leu Glu Asn Val 530 535 540 Trp Pro Leu Val Pro Pro Gly Ala Ser Asn Ser Gln Met Leu Glu Lys 545 550 555

Leu Ser <210> 8498

<211> 62 <212> PRT

<213> Enterobacter cloacae

<400> 8498

Lys Thr Cys Ile Ala Pro Val Arg Arg Ala Ser Val Pro Pro Arg Arg 10 Ser Arg Arg Ile Ala Val Gly Thr Arg Leu Met Thr Ile Ala Pro Lys 20 25 30 Ala Ala Phe Ala Arg Trp Asn Met Pro Ile Ala Lys Thr Ala Ala Trp 4.0 Pro Cys Cys Thr Val Thr Leu Arg Lys Met Ala Val Ser 50 55

<210> 8499 <211> 74

<212> PRT <213> Enterobacter cloacae

<400> 8499

Gly Tyr Thr Arg Ala Thr Met Ala His Thr Lys Arg Ser Asp Leu Ala Arg Ala Ser Gly Pro His Lys Val Arg Arg Ser Pro Asp Trp Ser Leu 20 25 Gln Leu Asp Ser Met Lys Ser Glu Ser Leu Val Ile Val Asp Gln Asn 4.0 Ala Thr Val Asn Thr Phe Pro Gly Leu Val His Thr Ala Arg His Thr 55

Met Gly Val Gly Cys Lys Arg Ser Arg

```
<210> 8500
<211> 130
<212> PRT
<213> Enterobacter cloacae
<400> 8500
Leu Ile Leu Arg Ala Ile Asn Ser Ser Ala Lys Glu Leu Gly Ala Cys
                           1.0
Arg Met Ala Glu Ser Phe Thr Thr Thr Asn Arg Phe Phe Asp Asn Lys
   20
                                               30
                            25
His Tyr Pro Arg Gly Phe Ser Arg His Gly Asp Phe Thr Ile Lys Glu
      35
                         4.0
Ala Gln Leu Leu Glu Arg His Gly Tyr Ala Phe Asn Glu Leu Asp Leu
                      55
Gly Lys Arg Glu Pro Ala Thr Glu Asp Glu Lys Gln Phe Val Ser Val
     70
                        75
Cys Arg Gly Glu Arg Glu Pro Gln Ser Asp Ala Glu Arg Val Trp Ile
              8.5
                   90
Lys Tyr Met Ala Arg Ile Lys Arg Pro Lys Arg Phe His Thr Leu Ser
       100
                  105 110
Gly Gly Lys Pro Gln Met Glu Gly Ala Glu Asp Tyr Thr Glu Ser Asp
                         120
 130
<210> 8501
<211> 520
<212> PRT
<213> Enterobacter cloacae
<400> 8501
Thr Gly Gly Leu Thr Met Ala Glu Ser Gln Pro Leu Ser Ala Ala Pro
                              1.0
                                                    15
Glu Gly Ala Glu Tyr Leu Arg Ala Val Leu Arg Ala Pro Val Tyr Glu
          20
                             25
Ala Val Gln Val Thr Pro Leu Gln Lys Met Glu Lys Leu Ser Ser Arg
                        4.0
Leu Asp Asn Val Ile Leu Val Lys Arg Glu Asp Arg Gln Pro Val His
                   5.5
Ser Phe Lys Leu Arg Gly Ala Tyr Ala Met Met Ala Gly Leu Thr Asp
                 7.0
                                     75
                                                       80
Glu Gln Lys Ala Arg Gly Val Ile Thr Ala Ser Ala Gly Asn His Ala
              85
                                 90
Gin Gly Val Ala Phe Ser Ser Ala Arg Leu Gly Leu Lys Ala Leu Ile
          100
                             105
                                                110
Val Met Pro Val Ala Thr Ala Asp Ile Lys Val Asp Ala Val Arg Gly
                         120
Phe Gly Gly Glu Val Leu Leu His Gly Ala Asn Phe Asp Glu Ala Lys
                     135
   130
Ala Lys Ala Ile Glu Leu Ala Gln Gln Gln Gly Phe Thr Trp Val Pro
145
                 150
                                    155
Pro Phe Asp His Pro Met Val Ile Ala Gly Gln Gly Thr Leu Ala Leu
              165
                                 170
Glu Leu Leu Gln Gln Asp Ala His Leu Asp Arg Val Phe Val Pro Val
          180
                             185
Gly Gly Gly Leu Ala Ala Gly Val Ala Val Leu Ile Lys Gln Leu
       195
                         200
Met Pro Gln Ile Lys Val Ile Ala Val Glu Ala Glu Asp Ser Ala Cys
                   215
Leu Lys Ala Ala Leu Asp Ala Gly His Pro Val Asp Leu Pro Arg Val
```

230

```
Gly Leu Phe Ala Glu Gly Val Ala Val Lys Arg Ile Gly Asp Glu Thr
                      250
           245
Phe Arg Leu Cys Gln Glu Tyr Leu Asp Asp Ile Val Thr Val Asp Ser
        260
                     265 270
Asp Ala Ile Cys Ala Ala Met Lys Asp Leu Phe Glu Asp Val Arg Ala
     275 280
                        285
Val Ala Glu Pro Ser Gly Ala Leu Ala Leu Ala Gly Met Lys Lys Tyr
  290
       295 300
Ile Ala Gln His Asn Ile Arg Gly Glu Arg Leu Ala His Val Leu Ser
   310 315
Gly Ala Asn Val Asn Phe His Gly Leu Arg Tyr Val Ser Glu Arg Cys
      325 330
Glu Leu Gly Glu Gln Arg Glu Ala Leu Leu Ala Val Thr Ile Pro Glu
        340 345
                                      350
Glu Lys Gly Ser Phe Leu Lys Phe Cys Gln Leu Leu Gly Gly Arg Ser 355 360 365
Val Thr Glu Phe Asn Tyr Arg Phe Ala Asp Ala Lys Asp Ala Cys Ile
 370 375
                                380
Phe Val Gly Val Arg Leu Ser Arg Gly Val Glu Glu Arg Lys Glu Ile
385 390 395
Leu Ser Leu Leu His Asp Gly Gly Tyr Ser Val Val Asp Leu Ser Asp
      405
                        410
Asp Glu Met Ala Lys Leu His Val Arg Tyr Met Val Gly Gly Arg Pro
       420
                       425
                           430
Ser Lys Pro Leu Lys Glu Arg Leu Phe Ser Phe Glu Phe Pro Glu Ser
                    440
Pro Gly Ala Leu Leu Lys Phe Leu His Thr Leu Gly Thr His Trp Asn
      455 460
Ile Ser Leu Phe His Tyr Arg Ser His Gly Thr Asp Tyr Gly Arg Val
465 470
                             475
Leu Ala Ala Phe Glu Leu Gly Glu His Glu Pro Asp Phe Glu Thr Arg
        485
                          490 495
Leu Asn Glu Leu Gly Tyr Glu Cys His Asp Glu Thr His Asn Pro Ala
500
                       505
Phe Arg Phe Phe Leu Ala Gly
```

<210> 8502 <211> 501 <212> PRT

<213> Enterobacter cloacae

<400> 8502 Thr Gln His His Glu Val Ser Pro Met Ala Asn Tyr Phe Asn Thr 1 5 10 15

Lys Val Gly Thr Tyr Glu Glu Leu Ile Pro Gln Ala Asp Leu Val Val Val 100 105 110

Asn Leu Thr Pro Asp Lys Gin His Ser Asp Val Val Arg Ser Val Gin 120 125 Pro Leu Met Lys Asp Gly Ala Ala Leu Gly Tyr Ser His Gly Phe Asn

```
Ile Val Glu Val Gly Glu Gln Ile Arg Lys Asp Ile Thr Val Val Met
Val Ala Pro Lys Cys Pro Gly Thr Glu Val Arg Glu Glu Tyr Lys Arg
                    170 175
           165
Gly Phe Gly Val Pro Thr Leu Ile Ala Val His Pro Glu Asn Asp Pro
        180 185 190
Lys Gly Glu Gly Met Ala Ile Ala Lys Ala Trp Ala Ala Ala Thr Gly
     195
         200
                       205
Gly His Arg Ala Gly Val Leu Glu Ser Ser Phe Val Ala Glu Val Lys
 210 215 220
Ser Asp Leu Met Gly Glu Gln Thr Ile Leu Cys Gly Met Leu Gln Ala
   230 235 240
Gly Ser Leu Ceu Cys Phe Asp Lys Leu Val Glu Glu Gly Thr Asp Pro
      245 250 255
Ala Tyr Ala Glu Lys Leu Ile Gln Phe Gly Trp Glu Thr Ile Thr Glu
     260 265 270
Ala Leu Lys Gln Gly Gly Ile Thr Leu Met Met Asp Arg Leu Ser Asn
 275 280 285
Pro Ala Lys Leu Arg Ala Phe Ala Leu Ser Glu Gln Leu Lys Thr Ile
 290 295 300
Met Ala Pro Leu Phe Gln Lys His Met Asp Asp Ile Ile Ser Gly Glu
305 310 315
Phe Ser Ser Gly Met Met Ala Asp Trp Ala Asn Asp Asp Lys Lys Leu
      325 330 335
Leu Thr Trp Arg Glu Glu Thr Gly Lys Thr Ala Phe Glu Thr Ala Pro
        340 345
                                     350
Gln Tyr Asp Gly Lys Ile Thr Glu Gln Glu Tyr Phe Asp Lys Gly Val
                   360
                                   365
Leu Met Ile Ala Met Val Lys Ala Gly Val Glu Leu Ala Phe Glu Thr
                375
                               380
Met Val Asp Ser Gly Ile Ile Glu Glu Ser Ala Tyr Tyr Glu Ser Leu
             390
                             395
His Glu Leu Pro Leu Ile Ala Asn Thr Ile Ala Arg Lys Arg Leu Tyr
     405
                          410
Glu Met Asn Val Val Ile Ser Asp Thr Ala Glu Tyr Gly Asn Tyr Leu
                      425
                                     430
Phe Ser Tyr Ala Cys Val Pro Leu Leu Lys Glu Phe Met Thr Thr Leu
    435
                   440
                          445
Gln Ala Gly Asp Leu Gly Gln Ala Ile Ala Glu Gly Ala Val Asp Asn
 450 455
                         460
Ala Gln Leu Arg Asp Val Asn Glu Ala Ile Arg Ser His Glu Ile Glu
465 470 475
Lys Val Gly Gln Lys Leu Arg Gly Tyr Met Thr Asp Met Lys Arg Ile
        485
                         490
Ala Val Ala Glv
        500
<210> 8503
<211> 144
<212> PRT
<213> Enterobacter cloacae
<400> 8503
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Ser Leu Phe Ala Val Val Ser Val Ser Arg Asn Leu Met Gln Asn Val 70 Tyr Gly Leu Ser Ile Trp Leu Ala Leu Ser Val Leu Ser Val Ser Ile 85 90 Arg Cys Leu Ala Ala Ser Arg Arg Trp Lys Val Gln Lys Thr Thr Pro 100 105 Ser Leu Thr Ile Lys Lys Arg Arg Gly Tyr Gly Pro Phe Phe Tyr 115 120 125 Ala Ser Ile Phe Cys Arg Cys Asn Ser Ser Arg Ser Ile Ala Arg 135 <210> 8504 <211> 96 <212> PRT <213> Enterobacter cloacae <400> 8504 Leu Thr Asn Ala Gly Glu Ile Ile Met Met Gln His Gln Val Ala Val 10 Gln Ala Arg Phe Asn Pro Glu Thr Leu Glu Arg Val Leu Arg Val Val 20 30 Arg His Arg Gly Phe Gln Ile Cys Ser Val Asn Met Glu Thr Ala Thr 35 40 Asp Ala Gln Asn Ile Ser Ile Glu Leu Thr Val Ala Ser Pro Arg Pro 50 55 60 Val Asp Leu Leu Phe Ser Gln Leu Ser Lys Leu Val Asp Val Ala His 65 70 7.5 Val Ala Ile Cys Gln Ser Thr Thr Thr Ser Gln Gln Ile Arg Ala <210> 8505 <211> 314 <213> Enterobacter cloacae <400> 8505 Gln Asp Glu Lys Met Thr Thr Lys Lys Ala Asp Tyr Ile Trp Phe Asn 1.0 Gly Glu Met Val Arg Trp Glu Asp Ala Lys Val His Val Met Ser His Ala Leu His Tyr Gly Thr Ser Val Phe Glu Gly Ile Arg Cys Tyr Asp 4.0 Ser His Lys Gly Pro Val Val Phe Arg His Arg Glu His Met Gln Arg 5.5 60 Leu His Asp Ser Ala Lys Ile Tyr Arg Phe Pro Val Ser Gln Ser Val Asp Glu Leu Met Glu Ala Cys Arg Glu Val Ile Arg Gln Asn Lys Leu 85 90 Thr Ser Ala Tyr Ile Arg Pro Leu Val Phe Val Gly Asp Val Gly Met 100 105 Gly Val Asn Pro Pro Ala Gly Tyr Asn Thr Asp Val Ile Ile Ala Ala 120 Phe Pro Trp Gly Ala Tyr Leu Gly Ala Glu Ala Leu Asp Gln Gly Ile 135 140 Asp Ala Met Val Ser Ser Trp Asn Arg Val Ala Pro Asn Thr Ile Pro 150 155 Thr Ala Ala Lys Ala Gly Gly Asn Tyr Leu Ser Ser Leu Leu Val Gly 165 170 175 Ser Glu Ala Arg Arg His Gly Tyr Gln Glu Gly Ile Ala Leu Asp Val 180 185 Asn Gly Tyr Ile Ser Glu Gly Ala Gly Glu Asn Leu Phe Glu Val Lys

4282 200 205 Asp Gly Ile Leu Phe Thr Pro Pro Phe Thr Ser Ser Ala Leu Pro Gly 210 215 220 Ile Thr Arg Asp Ala Ile Ile Lys Leu Ala Lys Asp Leu Gly Ile Glu 230 235 Val Arg Glu Gln Val Leu Ser Arg Glu Ser Leu Tyr Leu Ala Asp Glu 245 250 255 Val Phe Met Ser Gly Thr Ala Ala Glu Ile Thr Pro Val Arg Ser Val 260 265 270 Asp Gly Ile Gln Val Gly Glu Gly Arg Cys Gly Pro Val Thr Lys Arg 275 280 285 Ile Gln Gln Ala Phe Phe Gly Leu Phe Thr Gly Glu Thr Glu Asp Lys 290 295 Tyr Gly Trp Leu Asp Gln Val Asn His <210> 8506 <211> 618 <212> PRT <213> Enterobacter cloacae <400> 8506 Ser Met Pro Lys Tyr Arg Ser Ala Thr Thr Thr His Gly Arg Asn Met 10 Ala Gly Ala Arg Ala Leu Trp Arg Ala Thr Gly Met Thr Asp Ala Asp 25 3.0 Phe Gly Lys Pro Ile Ile Ala Val Val Asn Ser Phe Thr Gln Phe Val 4.5 35 40 Pro Gly His Val His Leu Arg Asp Leu Gly Lys Leu Val Ala Glu Gln 60 55 Ile Glu Ala Ser Gly Gly Val Ala Lys Glu Phe Asn Thr Ile Ala Val 75 70 Asp Asp Gly Ile Ala Met Gly His Gly Gly Met Leu Tyr Ser Leu Pro 85 90 95 Ser Arg Glu Leu Ile Ala Asp Ser Val Glu Tyr Met Val Asn Ala His 100 105 110 Cys Ala Asp Ala Met Val Cys Ile Ser Asn Cys Asp Lys Ile Thr Pro 115 120 Gly Met Leu Met Ala Ser Leu Arg Leu Asn Ile Pro Val Ile Phe Val 135 140 Ser Gly Gly Pro Met Glu Ala Gly Lys Thr Lys Leu Ser Asp Lys Ile 150 155 Ile Lys Leu Asp Leu Val Asp Ala Met Ile Gln Gly Ala Asp Pro Lys 165 170 175 Val Ser Asp Glu Gln Ser Asp Gln Val Glu Arg Ser Ala Cys Pro Thr 180 190 Cys Gly Ser Cys Ser Gly Met Phe Thr Ala Asn Ser Met Asn Cys Leu 195 200 205 Thr Glu Ala Leu Gly Leu Ser Gln Pro Gly Asn Gly Ser Leu Leu Ala 215 220 Thr His Ala Asp Arg Lys Gln Leu Phe Leu Asn Ala Gly Lys Arg Ile 230 235 Val Glu Leu Thr Lys Arg Tyr Tyr Glu Gln Asp Asp Ala Ser Ala Leu 245 250 255 Pro Arg Asn Ile Ala Ser Lys Ala Ala Phe Glu Asn Ala Met Thr Leu 260 265 Asp Ile Ala Met Gly Gly Ser Thr Asn Thr Val Leu His Leu Leu Ala 280 285 Ala Ala Gln Glu Ala Glu Ile Asp Phe Thr Met Ser Asp Ile Asp Lys 300 295

Leu Ser Arg Lys Val Pro Gln Leu Cys Lys Val Ala Pro Ser Thr Gln

```
310
Lys Tyr His Met Glu Asp Val His Arg Ala Gly Gly Val Ile Gly Ile
           325
                    330
                                           335
Leu Gly Glu Leu Asp Arg Ala Gly Leu Leu Asn Arg Asp Val Lys Asn
         340
              345
                             350
Val Leu Gly Leu Thr Leu Pro Glu Ser Leu Glu Gln Tyr Asp Val Met
     355 360 365
Leu Thr Lys Asp Asp Ala Val Lys Asn Met Tyr Arg Ala Gly Pro Ala
 370 375 380
Gly Ile Arg Thr Thr Gln Ala Phe Ser Gln Asp Cys Arg Trp Asp Thr
   390 395 400
Leu Asp Asp Asp Arg Ala Glu Gly Cys Ile Arg Ser Leu Glu His Ala
         405 410 415
Tyr Ser Lys Asp Gly Gly Leu Ala Val Leu Tyr Gly Asn Phe Ala Glu
        420 425 430
Asn Gly Cys Ile Val Lys Tnr Ala Gly Val Asp Asp Ser Ile Leu Lys
     435 440 445
Phe Thr Gly Pro Ala Lys Val Tyr Glu Ser Gln Asp Glu Ala Val Asp
       455 460
Ala Ile Leu Gly Gly Lys Val Val Glu Gly Asp Val Val Val Ile Arg
465 470 475 480
Tyr Glu Gly Pro Lys Gly Gly Pro Gly Met Gln Glu Met Leu Tyr Pro
          485 490 495
Thr Thr Phe Leu Lys Ser Met Gly Leu Gly Lys Ala Cys Ala Leu Ile
       500 505 510
Thr Asp Gly Arg Phe Ser Gly Gly Thr Ser Gly Leu Ser Ile Gly His
515 520 525
Val Ser Pro Glu Ala Ala Ser Gly Gly Asn Ile Ala Ile Ile Glu Asp
530
                  535
                                  540
Gly Asp Leu Ile Glu Ile Asp Ile Pro Asn Arg Gly Ile Gln Leu Lys
545 550 555
Leu Ser Asp Gln Glu Ile Ala Ala Arg Arg Glu Ala Gln Glu Ala Arg
         565 570
Gly Asp Lys Ala Trp Thr Pro Lys Asp Arg Gln Arg Glu Val Ser Phe
      580 585 590
Ala Leu Arg Ala Tyr Ala Ser Leu Ala Thr Ser Ala Asp Lys Gly Ala
    595 600
Val Arg Asp Lys Ser Lys Leu Gly Gly
  610
                  615
<210> 8507
<211> 142
<212> PRT
<213> Enterobacter cloacae
<400> 8507
Pro Gly Arg Cys Pro Ala Thr Arg Gly Val Leu Ala Pro Met Gly Ser
                            10
Cys Phe Leu Thr Met Cys Pro Ala Ser Leu Met Gly Cys Phe Ser Ser
  20
                         25
Ala Arg Ala Leu Pro Ala Ile Ala Asp Ala Val Lys Gly Asp Ile Ala
                     40
Ile Leu Ala Asp Ser Gly Ile Arg Asn Gly Leu Asp Val Val Arg Met
 50
                  55
Ile Ala Leu Gly Ala Asp Ser Val Leu Leu Gly Arg Ala Tyr Leu Tyr
               70
                              75
Ala Leu Ala Thr Ser Gly Gln Ala Gly Val Ala Asn Leu Leu Asn Leu
           8.5
                           90
Ile Glu Lys Glu Met Lys Val Ala Met Thr Leu Thr Gly Ala Lys Ser
```

100 105 110 Ile Ser Glu Ile Asn Lys Asp Ser Leu Val Gln Glu Leu Ser Lys Leu

115 120 Pro Ala Ala Leu Ala Pro Leu Ser Gln Gly Asn Ala Ala 130 135 <210> 8508 <211> 476

<212> PRT <213> Enterobacter cloacae

<400> 8508 Glu Asn Leu Thr His Pro Ala Pro Pro Gin Leu Tyr Arg Gln Ala Asn -5 10 Thr Arg Thr Gln Lys Gln His His Ile Gly Gly Glu Arg Met Thr Tyr 20 25 Ser Gly Arg Val Asp Ile Gln Gln Val Ile Asp Glu Ser Pro Phe Ser 35 4.0 Gly Phe His Trp Leu Leu Ile Val Leu Gly Phe Leu Val Leu Ala Ile 50 55 Asp Gly Phe Asp Thr Ala Ala Met Gly Tyr Ile Ala Pro Thr Leu Ser 70 75 Thr Glu Trp Gly Ile His Lys Gln Asp Leu Gly Pro Val Leu Ser Ala 85 90 Ala Leu Leu Gly Leu Ser Leu Gly Ala Leu Ile Ala Gly Pro Val Ser 100 105 110 Asp Arg Met Gly Arg Lys Arg Val Leu Val Phe Ser Cys Leu Phe Phe 115 120 125 Gly Leu Ala Ser Leu Gly Thr Ala Trp Ala Gln Ser Leu Asn Thr Leu 130 135 140 Thr Leu Trp Arg Phe Leu Thr Gly Leu Gly Leu Gly Ala Ala Met Pro 145 150 155 Asn Ala Ile Thr Leu Ile Ser Glu Phe Ala Pro Gln Arg Cys Arg Ala 165 170 Met Ala Ile Asn Thr Met Tyr Cys Gly Phe Pro Leu Gly Ala Ala Gly 180 185 190 Gly Gly Ala Ile Ser Ser Trp Leu Ile Pro His His Gly Trp Arg Ser 195 200 205 Val Leu Leu Thr Gly Ala Ile Ala Pro Leu Ile Leu Thr Val Leu Leu 210 215 220 Ala Leu Leu Pro Glu Ser Val Lys Phe Leu Val Gln Arg Gly Lys 225 230 235 Asp Ile Ala Gln Val Arg Arg Ile Ala Ser Arg Phe Ala Arg Ser Thr 245 250 Leu Asp Ser Val Thr Gly Phe Phe Leu Thr Glu Glu Lys Val Ala Ser 265 270 Lys Lys Gly Ser Val Ser Gln Leu Phe Ser Met Pro Trp Leu Pro Gly 280 Thr Leu Met Leu Trp Val Thr Tyr Phe Met Gly Leu Val Ile Tyr Tyr 290 295 300 Val Leu Leu Ser Trp Met Pro Thr Leu Met Gln Gly Met Gly Tyr Ala 310 315 Leu Ala Glu Ser Ala Trp Leu Thr Ser Leu Phe Thr Phe Gly Gly Thr 325 330 335 Ala Gly Ile Leu Leu Ala Gly Trp Met Met Asp Arg Trp Glu Ala His 340 345 350 Lys Val Val Ala Cys Gly Phe Val Leu Thr Met Gly Leu Ile Leu Leu 355 360 365 Leu Gly Ile Glu His Asn His Ile Ala Leu Phe Gly Gly Leu Ile Phe 370 375 380 Leu Met Gly Ile Ala Met Asn Gly Ala Gln Ser Gly Met Gln Thr Leu

395 Ala Ala Thr Phe Tyr Pro Thr Glu Cys Arg Ala Thr Gly Ile Ala Trp

405 410 Met Gln Gly Ile Gly Arg Phe Gly Gly Val Ala Gly Thr Met Thr Ser 420 425 Ala Gln Leu Leu Ser Met Gln Trp Gln Ala Asp Ser Ile Leu Met Ile 435 440 445 Leu Ser Val Pro Ala Leu Val Ala Ala Ala Ala Thr Val Tyr Lys Met 450 455 460 Leu Tyr Ser Arg Ala Gln Glu Pro Gly Val Ala 470 <210> 8509 <211> 161 <212> PRT <213> Enterobacter cloacae <400> 8509 Gly Gly Ser Met Leu Asn Ile Val Leu Phe Glu Pro Glu Ile Pro Pro 1.0 Asn Thr Gly Asn Ile Ile Arg Leu Cys Ala Asn Thr Gly Phe Arg Leu 20 25 His Ile Ile Glu Pro Met Gly Phe Thr Trp Asp Asp Lys Arg Leu Arg 40 Arg Ala Gly Leu Asp Tyr His Glu Phe Thr Ala Val Val Arg His His 55 60 Asp Tyr Ala Ala Phe Leu Asp Ala Glu Lys Pro Gln Arg Met Phe Ala 75 7.0 Leu Thr Thr Lys Gly Thr Pro Ala His Ser Ala Val Ser Tyr Gln Asp 85 90 Gly Asp Tyr Leu Met Phe Gly Pro Glu Thr Arg Gly Leu Pro Ala Thr 100 105 110 Ile Leu Asp Ala Leu Pro Ala Glu Gln Lys Ile Arg Ile Pro Met Met 115 120 Pro Asp Ser Arg Ser Met Asn Leu Ser Asn Ala Val Ser Val Val Val 130 135 140

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<210> 8510
<211> 285
<212> PRT
<213> Enterobacter cloacae
<400> 8510
Ile Ile Thr Thr Asn Asn Phe Ala Glu Lys Asp Val Asp Thr Glu Leu
Leu Lys Thr Phe Leu Glu Val Ser Arg Thr Arg His Phe Gly Arg Ala
           20
                              25
                                                  3.0
Ala Glu Ala Leu Tyr Leu Thr Glr Ser Ala Val Ser Phe Arg Ile Arg
      3.5
                           40
                                              45
Gln Leu Glu Asn Gln Leu Gly Val Asn Leu Phe Thr Arg His Arg Asn
                      55
Asn Ile Arg Leu Thr Pro Ala Gly Glu Lys Leu Leu Pro Tyr Ala Glu
                   70
Thr Leu Met Asn Thr Trp Gln Ala Ala Arg Lys Glu Val Ala His Thr
            8.5
Ser Arg His Asn Glu Phe Ser Ile Gly Ala Ser Ala Ser Leu Trp Glu
                             105 110
```

Cys Met Leu Ser Gln Trp Leu Met Arg Leu Tyr Arg Ser His Asn His

120

Tyr Glu Ala Trp Arg Gln Leu Gly Tyr Pro Gly Ala Ile Leu Arg Ser

155

150

```
Leu Gln Phe Glu Ala Arg Ile Ala Gln Arg Gln Ser Leu Val Lys Gln
                   135
                         140
Leu His Glu Arg Gln Leu Asp Leu Leu Ile Thr Thr Glu Ala Pro Lys
            150
                             155 160
Met Asp Glu Phe Ser Ser Gln Ile Val Gly Gln Phe Ser Leu Ala Leu
         165 170 175
Tyr Ala Ser Glu Pro Ala Met Met Lys Ala Asp Leu Asn Tyr Leu Arg
       180 185 190
Leu Glu Trp Gly Pro Asp Phe Gln Gln His Glu Thr Gly Leu Ile Ala
 195 200 205
Ser Asp Asp Ile Pro Gln Leu Thr Thr Ser Ser Ala Glu Ile Ala Cys
210 215 220
Gln His Leu Pro Ala Leu Lys Gly Cys Thr Trp Leu Pro Val Arg Trp
225 230 235
Ala Asp Asn Lys Pro Ala Leu His Val Val Thr Asp Ser Thr Thr Leu
      245 250 255
Ser Arg Pro Leu Tyr Ala Ile Trp Leu Gln Asn Ser Asp Lys Gln Ser
       260 265
Gln Ile Lys Asp Leu Leu Lys Thr Ser Ile Leu Asp
                      280
<210> 8511
<211> 303
<212> PRT
<213> Enterobacter cloacae
<400> 8511
Lys Glu Gly Val Glu Ser Val Asp Leu Arg Asp Leu Lys Met Phe Leu
                          10
His Leu Ala Glu Ser Arg His Phe Gly Arg Ser Ala Arg Ala Met His
                        25
                                         3.0
Val Ser Pro Ser Thr Leu Ser Arg Gln Ile Gln Arg Leu Glu Glu Asp
                   4.0
                                      4.5
Leu Gly Gln Pro Leu Phe Val Arg Asp Asn Arg Thr Val Thr Leu Thr
                  55
                                  60
Glu Ala Gly Glu Glu Leu Arg Ile Phe Ala Gln Gln Thr Leu Leu Gln
                    75
         70
                                               8.0
Tyr Gln Gln Leu Arg His Thr Ile Asp Gln Gln Gly Pro Ser Leu Ser
           8.5
                           90
Gly Glu Leu His Ile Phe Cys Ser Val Thr Ala Ala Tyr Ser His Leu
       100 105
                                        110
Pro Pro Ile Leu Asp Arg Phe Arg Ala Glu His Pro Ser Val Glu Ile
                      120
Lys Leu Thr Thr Gly Asp Ala Ala Asp Ala Met Glu Lys Val Val Thr
      135
                                   140
Gly Glu Ala Asp Leu Ala Ile Ala Gly Lys Pro Glu Thr Leu Pro Gly
145
    150
                               155
Ala Val Ala Phe Ser Met Leu Glu Asn Leu Ala Val Val Leu Ile Ala
            165 170
Pro Ala Leu Pro Cys Pro Val Arg Asn Gln Val Ser Val Glu Lys Pro
      180
                         185
                                         190
Asp Trp Ser Thr Val Pro Phe Ile Met Ala Asp Gln Gly Pro Val Arg
      195
         200 205
Arg Arg Ile Glu Leu Trp Phe Arg Arg Gln Lys Ile Ser Asn Pro Ser
  210
                  215
                                  220
Ile Tyr Ala Thr Val Gly Gly His Glu Ala Met Val Ser Met Val Ala
            230
                               235
Leu Gly Cys Gly Val Ala Leu Leu Pro Glu Val Val Leu Glu Asn Ser
            245 250
Pro Glu Pro Val Arg Asn Arg Val Met Ile Leu Glu Arg Ser Asp Glu
                         265
```

```
Lys Thr Pro Phe Glu Leu Gly Val Cys Ala Gln Lys Lys Arg Leu His
                          280
                                             285
Glu Pro Leu Ile Asp Ala Phe Trp Thr Ile Leu Pro Asn His
   290
            295
                                         300
<210> 8512
<211> 76
<212> PRT
<213> Enterobacter cloacae
<400> 8512
Leu Lys Arg Pro Trp Ser Asp Ile Arg Glu Leu Met Gly Arg Pro Gly
                                  10
Cys Asp Ser Lys Asp Thr Leu Thr Arg Lys Met Pro Arg Asp Ala Trp
           20
                              25
Arg Phe Gly Ala Asp Gly Ile Val Phe Ser Asn His Val Pro Arg Gln
     35
                       40
                                       4.5
Leu Asp Gly Val Phe Phe Leu Arg Pro Arg Pro Ala Gly His Cys Arg
            5.5
Cys Gly Glu Arg Arg Tyr Cys Asp Pro Gly Arg
<210> 8513
<211> 517
<212> PRT
<213> Enterobacter cloacae
<400> 8513
Cys Trp His Ser His Arg Gln Gly Gly Leu Met Ser Leu Ser Val Val
                                  10
Tyr Thr Arg Ala Ala Ile Gly Val Lys Ala Pro Leu Ile Ser Val Glu
          20
                               25
                                                  30
Val His Leu Ser Asn Gly Leu Pro Gly Leu Thr Leu Val Gly Leu Pro
                          4.0
                                             45
Glu Thr Thr Val Lys Glu Ala Arg Asp Arg Val Arg Ser Ala Ile Ile
                      55
                                          60
Asn Ser Gly Tyr Ala Phe Pro Ala Lys Lys Ile Thr Ile Asn Leu Ala
                  7.0
                                      75
Pro Ala Asp Leu Pro Lys Glu Gly Gly Arg Tyr Asp Leu Pro Ile Ala
              85
                                  90
Ile Ala Leu Leu Ala Ala Ser Glu Gln Leu Asn Thr Pro Gly Leu Ser
           100
                              105
Ser Cys Glu Phe Val Gly Glu Leu Ala Leu Thr Gly Ala Leu Arg Gly
                          120
       115
Val Pro Gly Ala Ile Ser Gly Ala Leu Glu Ala Ile Arg Ala Gly Arg
  130
                      135
                                          140
Gln Ile Ile Val Ala Asn Glu Asn Ala Ser Glu Val Ser Leu Ile Ala
                   150
                                      155
                                                         160
Glu Lys Gly Cys Leu Val Ala Gly His Leu Gln Glu Val Cys Ala Trp
               165
                                  170
Leu Glu Gly Arg His Glu Leu Ala Glu Pro Gln Glu Asn Asp Glu Val
           180
                              185
                                                 190
Ala Pro Asp Ser Pro Glu Asp Leu Ser Asp Ile Met Gly Gln Glu Gln
       195
                          200
                                              205
Gly Lys Arg Ala Leu Glu Ile Tor Ala Ala Gly Gly His Asn Leu Leu
                       215
                                         220
Leu Ile Gly Pro Pro Gly Thr Gly Lys Thr Met Leu Ala Ser Arg Leu
                  230
                                     235
Ser Gly Leu Leu Pro Pro Leu Asn Asn His Glu Ala Leu Glu Ser Ala
              245
                                 250
Ala Ile Phe Ser Leu Val Ser Ser Thr Ser Leu His Lys Gln Trp Arg
```

```
260
                         265
Arg Arg Pro Phe Arg Ser Pro His His Ser Ala Ser Leu Thr Ala Met
                     280
                                    285
Val Gly Gly Ser Ile Pro Gly Pro Gly Glu Ile Ser Leu Ala His
                  295
                          300
Asn Gly Ile Leu Phe Leu Asp Glu Leu Pro Glu Phe Glu Arg Arg Val
                   315 320
         310
Leu Asp Ala Leu Arg Glu Pro Ile Glu Ser Gly Glu Ile His Leu Ser
       325
                   330 335
Arg Thr Arg Ala Lys Ile Ser Tyr Pro Ala Gln Phe Gln Leu Val Ala
       340
            345 350
Ala Met Asn Pro Ser Pro Thr Gly His Tyr Gln Gly Asn His Asn Arg
     355 360 365
Cys Thr Pro Glu Gln Thr Leu Arg Tyr Leu Ser Lys Leu Ser Gly Pro
 370 375 380
Phe Leu Asp Arg Phe Asp Leu Ser Leu Glu Ile Pro Leu Pro Pro Pro
385 390 395 400
Gly Leu Leu Arg Gln Thr Gly Ile Lys Gly Glu Ser Ser Ala Thr Val
      405 410 415
Arg Glu Arg Val Ile Ala Ala Gln Ala Arg Gln Tyr Val Arg Gln Asn
 420 425
Arg Leu Asn Ala Arg Leu Asp Asn Ser Gly Ile Arg Gln Phe Cys Ser
435 440 445
Leu Asn Ala Glu Asp Ala Gly Trp Leu Glu Glu Thr Leu Thr Arg Phe
450 455 460
Gly Leu Ser Ile Arg Ala Trp Gln Arg Leu Leu Lys Val Ala Arg Thr
465 470
                            475
Val Ala Asp Val Glu Gly Cys Pro Gly Ile Glu Arg Arg His Leu Gln
        485 490 495
Glu Ala Leu Ser Tyr Arg Ala Ile Asp Arg Leu Leu His Leu Gln
 500
                       505
Lys Met Leu Ala
515
<210> 8514
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 8514
Glu Ser Gly Pro Cys Leu Ser Ser Ser Val Ala Gly His Pro Leu Arg
                         10
Pro Ala Arg Asp Arg Leu Gly Glu Pro Leu Pro His Leu Leu Ala
                                       30
Asn Pro Ile Trp Ala His Pro Met Ala Arg Gly Pro Lys Val Pro Leu
            4.0
                           4.5
Phe Gly Leu Ala Thr Leu Cys Gly Ile Ser Tyr Arg Phe Gln
 50
<210> 8515
<211> 496
<212> PRT
<213> Enterobacter cloacae
<400> 8515
Gln Leu Ala Lys Ser Ser Leu Phe Leu Leu Leu Ile Tyr Thr Val Ser
                        10
Asn Lys Glu Asn Leu Met Lys Lys Tyr Gln Arg Leu Ala Gln Gln Ile
                      25
                                  30
Ile Ser Gln Ile Glu Leu Gly Val Trp Leu Pro Gly Asp Lys Leu Pro
                    4.0
                                    4.5
```

Ser Leu Arg Glu Gln Val Ala Gly Ser Gly Met Ser Phe Met Thr Val 55 Gly His Ala Tyr Gln Met Leu Glu Ser Gln Gly Arg Ile Val Ala Arg 70 75 Pro Gln Ser Gly Tyr Tyr Val Ala Ala Arg Pro Thr Thr His Gln Pro 90 Ala Pro Pro Ala Gln Val Met Arg Asp Glu Val Val Asp Ile Asn Thr 105 100 Tyr Ile Phe Asp Val Leu Gln Ala Ser Arg Asp Pro Ser Val Val Pro 120 125 115 Phe Ala Ser Ala Phe Pro Asp Pro Arg Leu Phe Pro Leu Gln Gln Leu 130 135 140 Asn Arg Ser Leu Ala Asn Val Ser Lys Thr Ala Thr Ala Met Ser Val 150 155 160 Ile Glu Asn Leu Pro Pro Gly Asn Val Asp Leu Arg His Ala Ile Ala 165 170 175 Arg Arg Tyr Ala Gln Gln Gly Met Asn Ile Ser Pro Asp Glu Ile Val 180 185 190 Ile Thr Ala Gly Ala Leu Glu Ala Leu Asn Leu Ser Leu Gln Ala Val 195 200 205 Thr Glu Pro Gly Asp Trp Val Ile Val Glu Asn Pro Cys Phe Tyr Gly 210 215 220 Ala Leu Gln Ala Leu Glu Arg Leu Lys Leu Lys Ala Leu Ser Val Ala 225 230 235 Thr Asp Val Arg Glu Gly Ile Asp Leu Ser Ala Leu Glu Gln Ala Leu 245 250 255 Asn Asp Tyr Pro Val Lys Ala Cys Trp Leu Met Thr Asn Ser Gln Asn 260 265 Pro Leu Gly Phe Thr Leu Ser Ala Glu Lys Lys Ala Gln Leu Val Ala 275 280 285 Leu Leu Thr Arg His Asn Val Thr Leu Ile Glu Asp Asp Val Tyr Ser 290 295 300 Glu Leu Tyr Phe Gly Arg Glu Lys Pro Leu Pro Ala Lys Ala Trp Asp 305 310 315Lys Gln Asp Met Thr Leu His Cys Ser Ser Phe Ser Lys Cys Leu Val 325 330 335 Ala Gly Phe Arg Ile Gly Trp Val Thr Ala Gly Lys His Ala Arg Arg 340 345 350 Ile Gln Gln Leu Gln Leu Met Ser Thr Leu Ser Thr Ser Ser Pro Met 355 360 365 Gln Leu Ala Leu Val Asp Tyr Leu Ala Thr Lys Arg Tyr Asp Ala His 375 380 Leu Arg Arg Leu Arg Arg Thr Leu Ala Glu Arg Lys Gln Gln Ala Trp 390 395 Gln Ser Leu Leu Arg His Met Pro Ala Gly Val Lys Ile His His Asn 405 410 Asp Ser Gly Tyr Phe Leu Trp Leu Glu Leu Pro Glu Gln Leu Asp Ala 420 425 430 Gly Arg Leu Ser Glu Lys Ala Leu Ile His Gln Ile Ser Ile Ala Pro 435 440 445 Gly Lys Met Phe Ser Thr Ser Asn Ile Trp Thr Pro Phe Phe Arg Phe 450 455 460 Asn Thr Ser Trp Gly Trp Gly Glu Arg Glu Glu Gln Ala Val Val Gln 465 470 475 480 Leu Ala Gly Leu Ile Arg Glu Met Met Leu His Pro Val Thr Pro 485 490

<210> 8516 <211> 89

<211> 89 <212> PRT

<213> Enterobacter cloacae

```
<400> 8516
Tyr Leu Ser Gly Tyr Asp Val Thr Lys Lys Leu Asp Leu Cys Gln His
Met Thr His Ile Ala Cys Gly Tyr Phe Ser Ala Gln Val Asn Arg Met
                         25
        2.0
Thr Leu Tyr Gln Lys Met Leu Val Phe Tyr Ala Ile Met Ala Ser Ile
                   40
                                 4.5
Cys Ala Leu Ile Thr Trp Phe Leu Ser Lys Asp Arg Lys Arg Ile Arg
                        - 60
                   5.5
Leu Leu Ser Ala Phe Leu Val Gly Ser Thr Trp Pro Met Ser Phe Pro
65 70
                     75
Val Ala Leu Leu Ile Ser Leu Phe
   85
<210> 8517
<211> 278
<212> PRT
<213> Enterobacter cloacae
<400> 8517
Leu Pro Cys Gln Leu Val Lys Arg Gly Asp His Gln Gln Gln Pro Leu
Arg Arg Arg Lys Arg Gly Arg Glr Gly Thr Gly Leu Gln Arg Thr Met
        20
                        2.5
                                         30
Tyr Gly Gly Asn Gly Pro Gly Phe Gly Leu His Leu Asn Asn Pro Arg
    35
                 40
                                      4.5
Asp Ile Ala Pro Asp Val Phe Tyr Pro Ile Thr Ser Pro Gly Val Ser
Leu Phe Ser His Arg Gly Ala Gly Ser Asp Gly Val Asp Gly Asp His
               70
                              75
Phe Ala Gly Thr Lys Arg Asn Arg Asp Cys Thr Ile Ala Val Asn
           8.5
                            90
Ser Leu His Arg Thr Thr Pro Leu His Cys Ala Lys Arg Gly Val Cys
        100
                        105
                                           110
Lys Thr Thr Thr Asp Pro Glu Tyr Tyr Leu Cys Ile Leu Ala Lys Leu
                      120
                                    125
Arg Phe Tyr Asp Phe Arg Phe Cys Val Leu Gly Met Arg Cys Ile Asn
       135 140
Asp Ser Lys Ala Ile Arg Val Lys Lys Leu Arg Glu Ile Val Thr Arg
             150 155 160
Ala His Asn Tyr Ala His Pro Leu Ser Thr Met Arg Arg Val Met Pro
             165 170
Ile Met His Arg Phe Arg Val Asn Tyr Gly Glu Glu Gly Met Arg Ser
       180 185
                                          190
Ala Phe Trp Val Gly Cys Ala Ala Leu Leu Leu Ser Ala Cys Ser Asn
     195
                    200 205
Glu Pro Val Gln Gln Ala Thr Ala Ala His Val Thr Pro Gly Met Arg
                   215
 210
                                    220
Ala Ala Met Ser Ser Ser Gly Gln Ala Asn Cys Ala Met Ile Gly Gly
             230
                    235
                                                  240
Ser Leu Ser Val Ala Arg Gln Leu Asp Gly Ser Ala Ile Gly Met Cys
            245
                             250
Ala Leu Pro Asn Gly Lys Arg Cys Ser Glu Gln Ser Leu Ala Val Gly
                          265
         260
Ser Cys Gly Ser Tyr
      275
```

<210> 8518 <211> 487 <212> PRT

<213> Enterobacter cloacae

<400> 8518 Gln Arg Lys Gln Cys Arg Phe Gln Gln Asp Asn Ala Met Gln Asn Gln 1.0 Leu Leu Ile Asn Gly Glu Leu Val Ala Gly Glu Gly Glu Lys Gln Ala 25 Val Tyr Asn Pro Ala Thr Gly Asp Val Leu Leu Glu Ile Ala Glu Ala 35 40 Ser Glu Ala Gln Val Asp Ala Ala Val Gln Ala Ala Asp Arg Ala Phe 55 60 Thr Glu Trp Gly Gln Thr Thr Pro Lys Thr Arg Ala Glu Cys Leu Leu 70 75 Lys Leu Ala Asp Val Ile Glu Ala Asn Ala Asp Ala Phe Ala Asn Leu 8.5 90 Glu Ser Leu Asn Cys Gly Lys Pro Leu His Cys Val Gln Gly Asp Glu 100 105 110 Ile Pro Ala Val Val Asp Val Phe Arg Phe Phe Ala Gly Ala Ala Arg 115 120 125 Cys Leu Asn Gly Leu Ala Ala Gly Glu Tyr Leu Glu Gly His Thr Ser 130 135 140 Met Ile Arg Arg Asp Pro Val Gly Val Val Ala Ser Ile Ala Pro Trp 145 150 155 Asn Tyr Pro Leu Met Met Ala Ala Trp Lys Leu Ala Pro Ala Leu Ala 165 170 Ala Gly Asn Cys Val Val Ile Lys Pro Ser Glu Ile Thr Pro Leu Thr 180 185 190 Ala Leu Lys Leu Ala Glu Leu Ala Lys Asp Ile Phe Pro Pro Gly Val 195 200 205 Leu Asn Val Leu Phe Gly Arg Gly Lys Thr Val Gly Asp Pro Leu Thr 215 220 Gly His Glu Lys Val Arg Met Val Ser Leu Thr Gly Ser Ile Ala Thr 225 230 235 Gly Glu His Ile Ile Gly His Thr Ala Ser Ser Val Lys Arg Thr His 245 250 Met Glu Leu Gly Gly Lys Ala Pro Val Ile Val Phe Asp Asp Ala Asp 265 260 270 Leu Asp Ala Val Val Glu Gly Val Arg Thr Phe Gly Phe Tyr Asn Ala 275 280 285 Gly Gln Asp Cys Thr Ala Ala Cys Arg Ile Tyr Ala Gln Lys Gly Ile 295 300 Tyr Pro Ala Leu Val Glu Lys Leu Gly Ala Ala Val Ala Ser Leu Lys 310 315 Met Gly Ala Pro Asp Asp Ala Ser Thr Glu Leu Gly Pro Leu Ser Ser 325 330 Ala Ala His Leu Ser Arg Val Cys Ala Ala Val Asp Glu Ala Lys Thr 340 345 Leu Gly His Ile Arg Val Val Thr Gly Gly Ser Lys Lys Glu Gly Ala 355 360 365 Gly Tyr Tyr Phe Gln Pro Thr Leu Leu Ala Gly Ala Lys Gln Glu Asp 375 380 Ala Ile Val Gln Arg Glu Val Phe Gly Pro Val Val Ser Val Thr Glu 390 395 400 Phe Glu Asp Glu Ala Gln Val Leu Asn Trp Ala Asn Asp Ser Gln Tyr 405 410 415 Gly Leu Ala Ser Ser Val Trp Thr Lys Asp Val Gly Arg Ala His Arg 420 425 Leu Ser Ala Arg Leu Gln Tyr Gly Cys Thr Trp Val Asn Thr His Phe 440 445 Met Leu Val Ser Glu Met Pro His Gly Gly Met Lys Leu Ser Gly Tyr 455

```
Gly Lys Asp Met Ser Val Tyr Gly Leu Glu Asp Tyr Thr Val Val Arg
465 470
His Val Met Phe Lys His
            485
<210> 8519
<211> 81
<212> PRT
<213> Enterobacter cloacae
<400> 8519
Gly Val Thr Met Ser His Leu Asn Lys Val Ile Ala Arg Val Asp Ala
                              1.0
Thr Ile Glu Glu Ser Val Ile Thr His Met Ash Glu Leu Leu Ile Glu
        20
                         25
Leu Ser Asp Asp Ala Glu Leu Ser Arg Glu Asp Arg Tyr Thr Gln Gln
    35
                     4.0
Gln Arg Leu Arg Thr Ala Ile Ala His His Gly Lys Gln His Lys Glu
               55
Glu Ala Glu Ala Arg His Ala His Leu Thr Gln Gly Gly Thr Ile Leu
<210> 8520
<211> 195
<212> PRT
<213> Enterobacter cloacae
<400> 8520
Tyr Asp Val Met Asn Thr Met Thr Asp Asn Met Asn Gln Arg Ile Ser
1 5
Ala Arg Ile Arg Leu Glu Arg Glu Ser Arg Gly Trp Ser Leu Ser Glu
 20
                           25
                                             30
Leu Ala Glu Arg Ala Gly Ile Ser Arg Ala Met Ile His Lys Ile Glu
 35
                     40
                                         4.5
Arg Gly Asp Ser Ser Pro Thr Ala Thr Leu Leu Ala Arg Leu Ser Gly
 50
                   55
                                     60
Ala Phe Gly Ile Ser Met Ser Thr Leu Ile Ala Arg Ala Glu Met Gln
                 70
                                  75
Glu Gly Lys Leu Leu Arg Leu Ala Asn Gln Pro Val Trp Arg Asp Pro 85 \\ 90 \\ 95
Gln Thr His Tyr Leu Arg Arg His Val Ser Pro Arg Thr Asp Met Pro
         100 105 110
Ile Asp Leu Val Gln Val Glu Leu Pro Ala Gly Ser Asp Val Pro Met
     115 120
                                         125
Pro Ala Ser Ser Tyr Ala Leu Ala Arg Gln Leu Ile Trp Leu Gln Ala
                    135
                                      140
Gly Glu Leu Val Phe Leu Glu Gly Asp Thr Arg His Glu Met Lys Ala
                 150
                                  155
Gly Asp Cys Leu Glu Leu Gly Pro Pro Asn Asp Cys Arg Phe Ile Asn
             165 170
Glu Thr Asp Glu Ser Cys Leu Tyr Leu Val Val Arg Leu Asn Gln Ser
         180
                           185
Gly Ser
<210> 8521
<211> 367
<212> PRT
<213> Enterobacter cloacae
```

```
<400> 8521
Cys Lys Gly Asp Pro Gln Asp Asn Val Pro Asp Leu Asn Asp Ile Phe
Ser Ser Lys Glu Arg Arg Met Asn Gln Ser Thr Thr Gln Asn Arg Arg
                        25
Trp Val Leu Ala Ser Arg Pro His Gly Ala Pro Val Ala Glu Asn Phe
                     40
                                    4.5
Arg Leu Glu Glu Gln Pro Ile Pro Thr Pro Ala Glu Gly Gln Val Leu
                  55
                                 60
Leu Arg Thr Val Trp Leu Ser Leu Asp Pro Tyr Met Arg Gly Arg Met
              70 75
Ser Asp Ala Pro Ser Tyr Ser Pro Pro Val Glu Ile Gly Ala Val Met
           85
                90
Val Gly Gly Thr Val Ser Arg Val Glu Thr Ser Arg His Pro Asp Tyr
        100
                       105 110
Lys Glu Gly Glu Trp Val Leu Gly Tyr Ser Gly Trp Gln Glu Tyr Glu
     115 120 125
Leu Ser Asp Gly Gln Gly Leu Val Lys Leu Gly Glu Asn Pro Ser His
 130
                 135 140
Pro Ser Trp Ala Leu Gly Val Leu Gly Met Pro Gly Phe Thr Ala Tyr
145 150 155 160
Met Gly Leu Leu Asp Ile Gly Gln Pro Gln Ala Gly Glu Thr Leu Val
      165 170 175
Val Ala Ala Ala Thr Gly Pro Val Gly Ala Thr Val Gly Gln Ile Gly
        180 185 190
Lys Ile Lys Gly Cys Arg Val Ile Gly Val Ala Gly Gly Glu Glu Lys
195 200
Cys Arg His Ala Val Asp Val Leu Gly Phe Asp Ala Cys Leu Asp His
210 215 220
His Ala Asp Asp Phe Ala Glu Gln Leu Ala Lys Ala Cys Pro Gln Gly
225 230
                              235
Ile Asp Val Tyr Tyr Glu Asn Val Gly Gly Lys Val Phe Asp Ala Val
     245 250 255
Leu Pro Leu Leu Asn Thr Ser Ala Arg Val Pro Val Cys Gly Leu Val
   260 265 270
Ser Gly Tyr Asn Ala Thr Asn Leu Pro Glu Gly Pro Asp Arg Leu Pro
                    280 285
    275
Leu Leu Met Gly Thr Ile Leu Lys Lys Arg Ile Arg Met Gln Gly Phe
                 295
                                 300
Ile Ile Ala Gln Asp Tyr Gly His Arg Ile Val Glu Phe Gln Glu
              310 315
Met Gly Arg Trp Val Lys Glu Gly Lys Ile His Tyr Arg Glu Gln Val
            325
                           330 335
Thr Glu Gly Leu Asn Ala Ala Pro Glu Ala Leu Ile Gly Leu Leu Glu
       340 345
                                       350
Gly Lys Asn Phe Gly Lys Val Val Ile Arg Val Ala Ala Asp
                     360
<210> 8522
<211> 266
<212> PRT
<213> Enterobacter cloacae
```

<400> 8522
Gly Cys Ile Asn Ile Gln Ser Val Ile His Gly Val Leu Met Asn Ser
1 5 10 15
Phe Tyr Ser Gln Gln Ala Gly Cys Thr Val Arg Trp Gln Asp Leu Pro

Phe Tyr Ser Gln Gln Ala Gly Cys Thr Val Arg Trp Gln Asp Leu Pro 20 25 30 Gly Phe Gly Asp Pro Val Val Phe Ile His Gly Leu Gly Cys Ala Ser 40 45

```
Ser Tyr Glu Tyr Pro Arg Ile Val Cys Asp Thr Arg Phe Gly Gly Arg
                 5.5
Arg Ala Ile Leu Ile Asp Leu Pro Gly Ser Gly Tyr Ser Asp Lys Pro
              70
                           7.5
Asp Asn Tyr Arg Tyr Arg Thr Ser Glu Gln Ala Gln Val Val Val Glu
          85 90 95
Leu Leu Asn His Leu Gly Leu Asp Ser Leu Trp Leu Tyr Gly His Ser
   100
           105 110
Met Gly Gly Ser Ile Ala Ile Glu Thr Ala Thr Leu Leu Thr Ser Arg
 115 120 125
Val Lys Gly Leu Ile Val Ser Glu Pro Asn Phe His Ala Gly Gly Gly
130 135 140
Met Phe Ser Arg Ala Ile Ala Ala Gln Thr Glu Gln His Phe Leu Ala
145 150 155 160
Gln Gly Tyr Asp Asp Met Leu Arg Ala Glu Thr Ser Pro Trp Ala Gly
         165 170 175
Ser Leu Gln Ser Asn Ala Pro Trp Ala Val Trp Arg Gly Ala Thr Ser
       180 185 190
Leu Val Glu Gly Val Lys Pro Asp Trp Glu His Leu Phe Leu Ser Leu
195 200 205
Arg Cys Pro Val Met Leu Val Phe Gly Glu Arg Ser Leu Pro Asp Asp
210 215 220
Asp Phe Asn Arg Leu Gln Gln Asn Gly Val Ala Val Lys Ile Ile Pro
225 230 235
Asp Ala Gly His Ser Met Ser Trp Glu Asn Pro Ser Ala Leu Ala Gln
   245 250
Ala Leu Ser Gly Phe Ile Asn Gly Ser
```

<212> PRT <213> Enterobacter cloacae

<210> 8523 <211> 563

<400> 8523 Asn Asn Leu Ile Val Ile Arg Tyr Leu Ser Gly Gln Tyr Val Cys Ala 10 1.5 Val Ile Thr Val His Tyr Asn Lys Thr Glu Arg Val Ile Thr Met Ser 2.5 Thr Gly Lys Thr Val Leu Ala Leu Ala Leu Ser Ala Leu Leu Pro Ala 35 40 4.5 Ser Ala Ala Trp Ala Ala Asn Lys Asp Thr Ile Ile Tyr Cys Ser Glu 55 Ala Ser Pro Glu Ser Phe Asn Pro Gln Ile Ala Ser Ser Gly Pro Ser 70 75 Phe Val Ala Ser Ser Gln Thr Leu Tyr Asn Arg Leu Ile Asn Phe Asp 8.5 90 95 Pro Val Lys Asn Thr Pro Val Pro Ser Leu Ala Glu Ser Trp Thr Ile 100 105 Ser Pro Asp Gly Lys Thr Tyr Thr Phe Thr Leu Arg Lys Gly Val Lys 115 120 125 Phe Asn Ser Asn Lys Tyr Phe Lys Pro Thr Arg Asp Phe Asn Ala Asp 130 135 140 Asp Val Ile Phe Ser Val Met Arg Gln Lys Asp Pro Lys His Pro Tyr 145 150 155 160 His Asn Val Ser Gln Gly Asn Tyr Glu Tyr Phe Asn Asp Val Gly Leu 165 170 175 Asp Lys Leu Ile Gln Asp Val Lys Lys Ile Asp Asp Tyr His Val Gln 180 185 190 Phe Thr Leu Ser Glu Pro Asn Ala Ala Phe Leu Ala Asp Trp Gly Met 200

```
Asp Phe Ala Ser Ile Leu Ser Ala Glu Tyr Ala Asp Ala Met Leu Lys
  210
               215
Lys Gly Thr Pro Glu Asn Val Asp Thr Trp Pro Ile Gly Thr Gly Pro
              230
                            235
Tyr Val Leu Gln Gln Tyr Lys Val Asp Ser Leu Ile Arg Tyr Val Ala
       245
                         250 255
Asn Pro Asn Tyr Trp Asp Gly Glu Val Pro Thr Lys His Leu Ile Phe
       260 265
                          270
Ser Ile Thr Pro Asn Val Glu Tar Arg Leu Ala Lys Leu Gln Thr Asn
    275
         280 285
Glu Cys Gln Ile Ile Pro Ala Pro Ser Pro Val Gln Phe Glu Ala Ile
 290 295 300
Lys Lys Asn Lys Asp Leu Thr Leu His Ser Val Asp Ala Leu Asn Val
305 310 315 320
Gly Tyr Leu Ala Phe Asn Thr Glu Lys Lys Pro Phe Asp Asn Val Leu $325$ $330 $35
Val Arg Gln Ala Leu Asn Tyr Ala Thr Asp Lys Lys Ala Ile Val Asn
      340 345 350
Ala Val Phe Met Gly Ser Gly Thr Val Ala Lys Ser Pro Ile Pro Pro
355 360 365
Asn Met Leu Gly Phe Asn Asn Asp Leu Lys Asp Tyr Gly Tyr Asp Pro
370 375 380
Glu Lys Ala Lys Ala Leu Leu Lys Gln Ala Gly Leu Glu Lys Gly Ala
             390 395
Glu Val Thr Leu Trp Ser Met Pro Val Gln Arg Pro Tyr Asn Pro Asn
     405 410 415
Ser Arg Arg Ile Ala Glu Met Ile Gln Ala Asp Trp Ala Lys Val Gly
       420 425
                                     430
Val Lys Ala Lys Ile Val Ser Tyr Glu Trp Gly Glu Tyr Leu Ser Gly
435 440 445
Met Arg Lys Gly Glu His Asp Ser Ala Leu Phe Gly Trp Met Ser Asp
450 455 460
Asn Gly Asp Pro Asp Asn Phe Ala Asp Val Leu Leu Gly Cys Asn Ser
465 470 475
Ile Lys Thr Gly Ser Asn Ala Ala Arg Trp Cys Asp Lys Gly Tyr Asp
          485 490 495
Glu Leu Val Gln Lys Ala Lys Leu Thr Ser Asn Pro Asp Glu Arg Ala
       500 505 510
Lys Leu Tyr Gly Gln Ala Gin Glu Ile Phe Tyr Gln Gln Ala Pro Trp
   515
                   520 525
Ile Ala Leu Ala Asn Gly Lys Thr Phe Tyr Ala Thr Arg Ser Asn Val
 530 535 540
Thr Gly Tyr Ser Val Ser Leu Met Gly Ser Asp Phe Ser Lys Ala Lys
545
             550
                             555
                                           560
```

```
<210> 8524
<211> 238
<212> PRT
<213> Enterobacter cloacae
```

Leu Asn

```
Ser Ile Thr Pro Val Arg Glu Ala Leu Leu Arg Leu Val Ser Ala Gly
Ala Leu Gln Ala Thr Pro Ala Gln Ala Phe Leu Val Pro Glu Val Thr
           85
                            90
Leu Glu Arg Tyr Asn Glu Ile Asn Ala Ile Arg Lys Gln Leu Glu Pro
         100
                        105
Met Ala Val Ala Ala Ala Cys Gln Asn Met Thr Glu Thr Lys Leu Gly
      115
            120 125
Ala Leu Arg Ala Leu Ser Asp Asn Phe Ser Thr Ala Met His Gln Gly
       135 140
Asp Val Gln Lys Ala Ile His Ala Asn Arg Val Phe Arg Phe Thr Leu
       150 155 160
Tyr Gln Tyr Ala Glu Met Pro Thr Leu Asn Ser Leu Ile Glu Gln Leu
         165 170 175
Trp Val Arg Ile Gly Pro Cys Ile Asn Tyr Leu His Glu Glu Met Lys
        180 185 190
Asp Ile Pro Ala Thr Thr Tyr His Tyr Ala Asp Leu Leu Ser Ala Leu
   195 200
                         205
Glu Gln Arg Asp Val Thr Ala Ser Arg Glu Ala Ile Asp Arg Ala Ile
 210 215 220
Asp Glu Ala Asn Ile Leu Leu Gln Arg Gln Tyr Tyr Ser
225 230
<210> 8525
<211> 231
<212> PRT
<213> Enterobacter cloacae
<400> 8525
Phe Ile Leu Ser Val Ile Val Phe Met Thr Ser Tyr Tyr Ser Val Arg
                         10
Met Val Phe Arg Gly Ser Phe Val Thr Lys Lys Gln Gly Phe Cys Arg
   20
                  25
                                        3.0
Ser Asp Gly Ile His Glu Leu Cys Asn Ile Val Thr Lys Pro Tyr Tyr
     35
             40 45
Tyr Ser Glu Gln His Ser Gln Arg Leu Thr Met Ile Val Arg His Ala
 50 55
                                  60
Cys Lys Glu Asp Cys Ala Ala Ile Gly Glu Ile Tyr Asn His Ala Val
    70 75
Leu His Thr Ala Ala Ile Trp Asn Asp Thr Thr Val Asp Thr Asp Asn
                90
         85
Arg Ile Ala Trp Phe Glu Ala Arg Thr Leu Leu Gly Tyr Pro Val Leu
        100 105
Val Ser Glu Glu Glu Gly Val Val Thr Gly Tyr Ala Ser Phe Gly Asp
 115 120
                                     125
Trp Arg Ala Phe Asp Gly Phe Arg His Thr Val Glu His Ser Val Tyr
 130 135
                                  140
Val His Pro Asp His Gln Gly Lys Gly Ile Gly Arg Leu Leu Met Thr
145 150
                               155
Glu Leu Ile Lys Glu Ala Arg Gln Ile Gly Lys His Val Met Val Ala
           165
                           170
                                175
Gly Ile Glu Ala Gln Asn Gln Ala Ser Ile His Leu His Glu Thr Leu
        180
                        185
Gly Phe Ile Thr Thr Gly Asn Met Gln Gln Val Gly Thr Lys Phe Gly
         200
Arg Trp Leu Asp Leu Thr Phe Met Gln Leu Gln Leu Asp Glu Arg Ser
                 215
                                  220
Asp Pro Asp Ala Leu Pro
225
```

```
<211> 117
<212> PRT
<213> Enterobacter cloacae
<400> 8526
Gln Gln Ala Phe Lys Gly Gly Asn Met Leu Arg Ile Pro Gln Ser Cys
Ile His Thr Arg Ser Thr Pro Phe Trp Asn Lys Glu Thr Ala Pro Ala
           20
                               25
                                                   30
Gly Ile Phe Lys Arg His Leu Asp Thr Gly Thr Arg Pro Gly Val Tyr
       35
                         40
                                               4.5
Pro Arg Leu Ser Val Met Arg Gly Ala Val Arg Tyr Leu Gly Tyr Ala
   50
                     5.5
                                           60
Asp Glu Phe Thr Ser Glu Pro Asp Ser Glu Leu Val Ile Glu Ala Gly
                   7.0
                                       7.5
Arg Phe Gly Val Phe Pro Pro Glu Arg Trp His His Ile Glu Val Met
                                  90
              8.5
Thr Asp Asp Thr Leu Phe Asn Ile Glu Phe Phe Val Glu Pro Glu Val
          100
Leu Lys Ser Leu
      115
<210> 8527
<211> 127
<212> PRT
<213> Enterobacter cloacae
<400> 8527
Ala Pro Ala Asn Met Lys Glu Thr Met Met Leu Arg Ile Pro Glu Asn
                                   1.0
                                                       15
Phe Val His Thr Arg Ser Thr Pro Phe Trp Asn Lys Glu Thr Ala Pro
           20
                               25
                                                   3.0
Lys Ala Leu Phe Thr His His Asn Thr Lys Ala Gly Val Tyr Gly Arg
                          40
Leu Ser Val Met G1n Gly Ala Val Arg Tyr Phe Gly Phe Ala Asp G1y
                       55
                                           60
Asp Ala Thr Glu Pro Asp Leu Glu Val Val Ile Glu Ala Gly Ser Phe
                   7.0
                                       75
                                                           8.0
Gly Ile Ser Pro Pro Gln Lys Trp His Arg Ile Glu Leu Leu Thr Asp
               85
                                   90
Asp Thr Tyr Phe Asn Ile Asp Phe Phe Ala Asp Pro Ala Val Thr Leu
                              105
           100
Ser Gly Ala Gly Ile Gly Lys Val Val Asn Thr His Lys Glu
      115
                           120
<210> 8528
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 8528
Ile Met Gly Lys Ala Thr Tyr Thr Val Thr Val Thr Asn Asn Ser Asn
                                   10
Gly Val Ser Val Asp Tyr Glu Thr Glu Ala Pro Met Glu Leu Leu Ile
           20
Pro Asp Val Ala Ala Asp Val Val Lys Asp Leu Val Asn Thr Val Arg
                          40
Ala Tyr Asp Thr Glu Asn Glu His Glu Val Cys Gly Trp
   5.0
                       55
```

<210> 8529

```
<211> 341
<212> PRT
<213> Enterobacter cloacae
<400> 8529
Gly Val Thr Val Met Gly Ile Asp Leu Ser Ile Ile Trp Phe Val Ile
                              1.0
Ile Val Phe Ala Thr Leu Met Tyr Ile Val Met Asp Gly Phe Asp Leu
       20
                25
Gly Ile Gly Ile Leu Phe Pro Ala Thr Pro Asn Ala Asp Asp Arg Asp
           40
Val Met Val Asn Ser Val Ala Pro Val Trp Asp Gly Asn Glu Thr Trp
                   55
Leu Val Leu Gly Gly Ala Ala Leu Phe Gly Ala Phe Pro Leu Ala Tyr
                70
                                 75
                                                  80
Ala Val Ile Ile Asp Ala Leu Thr Ile Pro Leu Thr Ile Met Leu Ile
                  90
Gly Leu Ile Phe Arg Gly Val Ala Phe Glu Phe Arg Phe Lys Ala Thr
         100 105
                                         110
Pro Ala His Arg Pro Phe Trp Asp Lys Ala Phe Ile Gly Gly Ser Ile
      115
                       120
                                        125
Val Ala Thr Phe Ser Gln Gly Ile Thr Val Gly Ala Val Ile Gln Gly
       135
                                    140
Phe Ser Val Thr Gly Arg Ala Tyr Ser Gly Gly Pro Phe Asp Trp Phe
       150
                                 155
Thr Ala Phe Asn Phe Phe Cys Gly Ala Gly Leu Val Val Ala Tyr Ala
            165 170
Leu Leu Gly Ser Thr Trp Leu Val Met Lys Ser Glu Asn Ala Leu Gln
      180
                          185
                                           190
Lys Arg Met Arg Gln Leu Ser Lys Val Leu Leu Pro Leu Leu Leu Val
195
                    200
                            205
Phe Ile Ala Ile Ile Ser Ile Trp Thr Pro Leu Ala Gln Pro Ala Ile
210 215
                                     220
Ala Ala Arg Trp Phe Thr Leu Pro Asn Leu Phe Tyr Leu Leu Pro Val
                230
                    235
Pro Ala Leu Val Ala Ile Leu Ser Leu Cys Gln Trp Arg Cys Leu His
             245
                              250
Asp Pro Ala Ser His Thr Leu Pro Phe Ile Met Thr Leu Gly Leu Val
         260
                          265 270
Phe Leu Gly Phe Ser Gly Leu Gly Ile Ser Ile Trp Pro His Ile Ile
    275
                    280
                                        285
Pro Pro Asp Ile Thr Leu Trp Gln Ala Ala Ala Pro Ala Gln Ser Gln
                 295
                                     300
Gly Phe Met Leu Val Gly Ala Leu Leu Ile Ile Pro Val Ile Leu Val
305 310
                                 315
Tyr Thr Phe Trp Ser Tyr Tyr Val Phe Arg Gly Lys Val Gln His Gly
                              330
             325
Glu Gly Tyr His
         340
<210> 8530
<211> 81
<212> PRT
<213> Enterobacter cloacae
<400> 8530
Ala Val Ser Val Asp Asn Pro Ser Val Leu Thr Lys Leu Leu Trp
                              10
Gly Ser Phe Val Asn Arg Ala Gly Ile Arg Arg Cys Asn Pro Tyr His
                          25
Thr Arg His Thr Phe Ala Cys Trp Phe Leu Pro Val Ala Ala Asn Pro
```

\$35\$ \$40\$ Ser Phe Ile Ala Asn Gln Met Gly His Val Asn Ala Gln Met Val Tyr 50 \$55\$ Glu Ile Tyr Ala Thr Trp Ile Glu Glu Met Asn Thr Lys Leu Thr Leu 65 \$70\$ \$75\$

<210> 8531 <211> 129 <212> PRT <213> Enterobacter cloacae

<400> 8531 Cys Gly Thr Leu Pro Pro Leu Trp Met Lys Thr Asp Cys Gly Gly Asn 1.0 Arg Met Pro Gly Ile Ala Arg Ash Met Gly Tyr Ala Ser Phe Gly Trp 20 2.5 Glu Pro Glu Glu Gly Trp Tyr Ala Gly Ala Asp Ala Arg Tyr Met Ser 35 40 Asp Val Met Ala Asn Asp Thr Asn Thr Ala Lys Ala Pro Ser Tyr Thr 55 Val Val Gly Leu Asn Thr Gly Tyr Lys Leu Asn Tyr Gly Lys Trp Gly 70 75 Met Asp Ile Phe Gly Arg Val Asp Asn Leu Phe Asp Lys Glu Tyr Val 8.5 90 Gly Ser Glu Ile Val Asn Ala Gly Tyr Asn Arg Tyr Tyr Glu Pro Ala 105 110 Pro Gly Arg Asn Tyr Gly Val Gly Leu Ser Val Ser Tyr Arg Phe Glu

<210> 8532 <211> 484 <212> PRT

<213> Enterobacter cloacae

<400> 8532 Tyr Leu Ile Pro Pro Leu Phe Ile Ile Thr Val His Arg Leu Thr Leu 1.0 Arg Gln Cys Met Phe Gly Pro Asp Ala Phe His Leu Ala Arg Ile Gln 25 30 Phe Ala Phe Thr Val Ser Phe His Ile Ile Phe Pro Ala Ile Thr Ile 40 Gly Leu Ala Ser Tyr Leu Ala Val Leu Glu Gly Leu Trp Leu Arg Thr 5.5 Lys Asn Pro Val Trp Arg Ser Leu Tyr His Phe Trp Ser Lys Ile Phe 7.0 7.5 Ala Val Asn Phe Gly Met Gly Val Val Ser Gly Leu Val Met Ala Tyr 90 Gln Phe Gly Thr Asn Trp Ser Gly Phe Ser Gln Phe Ala Gly Ser Ile 105 110 Thr Gly Pro Leu Leu Thr Tyr Glu Val Leu Thr Ala Phe Phe Leu Glu 115 120 Ala Gly Phe Leu Gly Val Met Leu Phe Gly Trp Asn Lys Val Gly Pro 135 Gly Leu His Phe Phe Ser Thr Cys Met Val Ala Leu Gly Thr Leu Met 145 150 155 Ser Thr Phe Trp Ile Leu Ser Ser Asn Ser Trp Met Gln Thr Pro Gln 165 170

```
Gly Tyr Glu Ile Ile Asn Gly Gln Val Val Pro Val Asp Trp Phe Ala
           185
       180
Val Val Phe Asn Pro Ser Phe Pro Tyr Arg Leu Leu His Met Ser Ile
     195
                           205
Ala Ala Phe Leu Ser Ser Ala Leu Phe Val Gly Ala Ser Ala Ala Trp
 210 215
                             220
His Leu Leu Arg Gly Asn Asn Thr Pro Ala Ile Arg Thr Met Phe Ser
     230 235 240
Met Ala Leu Trp Met Thr Leu Ile Val Ala Pro Val Gln Ala Leu Val
          245 250 255
Gly Asp Met His Gly Leu Asn Thr Leu Lys His Gln Pro Ala Lys Ile
       260 265 270
Ala Ala Ile Glu Gly His Trp Glu Asn Pro Pro Gly Glu Pro Thr Pro
    275 280 285
Leu Leu Phe Gly Trp Pro Asp Met Glu Gln Glu Arg Thr Arg Phe
      295 300
Gly Leu Glu Ile Pro Ala Leu Gly Ser Leu Ile Leu Thr His Ser Leu
305 310 315 320
Asp Lys Gln Val Pro Ala Leu Lys Glu Phe Pro Lys Glu Asp Arg Pro
   325 330 335
Asn Ala Thr Ile Val Phe Trp Ser Phe Arg Ile Met Ala Gly Leu Gly
340 345 350
Met Leu Met Leu Leu Gly Val Thr Ala Ile Trp Leu Arg Tyr Lys
355 360 365
Gln Arg Leu Tyr Thr Ser Arg Ser Phe Leu Trp Phe Ala Leu Leu Met
370 375
Gly Pro Ser Gly Leu Ile Ala Ile Leu Ala Gly Trp Val Thr Thr Glu
385 390 395
Val Gly Arg Gln Pro Trp Val Val Tyr Gly Leu Gln Arg Thr Lys Asp
     405 410 415
Ala Val Ser Ala His Gly Asp Leu His Met Ser Ile Ser Leu Leu Ala
420 425 430
Phe Phe Val Val Tyr Thr Ala Val Phe Gly Val Gly Tyr Ser Tyr Met
435 440 445
Val Arg Leu Ile Lys Lys Gly Pro Gln Pro His Glu Ser Phe Ala Thr
450 455 460
Glu Ser Asp Gly Arg Pro Ala Arg Pro Leu Ser Ala Val Thr Thr Glu
465 470
Phe Lys Glu
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<210> 8533 <211> 147 <212> PRT <213> Enterobacter cloacae

100

<400> 8533 Lys Met Lys Lys Leu Ala Ala Val Ser Leu Ile Ser Leu Val Leu Ala 10 15 Gly Cys Val Asn Pro Gly Lys Ala Ser Val Gln Thr Asp Gln Leu Glu 20 25 Asn His Arg Phe Val Leu Glu Asn Val Asp Gly Lys Ala Val Lys Gly 40 4.5 Gly Lys Thr Gln Pro Glu Ile Arg Phe Ser Ala Gln Pro Asn Ile Ser 55 Leu Ile Asn Asn Ile Val Val Ser Gly Thr Met Cys Asn Gly Phe Asn 70 75 Gly Gln Gly Lys Leu Ser Glu Gly Glu Leu Thr Val Lys Thr Leu Ala 85 90 Met Thr Arg Lys Leu Cys Thr Glu Pro Gln Leu Asn Glu Leu Asp Gln

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Thr Ile Ala Asp Met Leu Arg Thr Gly Ala Gln Val Asp Leu Thr Glu
    115
                      120
Asp Gln Leu Thr Leu Ala Thr Ala Asn Lys Thr Leu Met Phe Lys Arg
  130
            135
Val Glu
145
<210> 8534
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<212> PRT
<213> Enterobacter cloacae
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Ala Gln Arg Ser Gly Cys Ser Ala Met Asn Gln Ser Leu Thr Leu Ala
                                 10
Phe Leu Val Ala Ala Gly Ile Gly Leu Val Val Gln Asn Thr Leu Met
        20
                            25
Val Arg Ile Thr Gln Ser Ser Ser Thr Ile Leu Ile Ala Met Leu Leu
      35
                        40
Asn Ser Leu Val Gly Ile Val Leu Phe Val Ser Met Leu Leu Val Lys
                     55
Asn Gly Met Ala Gly Phe Asn Glu Leu Ala Ser Thr Val Arg Trp Trp
                 70
                                    75
Thr Leu Ile Pro Gly Leu Leu Gly Ser Phe Phe Val Phe Ala Ser Ile
             85
                                 90
Ser Gly Tyr Gln Asn Val Gly Ala Ala Thr Thr Ile Ala Val Leu Val
        100
                            105
Ala Ser Gln Leu Ile Gly Gly Leu Val Met Asp Ile Leu Lys Ser Asn
 115
                       120
                                            125
Gly Val Pro Leu Arg Ala Leu Val Gly Pro Val Cys Gly Ala Val Met
 130 135
                               140
Leu Val Ala Gly Ala Trp Leu Val Ala Arg Arg Gln Phe
                  150
<210> 8535
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<212> PRT
<213> Enterobacter cloacae
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Gly Cys Cys Pro Met Gln Thr Ile Asp Gly Asn Gly Ala Val Ala Ser
                                10
Val Ala Phe Arg Thr Ser Glu Val Ile Ala Ile Tyr Pro Ile Thr Pro
      20
                             25
                                                30
Ser Ser Thr Met Ala Glu Gln Ala Asp Ala Trp Ala Gly Asn Gly Ile
                         4.0
                                            45
Lys Asn Val Trp Gly Asp Val Pro Arg Val Val Glu Met Gln Ser Glu
                     55
                                        60
Ala Gly Ala Ile Ala Thr Val His Gly Ala Leu Gln Thr Gly Ala Leu
                 70
                                    75
Ser Thr Ser Phe Thr Ser Ser Gln Gly Leu Leu Leu Met Ile Pro Thr
              8.5
                                 90
Leu Tyr Lys Leu Ala Gly Gln Leu Thr Pro Phe Val Leu His Val Ala
          100
                            105
Ala Arg Thr Val Ala Thr His Ala Leu Ser Ile Phe Gly Asp His Ser
      115
                         120
                                            125
Asp Val Met Ala Val Arg Gln Thr Gly Cys Ala Met Leu Cys Ala Ser
                     135
                                        140
Ser Val Gln Glu Ala Gln Asp Phe Ala Leu Ile Ser His Ile Ala Thr
145 150
                                    155
Leu Lys Ser Arg Val Pro Phe Ile His Phe Phe Asp Gly Phe Arg Thr
```

165 170 Ser His Glu Ile Asn Lys Ile Val Pro Leu Pro Asp Asp Thr Ile Leu 185 180 190 Asn Leu Leu Pro Gln Ala Asp Ile Asp Ala His Arg Ala Arg Ala Leu 195 200 205 Asn Pro Glu His Pro Val Ile Arg Gly Thr Ser Ala Asn Pro Asp Thr 210 215 220 Tyr Phe Gln Ser Arg Glu Ala Thr Asn Pro Trp Tyr Asn Ala Val Tyr 225 230 235 Glu His Val Glu Gln Ala Met Asp Asp Phe Ala Ala Ala Thr Gly Arg 245 250 255 Glu Tyr Lys Pro Phe Glu Tyr Tyr Gly His Pro Gln Ala Glu Arg Val 260 265 270 Ile Val Leu Met Gly Ser Ala Ile Gly Thr Cys Glu Glu Val Val Asp 275 280 285 Glu Leu Leu Thr Arg Gly Glu Lys Val Gly Val Leu Lys Val Arg Leu 290 295 300 Tyr Arg Pro Phe Ser Ala Lys His Leu Leu Ala Ala Leu Pro Asp Ser 305 310 315 320 Ala His Ala Val Ala Val Leu Asp Arg Thr Lys Glu Pro Gly Ala Gln 325 330 335 Ala Glu Pro Leu Tyr Leu Asp Val Met Thr Ala Leu Ala Glu Thr Phe 345 Asn Arg Gly Glu Arg Glu Thr Leu Pro Arg Val Ile Gly Gly Arg Tyr 355 360 365 Gly Leu Ser Ser Lys Glu Phe Gly Pro Glu Cys Val Leu Ala Val Phe 370 375 380 Ala Glu Leu Arg Glu Ala Lys Pro Lys Pro Arg Phe Thr Val Gly Ile 385 \$390\$Tyr Asp Asp Val Thr Asn Leu Ser Leu Pro Leu Pro Glu Asn Thr Leu 405 410 415 Pro Ser Asn Ala Lys Leu Glu Ala Leu Phe Tyr Gly Leu Gly Ser Asp 420 425 Gly Ser Val Ser Ala Thr Lys Asn Asn Ile Lys Ile Ile Gly Asn Ser 440 445 Thr Pro Trp Tyr Ala Gln Gly Tyr Phe Val Tyr Asp Ser Lys Lys Ala 450 455 460 Gly Gly Leu Thr Val Ser His Leu Arg Val Ser Glu His Pro Ile Arg 470 475 Ser Ala Tyr Leu Ile Ser Gln Ala Asp Phe Val Gly Cys His Gln Leu 485 490 Gln Phe Ile Asp Lys Tyr Gln Met Ala Glu Arg Leu Lys Pro Gly Gly 500 505 510 Ile Phe Leu Ile Asn Thr Pro Tyr Ser Ala Asp Glu Val Trp Ala Arg 515 520 Leu Pro Gln Glu Val Gln Ala Val Leu Asn Gln Lys Gln Ala Arg Leu 535 530 540 Tyr Val Ile Asn Ala Ala Lys Ile Ala Arg Glu Cys Gly Leu Ala Ala 1 555 550 Arg Ile Asn Thr Val Met Gln Met Ala Phe Phe His Leu Thr Asn Ile 565 570 Leu Pro Gly Asp Ser Ala Leu Met Glu Leu Gln Gly Ala Ile Ala Lys 580 585 590 Ser Tyr Ser Ser Lys Gly Gln Glu Leu Val Glu Arg Asn Trp Gln Ala 595 600 605 Leu Ala Leu Ala Arg Glu Ser Leu Phe Ala Val Pro Leu Gln Pro Val 615 Asn Ala Ser Ser Pro Asn Arg Pro Pro Val Val Ser Asp Ala Ala Pro 625 630 635 640 Asp Phe Val Lys Thr Val Thr Ala Ala Met Leu Ala Gly Leu Gly Asp 645 650

Thr Leu Pro Val Ser Ala Leu Pro Pro Asp Gly Thr Trp Pro Met Gly 660 665 Thr Thr Arg Trp Glu Lys Arg Asn Ile Ala Glu Ala Ile Pro Ile Trp 675 680 685 Lys Glu Glu Leu Cys Thr Gln Cys Asn His Cys Val Ala Ala Cys Pro 695 700 His Ser Ala Ile Arg Ala Lys Val Val Ser Pro Glu Ala Leu Asp Gly 710 715 720 Ala Pro Glu Ser Leu His Ser Leu Asp Val Lys Ser Arg Asp Met Arg 725 730 735 Gly Gln Lys Tyr Val Leu Gln Val Ala Pro Glu Asp Cys Thr Gly Cys 740 745 750 Asn Leu Cys Val Glu Val Cys Pro Ala Lys Asp Arg Gln Asp Pro Ser 755 760 765 Ile Lys Ala Ile Asn Met Met Ser Arg Leu Glu His Val Glu Glu Glu 770 775 780 Lys Val Asn Tyr Asp Phe Phe Leu Asp Leu Pro Glu Ile Asp Arg Asn $785 \ \ \, 790 \ \ \, 795 \ \ \, 800$ Lys Leu Glu Arg Ile Asp Ile Arg Thr Ser Gln Leu Ile Thr Pro Leu 805 810 815 Phe Glu Tyr Ser Gly Ala Cys Ser Gly Cys Gly Glu Thr Pro Tyr Ile 820 825 Lys Leu Leu Thr Gln Leu Tyr Gly Asp Arg Met Leu Ile Ala Asn Ala 835 840 845 Thr Gly Cys Ser Ser Ile Tyr Gly Gly Asn Leu Pro Ser Thr Pro Tyr 850 855 860 Thr Thr Asp Ala Asn Gly Arg Gly Pro Ala Trp Ala Asn Ser Leu Phe 865 870 880 Glu Asp Asn Ala Glu Phe Gly Leu Gly Phe Arg Leu Thr Val Asp Gln 885 890 895 His Arg Ala Arg Ile Met Arg Leu Leu Ala Gln Phe Ala Asp Lys Ile 905 910 Pro Ala Glu Leu Asn Asp Ala Leu His Ala Glu Ala Thr Pro Asp Val 915 920 925 Arg Arg Ala Gln Val Ala Glu Leu Arg His Ala Leu Gln Gly Val Glu 930 935 940 Gly Ala Glu Gln Leu Leu Thr Asp Ala Asp Ala Leu Val Glu Lys Ser 945 950 955 Ile Trp Leu Ile Gly Gly Asp Gly Trp Ala Tyr Asp Ile Gly Phe Gly 965 970 Gly Leu Asp His Val Leu Ser Leu Thr Glu Asn Val Asn Ile Leu Val 980 985 Leu Asp Thr Gln Cys Tyr Ser Asn Thr Gly Gly Gln Ala Ser Lys Ala 1000 1005 Thr Pro Leu Gly Ala Val Thr Lys Phe Gly Glu His Gly Lys Arg Lys 1010 1015 1020 Ala Arg Lys Asp Leu Gly Val Ser Met Met Met Tyr Gly His Val Tyr 1030 1035 1040 Val Ala Gln Ile Ser Leu Gly Ala Gln Leu Asn Gln Thr Val Lys Ala 1045 1050 1055 Ile Gln Glu Ala Glu Ala Tyr Pro Gly Pro Ser Leu Ile Ile Ala Tyr 1060 1065 1070 Ser Pro Cys Glu Glu His Gly Tyr Asp Leu Ala Leu Ser His Asp Gln 1075 1080 1085 Met Arg Gln Leu Thr Ala Thr Gly Phe Trp Pro Leu Tyr Arg Phe Asp 1090 1095 1100 Pro Arg Arg Ala Asp Glu Gly Lys Leu Pro Leu Ala Leu Asp Ser Arg 1110 1115 Pro Pro Ser Asp Ala Leu Ala Glu Thr Leu Leu Gln Glu Gln Arg Phe 1125 1130 Arg Arg Leu Asn Ala Gln Gln Pro Glu Val Ala Glu Gln Leu Trp Lys

1140 1145 Asp Ala Ala Asp Leu Gln Lys Arg Tyr Asp Phe Leu Ala Gln Leu 1160 1155 Ala Gly Lys Ala Glu Lys Ser Thr Ser Glu 1170 <210> 8536 <211> 385 <212> PRT <213> Enterobacter cloacae <400> 8536 Lys Asn Asn Cys Lys Gly Ile Ile Lys Met Gln Arg Lys Val Leu Ala 10 Leu Met Ile Pro Ala Leu Leu Met Ala Gly Ala Ala His Ala Ala Glu 20 25 Ile Tyr Asn Lys Asp Gly Asn Lys Leu Asp Leu Tyr Gly Lys Val Asp 35 40 45Gly Leu His Tyr Phe Ser Asp Asp Ala Ser Lys Asp Gly Asp Gln Thr 50 55 60 Tyr Met Arg Leu Gly Phe Lys Gly Glu Thr Gln Ile Asn Asp Met Met 65 70 75 80 Thr Gly Phe Ala Gln Trp Glu Tyr Asn Ile Gln Ala Asn Asn Thr Glu 85 90 Gly Ser Asp Asn Gln Ser Trp Thr Arg Leu Ala Phe Ala Gly Val Lys 100 105 110 Val Gly Asp Tyr Gly Ser ?he Asp Tyr Gly Arg Asn Tyr Gly Val Leu 115 120 125 Tyr Asp Val Glu Gly Trp Thr Asp Met Leu Pro Glu Phe Gly Gly Asp 130 135 140 Ser Tyr Thr Tyr Ala Asp Asn Phe Met Thr Gly Arg Ala Asn Gly Val 145 150 155 Ala Thr Tyr Arg Asn Thr Asp Phe Phe Gly Leu Val Gln Gly Leu Asn 165 170 175 Phe Ala Val Gln Tyr Gln Gly Asn Asn Glu Gly Asn Asn Cys Asp Glu 180 185 190 Asn Phe Cys Ser Thr Asn Glu Gly Thr Asn Asn Gly Arg Asp Thr Arg 195 200 205 His Glu Asn Gly Asp Gly Tyr Gly Ile Ser Ala Thr Tyr Asp Phe Gly 210 215 220 Met Gly Phe Ser Ala Gly Ala Ala Tyr Thr Ser Ser Asp Arg Thr Asn 225 230 235 240 Asp Gln Val Asn Tyr Thr Thr Ala Gly Gly Asp Thr Ala Asp Ala Trp 245 250 255 Thr Ala Gly Leu Lys Tyr Asp Ala Asn Asn Ile Tyr Leu Ala Ala Met 265 270 260 Tyr Ser Glu Thr Arg Asn Met Thr Pro Tyr Gly Asp Asn Ala Asp Ala 275 280 285 Val Ala Asn Lys Thr Gln Asn Phe Glu Val Thr Ala Gln Tyr Gln Phe 295 300 Asp Phe Gly Leu Arg Pro Ala Ile Ser Tyr Leu Gln Ser Lys Gly Lys 310 315 Asp Leu Gly Asn Gly Gln Asp Asp Lys Asp Leu Val Lys Tyr Ala Asp 325 330 Val Gly Ala Thr Tyr Tyr Phe Asn Lys Asn Met Ser Thr Tyr Val Asp 345 340 350 Tyr Lys Ile Asn Leu Leu Asp Glu Asp Asp Ser Phe Tyr Lys Asn Asn 355 360 365 Gly Ile Gly Thr Asp Asp Ile Val Ala Leu Gly Leu Val Tyr Gln Phe

375

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385
<210> 8537
<211> 189
<212> PRT
<213> Enterobacter cloacae
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<400> 8537 Lys Arg Arg Tyr Ser Gly Ser Cys Gly Glu Ser Gly Ala Gly Leu Pro 10 Val Gly Arg Arg Gly Glu Asn Arg Gln Arg Ser Val Cys His Arg Ser 20 25 3.0 Ala Met Ala Thr Ala Ala Leu Ser Asp Ile Thr Thr Arg Val Glu Lys 35 4.0 45 Met Lys Arg Tyr Thr Pro Asp Phe Pro Glu Met Met Arg Leu Cys Glu 55 60 Thr Asn Phe Ala Gln Leu Arg Arg Leu Leu Pro Arg Asn Asp Ala Pro 70 75 Gly Glu Thr Val Ser Tyr Gln Val Ser Asn Ala Gln Tyr Arg Leu Thr 85 90 Ile Thr Glu Ser Thr Arg Tyr Thr Thr Leu Val Glu Ile Glu Gln Thr 100 105 110 Ala Pro Ser Ile Ser Tyr Trp Ser Leu Pro Ser Met Thr Val Arg Leu 115 120 125 Tyr His Asp Ala Met Val Ala Glu Val Cys Ser Ser Gln Gln Ile Phe 130 135 140 Arg Phe Lys Ala Arg Tyr Asp Tyr Pro Asn Lys Lys Leu His Gln Arg 145 \$150\$Asp Glu Lys His Gln Ile Asn Gln Phe Leu Ala Asp Trp Leu Arg Tyr 165 170

Cys Leu Ala His Gly Ala Met Ala Ile Pro Val Cys 185

<210> 8538 <211> 279 <212> PRT

<213> Enterobacter cloacae

<400> 8538 Gly His His Leu Glu Ser Leu Leu Asn Leu Thr Val Ala Gly Gly Ala 1.0 Pro Val Arg Ile Leu Gln Ile Thr Asp Thr His Leu Phe Ala Glu Lys 20 25 30 His Glu Thr Leu Leu Gly Val Asn Thr Trp Glu Ser Tyr Gln Ala Val 40 Leu Asp Ala Ile His Ala Glu Lys Arg Pro Cys Asp Leu Ile Val Ala 60 Thr Gly Asp Leu Ala Gln Asp Gln Ser Ser Ala Ala Tyr Gln His Phe 7.0 75 Ala Glu Gly Ile Ala Ser Phe Ser Val Pro Cys Val Trp Leu Pro Gly 85 90 Asn His Asp Phe Gln Pro Ala Met Tyr Ser Ser Leu Gln Asp Ala Gly 110 100 105 Ile Ser Pro Ala Lys Cys Val Phe Ala Gly Asp Gln Trp Gln Ile Leu 115 120 Leu Leu Asp Ser Gln Val Phe Gly Val Pro His Gly Glu Leu Ser Asp 135 140 Tyr Gln Leu Asp Trp Leu Glu Thr Lys Leu Ala Ala Glu Pro Asn Arg 145 150 155 160 Asn Thr Leu Leu Leu His His His Pro Leu Pro Ala Gly Cys Ser 165 170

Trp Leu Asp Gln His Ser Leu Arg Asn Ser Ala Ala Leu Asp Gly Val 185 180 Leu Ala Lys Phe Pro Arg Val Lys Asn Leu Leu Cys Gly His Ile His 195 200 205 Gln Glu Gln Asp Leu Asp Trp Asn Gly Arg Arg Leu Leu Ala Thr Pro 215 220 Ser Thr Cys Val Gln Phe Lys Pro His Cys Ala Asn Phe Thr Leu Asp 230 235 240 Thr Ile Ala Pro Gly Trp Arg Trp Leu Glu Leu His Ala Asp Gly Ser 245 250 255 Leu Thr Thr Glu Val Cys Arg Leu Ala Gly Ala Gln Phe Arg Pro Asp 260 265 Thr Ala Ser Glu Gly Tyr 275

<210> 8539 <211> 632 <212> PRT <213> Enterobacter cloacae

<400> 8539 Ile Met Thr Gln Thr Tyr Asn Ala Asp Ala Ile Glu Val Leu Thr Gly 10 Leu Glu Pro Val Arg Arg Arg Pro Gly Met Tyr Thr Asp Thr Thr Arg 20 25 3.0 Pro Asn His Leu Gly Gln Glu Val Ile Asp Asn Ser Val Asp Glu Ala 40 45 Leu Ala Gly His Ala Lys Arg Val Asp Val Ile Leu His Ala Asp Gln 55 Ser Leu Glu Val Ile Asp Asp Gly Arg Gly Met Pro Val Asp Ile His 70 7.5 80 Pro Glu Glu Gly Val Pro Ala Val Glu Leu Ile Leu Cys Arg Leu His 85 90 Ala Gly Gly Lys Phe Ser Asn Lys Asn Tyr Gln Phe Ser Gly Gly Leu 100 105 110 His Gly Val Gly Ile Ser Val Val Asn Ala Leu Ser Lys Arg Val Glu 115 120 125 Val Asn Val Arg Arg Asp Gly Gln Val Tyr Asn Ile Ala Phe Glu Asn 135 140 Gly Glu Lys Val Gln Asp Leu Gln Val Val Gly Thr Cys Gly Lys Arg 145 150 155 Asn Thr Gly Thr Ser Val His Phe Trp Pro Asp Glu Ser Phe Phe Asp 165 170 Ser Pro Arg Phe Ser Val Ser Arg Leu Thr His Leu Leu Lys Ala Lys 180 185 190 Ala Val Leu Cys Pro Gly Val Glu Ile Thr Phe Lys Asp His Val Asn 195 200 205 Asn Thr Glu Gln Thr Trp Cys Tyr Ala Asp Gly Leu Asn Asp Tyr Leu 215 220 Cys Glu Ala Val Asn Gly Leu Pro Thr Leu Pro Glu Lys Pro Phe Val 225 230 235 Gly Asn Phe Glu Gly Asp Thr Glu Ala Val Asp Trp Ala Leu Leu Trp 245 250 Leu Pro Glu Gly Gly Glu Leu Leu Thr Glu Ser Tyr Val Asn Leu Ile 260 265 Pro Thr Met Leu Gly Gly Thr His Val Asn Gly Leu Arg Gln Gly Leu 275 280 285 Leu Asp Ala Met Arg Glu Phe Cys Glu Tyr Arg Asn Ile Leu Pro Arg 295 300 Gly Val Lys Leu Ser Ala Glu Asp Ile Trp Asp Arg Cys Ala Tyr Val 310 315

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Leu Ser Val Lys Met Gln Asp Pro Gln Phe Ala Gly Gln Thr Lys Glu
           325
Arg Leu Ser Ser Arg Gln Cys Ala Ala Phe Val Ser Gly Val Val Lys
         340
                       345
                                       350
Asp Ala Phe Thr Leu Trp Leu Asn Gln Asn Val Gln Ala Ala Glu Met
      355
                    360
                         365
Leu Ala Glu Met Ala Ile Ser Ser Ala Gln Arg Arg Leu Arg Ala Ala
                 375 380
Lys Lys Val Val Arg Lys Lys Leu Thr Ser Gly Pro Ala Leu Pro Gly
      390 395 400
Lys Leu Ala Asp Cys Thr Ala Gln Asp Leu Asn Arg Thr Glu Leu Phe
        405 410 415
Leu Val Glu Gly Asp Ser Ala Gly Gly Ser Ala Lys Gln Ala Arg Asp
      420 425 430
Arg Glu Tyr Gln Ala Ile Met Pro Leu Lys Gly Lys Ile Leu Asn Thr
 435 440 445
Trp Glu Val Ser Ser Asp Glu Val Leu Ala Ser Gln Glu Val His Asp
 450 455 460
Ile Ser Val Ala Ile Gly Ile Asp Pro Asp Ser Asp Asp Leu Ser Gln
465 470 475
Leu Arg Tyr Gly Lys Ile Cys Ile Leu Ala Asp Ala Asp Ser Asp Gly
          485 490 495
Leu His Ile Ala Thr Leu Leu Cys Ala Leu Phe Val Lys His Phe Arg
        500 505 510
Ala Leu Val Lys Asn Gly His Val His Val Ala Leu Pro Pro Leu Tyr
515 520 525
Arg Ile Asp Leu Gly Lys Glu Val Tyr Tyr Ala Leu Thr Glu Glu Glu
                535
                                 540
Lys Ala Gly Val Leu Glu Gln Leu Lys Arg Lys Lys Gly Lys Pro Asn
545 550 555
Val Gln Arg Phe Lys Gly Leu Gly Glu Met Asn Pro Met Gln Leu Arg
          565 570
                                          575
Glu Thr Thr Leu Asp Pro Asn Thr Arg Arg Leu Val Gln Leu Thr Ile
        580 585 590
Ser Asp Glu Asp Glu Gln Gln Thr Asn Ala Val Met Asp Met Leu Leu
595 600 605
Ala Lys Lys Arg Ser Glu Asp Arg Arg Asn Trp Leu Gln Glu Lys Gly
 610 615
Asp Met Ala Asp Ile Glu Ala
              630
<210> 8540
<211> 759
<212> PRT
<213> Enterobacter cloacae
<400> 8540
Val Glu Glu Ser His Val Met Ser Asp Met Ala Glu Arg Leu Ala Leu
1 5
                           1.0
His Glu Phe Thr Glu Asn Ala Tyr Leu Asn Tyr Ser Met Tyr Val Ile
     20
                        25
                                       3.0
Met Asp Arg Ala Leu Pro Phe Ile Gly Asp Gly Leu Lys Pro Val Gln
                   40
                                    45
Arg Arg Ile Val Tyr Ala Met Ser Glu Leu Gly Leu Asn Ala Thr Ala
                 55
Lys Phe Lys Lys Ser Ala Arg Thr Val Gly Asp Val Leu Gly Lys Tyr
         70
                              75
```

His Pro His Gly Asp Ile Ala Cys Tyr Glu Ala Met Val Leu Met Ala

105

90 Gln Pro Phe Ser Tyr Arg Tyr Pro Leu Val Asp Gly Gln Gly Asn Trp

85

```
600
Gly Phe Ile Cys Thr Phe Asn Asp Leu Val Ser Arg Asn Arg Ala Gly
                   615
                                   620
Lys Ala Leu Ile Ser Leu Pro Asp Asn Ala His Val Met Pro Pro Leu
           630
                    635
Ile Ile Glu Asn Glu Ser Asp Met Leu Leu Ala Ile Thr Ala Ala Gly
         645 650 655
Arg Met Leu Met Phe Pro Val Ser Asp Leu Pro Glu Leu Ser Lys Gly
      660 665 670
Lys Gly Asn Lys Ile Ile Ser Ile Pro Ser Ala Glu Ala Ala Lys Gly
 675 680 685
Glu Asp Ser Leu Ala His Leu Phe Leu Leu Pro Pro Gln Ser Thr Leu
690 695 700
Thr Ile His Val Gly Lys Arg Lys Ile Lys Leu Arg Pro Glu Glu Leu
705 710 715
Gln Lys Val Val Gly Glu Arg Gly Arg Arg Gly Ser Leu Met Arg Gly
          725 730 735
Leu Gln Arg Ile Asp Arg Val Glu Ile Asp Ser Pro Ala Arg Ser Lys
        740
                         745
Ala Asp Asp Ser Glu Glu
      755
<210> 8541
<211> 256
<212> PRT
<213> Enterobacter cloacae
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Leu Ser Ala Val Arg Ala Ser Glu Val Ala Met Leu Tyr Ile Val Arg
                             1.0
Leu Ile Leu Thr Val Ile Tyr Cys Ile Leu Val Cys Ile Phe Gly Ser
                         25
Ile Tyr Cys Leu Phe Ser Pro Arg Asn Pro Lys His Val Ala Thr Phe
          40
                                       4.5
Gly His Met Phe Gly Arg Leu Ala Pro Leu Phe Gly Leu Lys Val Glu
                 55
                                   60
Lys Arg Leu Pro Glu Gly Ala Glu Asn Phe Gly Asn Ala Ile Tyr Ile
               70 75
65
Ala Asn His Gln Asn Asn Tyr Asp Met Val Thr Ala Ser Asn Ile Val
            85
                             90
Leu Pro Pro Thr Val Thr Val Gly Lys Lys Ser Leu Leu Trp Ile Pro
         100
                         105
                                          110
Phe Phe Gly Gln Leu Tyr Trp Leu Thr Gly Asn Leu Leu Ile Asp Arg
      115
                      120
                                       125
Asn Asn Arg Ala Lys Ala His Gly Thr Ile Ala Glu Val Val Asp Gln
  130
                   135
                                    140
Phe Lys Lys Arg Arg Ile Ser Ile Trp Met Phe Pro Glu Gly Thr Arg
                150
                                155
Ser Arg Gly Arg Gly Leu Leu Pro Phe Lys Thr Gly Ala Phe His Ala
            165
                             170
                                             175
Ala Ile Ala Ala Gly Val Pro Ile Ile Pro Val Cys Val Ser Asn Thr
         180
                          185
Ser Asn Lys Ile Asn Leu Asn Arg Leu Asn Asn Gly Leu Val Ile Val
      195
                      200
Glu Met Leu Pro Pro Val Asp Thr Ser Lys Tyr Gly Lys Asp Gln Val
 210
                   215
                                   220
Arg Glu Leu Ala Thr His Cys Arg Glu Leu Met Ala Gln His Ile Ala
                230
                              235
Gln Leu Asp Lys Glu Val Ala Glu Arg Glu Ala Ala Gly Lys Ile
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250

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<211> 79
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(79)
<400> 8542
Val Asp Cys Met Ala Met Arg Leu Asn Glu Asn Leu Asp Asp Asn Gly
                 10
           5
Glu Met His Glu Ile Asn Val Thr Pro Phe Ile Asp Val Met Leu Val
 20
                         25
                                              30
Leu Leu Ile Ile Phe Met Val Ala Ala Pro Leu Ala Thr Val Asp Val
     35 40
                                          45
Lys Val Asn Leu Pro Ala Ser Ser Ser Gln Pro Gln Pro Arg Pro Glu
                     5.5
Lys Pro Ile Tyr Leu Ser Val Lys Ala Asp Lys Ser Met Phe Xaa
                 70
<210> 8543
<211> 234
<212> PRT
<213> Enterobacter cloacae
<400> 8543
Pro Tyr Lys Arg Gln Pro Asn Ser Leu Glu Ile His Asn Phe Ile Thr
                             10
Ile Ala Thr Arg Thr Arg Pro Met Gln Lys Pro Glu Asn Val Pro Val
                            25
                                              30
Thr Phe Ala Lys Asn Asp Val Glu Ile Ile Ala Arg Glu Thr Leu Tyr
    35
                      40
                                       4.5
Ser Gly Phe Phe Ser Met Glu Leu Tyr Arg Phe Arg His Arg Leu Phe
                  55
Asn Gly Glu Met Ser Gly Glu Ile Lys Arg Glu Ile Phe Glu Arg Gly
                 70
                      75
                                                     8.0
His Ala Ala Val Leu Leu Pro Tyr Asp Pro Val Arg Asp Glu Val Val
             85
                               90
Leu Val Glu Gln Val Arg Ile Ala Ala Tyr Asp Thr Ser Glu Thr Pro
         100
                           1.05
                                             110
Trp Leu Leu Glu Met Val Ala Gly Met Ile Glu Glu Gly Glu Ser Val
      115
                        120
                                          125
Glu Asp Val Ala Arg Arg Glu Ala Leu Glu Glu Ala Gly Leu Val Val
                                      140
Gly Arg Thr Lys Pro Val Leu Ser Tyr Leu Ala Ser Pro Gly Gly Thr
145 150
                                   155
                                                     160
Thr Glu Arg Ser Ser Ile Met Val Gly Glu Val Asp Ala Thr Thr Ala
             165
                                170
                                                 175
Glu Gly Ile His Gly Leu Ala Asp Glu Asn Glu Asp Ile Arg Val His
          180 185
                                              190
Val Val Ser Arg Glu Leu Ala Tyr Gln Trp Val Glu Glu Gly Lys Ile
      195
                        200
Asp Asn Ala Ala Ser Val Ile Ala Leu Gln Trp Leu Gln Leu His Tyr
                     215
                                       220
Gln Thr Leu Arg His Glu Trp Lys Lys
                 230
<210> 8544
<211> 453
<212> PRT
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450

<213> Enterobacter cloacae

<400> 8544 Pro Ile Ala Gly Ser Ser Leu Ala Asn Pro Glu Ala Asn Val Ser Cys Arg Ser His Tyr Lys Asn Leu Ala Leu His Val Gly Glu Asp Asp Met 20 25 Lys Ser Thr Ser Thr Thr Asn Arg Thr Glu Tyr Tyr Lys Ile Ser Ser 35 40 Phe Ile Phe Leu Tyr Phe Phe Thr Trp Ser Ala Ser Ile Gly Leu Leu 55 60 Ala Ile Trp Leu Gly Gln Lys Ala Asn Leu Ser Gly Ser Val Ile Gly 70 75 Thr Val Phe Ala Val Asn Gly Ile Phe Ser Val Ile Leu Lys Pro Ile 85 90 Tyr Gly Tyr Ile Leu Asp Lys Ile Gly Met Ser Lys Tyr Leu Leu Tyr 100 105 110 Phe Val Val Ile Met Ser Ala Leu Met Ala Pro Phe Phe Ile Tyr Val 115 120 125 Tyr Gln Pro Leu Leu Met Ser Asn Thr Leu Leu Gly Ile Ile Ile Gly 130 135 140 Ala Leu Tyr Leu Ser Phe Ala Trp Tyr Ala Gly Val Ala Ala Cys Glu 145 150 155 Ser Tyr Ser Asp Arg Phe Ser Arg Leu Asn Gly Met Glu Phe Gly Gln 165 170 175 Ile Arg Met Trp Gly Ser Leu Gly Trp Ala Val Ala Ser Ser Phe Ser 180 185 190 Gly Leu Leu Phe Asn Leu Ser Pro Ala Tyr Asn Phe Ile Leu Gly Ser 195 200 205 Val Ala Ser Val Val Met Leu Iie Val Leu Leu Ser Leu Lys Val Asn 210 215 220 Thr Asn Ser Ala His Ala Gly Glu Val Leu Thr Lys Glu Lys Ile Ala 225 230 235 Pro Ser Asp Val Tyr Ala Leu Leu Arg Asn Arg Lys Phe Trp Ala Phe 245 250 255 Cys Leu Tyr Val Ala Gly Val Ala Trp Met Met Phe Ile Ala Glu Gln 260 265 270 Gln Phe Ser Arg Tyr Phe Val Thr Phe Phe Asp Asp Ile His Gln Gly 275 280 285 Asn Ala Val Phe Gly Tyr Leu Gly Thr Val Gln Ser Gly Met Glu Phe 295 300 Val Met Tyr Met Val Ile Pro Leu Phe Val Asn Phe Ile Gly Ala Lys 310 315 Arg Gly Leu Leu Ile Val Gly Leu Val Val Gly Ala Arg Leu Ile Ile 325 330 335 Ser Gly Met Cys Asp Ser His Leu Leu Ile Ser Val Leu Lys Pro Leu 345 350 340 Tyr Gly Leu Glu Ile Cys Leu Leu Leu Val Ser Val Phe Lys Tyr Ile 355 360 365 Ala Glu His Phe Asp Lys Arg Val Asn Ala Thr Met Tyr Leu Leu Gly 375 380 Tyr Gln Ala Met Leu Tyr Val Gly Asn Val Val Val Ser Ser Pro Ala 390 395 Gly Tyr Met Tyr Asp Arg Ile Gly Phe Glu His Thr Tyr Ile Ile Met 405 410 415 Gly Ala Thr Ala Leu Thr Phe Thr Leu Ile Ser Ala Phe Thr Leu Ser 420 425 Ala Cys Gln Ser Lys Trp Arg Gly Ala Arg Ala Leu Asn Val Ala Glu 440 Thr Ser Thr Arg

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<210> 8545
<211> 101
<212> PRT
<213> Enterobacter cloacae
<400> 8545
Leu Leu Ile Pro Gly Tyr Gln Leu Ser Lys Asn Phe Arg Glu Met
Leu Ala Ile Phe Cys Asp Ile Ala Arg Asp Val Arg His Phe Asn Tyr
           20
                              25
                                                  30
Val Val Asp Asp Lys Gly Arg Gln Arg Leu His Ser Gln Glu Leu Ile
       35
                          4.0
                                             4.5
Arg Leu Val Glu Arg Gln Ile Arg Ala Val Tyr Ala His Ala Phe Glu
                    55
                                          60
Glu Leu Ile Phe Leu Gly Glu Gly Phe Gln Arg Arg Val Pro Gly Gln
            70
                        75
Gly Glu His Ile Phe Phe Ala Leu Asn Gln Thr Ala Arg Thr Val Phe
               85
Phe Arg Arg Ile
           100
<210> 8546
<211> 139
<212> PRT
<213> Enterobacter cloacae
<400> 8546
Thr Gly Ala Ala Val Ala Gly Ile Gln Arg Thr Val Thr Phe Gly Lys
                                  10
His Ile Val His Val Phe Phe His Gly Pro Arg Cys Ala His Pro Pro
Ala Arg His Leu Pro Asp His His Val Gly Pro Gln Glu Val Leu His
                          40
Phe Gly Leu His Val Val Ile Ala Val Arg Ala His Asp Leu Asn Ile
                      55
Met Ser Gly Val Ala Gln Glu Thr Ile Arg Asp Leu Gly Gln Gly Val
                                      75
                   7.0
Ile Glu Leu Ala Phe Arg Val Arg Lys Phe Phe Arg Ala Val Asp Asn
               85
                                  90
Gln Asn Val Ala His Tyr Leu Ser Ser Met Met Arg Val Cys Arg Val
                              105
                                               110
Phe Tyr Ala Arg Gly Arg Ser Gly Lys Ile Ser Lys Met Cys Lys Val
    115
             120
Phe Cys Ala Gln Arg Asn Asn Leu Thr Ser
  130
                       135
<210> 8547
<211> 513
<212> PRT
<213> Enterobacter cloacae
<400> 8547
Trp Leu Ser Ile Leu Arg Ser Ser Ile Lys Lys Leu Gln Ser Glu Lys
                                                     15
Pro Pro Val Arg Phe Asn Pro Val Ser Cys Lys Gly Lys Arg Ile Pro
Ala Leu Leu Val Val Ser Asp Gly Ala Tyr Met Ser Leu Ser Arg Arg
                          40
Gln Phe Ile Gln Ala Ser Gly Ile Ala Leu Cys Ala Gly Ala Ile Pro
   50
                       55
```

Arg Thr Ala Ser Ala Ala Gly Gln Gln Gln Pro Leu Pro Ile Pro Pro Leu Ile Glu Ser Arg Arg Gly Gln Pro Leu Phe Leu Thr Leu Gln Arg 85 90 Ser His Trp Ser Phe Thr Gln Gly Thr Arg Ala Gln Val Trp Gly Ile 100 105 110 Asn Gly Arg Tyr Leu Gly Pro Thr Ile Arg Val Trp Asn Gly Asp Asp 120 125 115 Val Lys Leu Ile Tyr Ser Asn Arg Thr Thr Glu Asn Val Ala Met Thr 135 140 Val Ser Gly Leu Gln Val Pro Gly Pro Leu Ile Gly Gly Ala Ala Arg 150 155 160 Met Met Ser Pro Asn Ala Asp Trp Ala Pro Val Leu Pro Ile Arg Gln 165 170 175 Ser Ala Ala Thr Leu Trp Tyr His Ala Asn Thr Pro Asn Arg Thr Ala 180 185 190 Gln Gln Val Tyr Asn Gly Leu Ala Gly Met Trp Leu Ile Glu Asp Glu 195 200 Val Ser Lys Thr Leu Pro Ile Pro Asn His Tyr Gly Val Asp Asp Phe 210 215 220 Pro Ile Ile Ile Gln Asp Lys Arg Leu Asp Asn Phe Gly Thr Pro Glu 225 230 235 Tyr Ser Glu Pro Gly Ser Gly Gly Phe Val Gly Asp Thr Leu Leu Val 245 250 255 Asn Gly Ala Gln Ser Pro Tyr Val Glu Val Ser Arg Gly Trp Val Arg 260 265 Leu Arg Leu Leu Asn Ala Ser Asn Ser Arg Arg Tyr Gln Leu Gln Met 275 280 285 Ser Asp Gly Arg Ala Leu His Val Ile Ser Gly Asp Gln Gly Leu Leu 290 295 300 Pro Ala Pro Val Ser Val Lys Gln Leu Ala Leu Ala Pro Gly Glu Arg 310 315 Arg Glu Ile Leu Val Asp Met Thr Asn Gly Asp Glu Val Ser Val Thr 325 330 335 Cys Gly Glu Ala Ala Ser Ile Val Asp Arg Ile Arg Gly Phe Phe Glu 345 350 Pro Ser Ser Val Leu Val Ser Thr Leu Val Leu Thr Leu Arg Pro Thr 360 365 Gly Leu Leu Pro Leu Val Thr Asp Ser Leu Pro Met Arg Leu Leu Pro 375 380 Gln Glu Ile Val Thr Gly Pro Ala Val Arg Ser Arg Asp Ile Ser Leu 390 395 Gly Asp Asp Pro Gly Ile Asn Gly Ala Leu Trp Asp Val Asn Arg Ile 405 410 Asp Ile Thr Ala Gln Gln Gly Thr Trp Glu Arg Trp Thr Val Arg Ser 420 425 Glu Met Pro Gln Ser Phe His Ile Glu Gly Val Ser Phe Leu Ile Arg 435 440 445 Asn Val Asn Gly Ala Met Pro Phe Pro Glu Asp Arg Gly Trp Lys Asp 455 460 Thr Val Trp Val Asp Gly Gln Val Glu Leu Leu Val Tyr Tyr Gly Gln 470 475 Pro Ser Trp Pro His Phe Pro Phe Leu Phe His Ser Gln Thr Leu Glu 485 490 495 Met Met Asp Arg Gly Ser Val Gly Gln Met Leu Val Asn Pro Ala Pro 500 505

<212> PRT <213> Enterobacter cloacae

<400> 8548 Ser Gly Gly Arg Gln Ar

Ser Gly Gly Arg Gln Arg Gln His Gly Ala His Arg Asp Arg Thr Ala 1 5 10 Asp Val Ala Ala Ala Arg Phe Gln Asn Met Pro Arg Val Asp Ala Val 20 25 Ser Val Met Gly Arg Arg Arg Asp Glu Phe Gly Ala Val Gln His Gly

Ser Val Met Gly Arg Arg Arg Asp Glu Phe Gly Ala Val Gln His Gly
35
40
45
Thr Ala Ala His Arg Gln Gln Glu Gly Asp Leu Leu Leu Ala Gly Asp
50
50

Phe Tyr Arg Val His Gln Arg Phe Ile Arg Arg Val Arg Leu Asp Thr 65 70 75 80
Ala Glu Leu Ala His Val Gln Thr Phe Gln Ser Ala Val His Leu Ile 85 90 95
Gln Tyr Ala Gly Phe Phe His Ala Ala Ala Ala Val Gly Asn Gln Asp

100 105 110 105 110 Ala Gly Val Arg Arg Arg Asp Leu Arg Ala Gln Val Ser Asp Ser Val Phe 115 120 125

115 120 125 Thr Lys Gln Asn Ala Gly Trp Gly Met Lys Ile Lys Val Val His Gly 130 135 140

Leu Phe Pro Val Val Gly Lys Lys Ser Trp Trp Arg Arg Arg Gln Pro 150 160 Asp Ala Ala His Cys Gly Gly Gln Ala Leu Ser Ser Gln Cys Thr Phe

Lys Cys Ala His Cys Gln Arg Arg Lys Pro Tyr Pro Glu 195 200 205

<210> 8549 <211> 302

<212> PRT <213> Enterobacter cloacae

<400> 8549

Leu Lys Met Asn Arg Asp Ala Ile Cys Arg Gln Leu Thr Ser Gln Ile 10 Lys Thr Leu Ile Asp Asn Gly Asn Asp Ser Ala Glu Leu Leu Pro Asp 25 3.0 Ile Arg Leu Leu Tyr Gly Thr Gln Pro Gly Thr Arg Thr Pro Val Met 40 45 Tyr Gln Pro Gly Ile Val Phe Leu Phe Ser Gly His Lys Ile Gly Tyr 55 Ile Asn Glu Arg Val Phe Arg Tyr Asp Thr Asn Glu Tyr Leu Leu Leu 65 7.0 75 Thr Val Pro Leu Pro Phe Glu Cys Glu Thr Phe Ala Thr Glu Glu Val 85 90 Pro Leu Ala Gly Ile Arg Val Asn Val Asp Ile Leu Gln Leu Gln Glu 100 105 110 Leu Leu Met Asp Ile Gly Glu Asp Glu Leu Phe Arg Pro Ser Met Ala 120 115 Ala Ser Gly Ile Asn Ser Ala Thr Leu Ser Glu Glu Ile Leu Cys Ala 135 140 Ile Glu Arg Leu Leu Asp Val Met Glu Arg Pro Leu Asp Ala Arg Ile 145 150 155 Leu Gly Lys Gln Ile Ile Arg Glu Ile Leu Tyr His Val Leu Leu Gly 165 170 Pro Gly Gly Gly Ala Leu Leu Ala Leu Val Ser Arg Gln Thr His Phe 180 185

```
Ser Leu Ile Ser Arg Val Leu Lys Arg Ile Glu Ser Gln Tyr Thr Glu
195
                   200
Asn Leu Ser Val Asp Gln Leu Ala Ala Glu Ala Asn Met Ser Val Ser
 210
                  215
Ala Phe His His Asn Phe Lys Ser Val Thr Ser Thr Ser Pro Leu Gln
225
    230
                               235
Tyr Leu Lys Thr Tyr Arg Leu His Lys Ala Arg Met Leu Met Ile His
                            250
            245
                                            255
Asp Gly Met Lys Ala Ser Ala Ala Ala Met Arg Val Gly Tyr Glu Ser
         260 265 270
Ala Ser Gln Phe Ser Arg Glu Phe Lys Arg Tyr Phe Gly Val Thr Pro
   275 280 285
Gly Glu Asp Ala Ser Arg Ile Arg Thr Met Gln Gly Ala
   290
      295
<210> 8550
<211> 242
<212> PRT
<213> Enterobacter cloacae
<400> 8550
Ala Ala Leu Arg Gln Leu Tyr Ala Gly Tyr His Arg Thr Gly Leu Ala
                           10
Leu Ala Gly Ala Ala Cys Arg Trp Leu Ala Asp His Arg Ser Leu Pro
                         25
Ser Gly Arg Gly Thr Ile Pro Pro Gly Tyr Arg Phe Gly Arg Leu Leu
                40
                          45
Met Ser Thr Leu Leu Tyr Leu His Gly Phe Asn Ser Ser Pro Arg Ser
                 55
                                 60
Ala Lys Ala Thr Gln Leu Arg Gln Trp Leu Ser Ala His His Pro His
    70
                               7.5
Val Glu Met Ile Ile Pro Gln Leu Pro Pro Tyr Pro Ala Asp Ala Ala
          8.5
                            90
Glu Met Leu Glu Ser Leu Val Leu Glu His Gly Gly Glu Ser Phe Gly
        100
                        105
                                        110
Val Val Gly Ser Ser Leu Gly Gly Tyr Tyr Ala Thr Trp Leu Ser Gln
     115
                      120
                                      125
Cys Phe Met Leu Pro Ala Val Val Val Asn Pro Ala Val Arg Pro Phe
                135
                                  140
Glu Leu Leu Arg Asp Phe Leu Gly Glu Asn Glu Asn Pro Tyr Thr Gly
145 150 155 160
Gln Gln Tyr Val Leu Glu Ser Arg His Ile Tyr Asp Leu Lys Val Met
           165 170
                                175
Gln Val Asp Pro Leu Glu Ala Pro Asp Leu Ile Trp Leu Leu Gln Gln
        180 185 190
Thr Gly Asp Glu Val Leu Asp Tyr Arg Gln Ala Val Ala Tyr Tyr Ala
     195 200
                                     205
Ser Cys Arg Gln Thr Val Glu Glu Gly Gly Asn His Ala Phe Thr Gly
 210
                  215
                                  220
Phe Glu Asp His Phe Thr Gln Ile Val Asp Phe Leu Gly Leu His Ser
225
               230
                               235
His
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<210> 8551
<211> 151
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<211> 151 <212> PRT

<213> Enterobacter cloacae

<400> 8551

Gly Leu Pro Cys Leu Met Asp Cys Glu Thr Thr Leu Lys Gly Glu Ile

Service Services

Gly Ala Pro Asp Asp Pro Lys Ser Phe Ala Ala Met Arg Tyr Thr Glu 120 115 Ser Arg Leu Ser Lys Tyr Ala Glu Val Leu Leu Gly Glu Leu Gly Gln 130 135 140 Gly Thr Val Asp Trp Val Pro Asn Phe Asp Gly Thr Met Gln Glu Pro 150 155 Lys Met Leu Pro Ala Arg Leu Pro Asn Ile Leu Leu Asn Gly Thr Thr 165 170 175 Gly Ile Ala Val Gly Met Ala Thr Asp Ile Pro Pro His Asn Leu Arg 180 185 Glu Val Ala Lys Ala Ala Ile Thr Leu Ile Glu Gln Pro Lys Thr Ser 195 200 205 Leu Asp Asp Leu Leu Asp Ile Val Gln Gly Pro Asp Tyr Pro Thr Glu 210 215 220 Ala Glu Ile Ile Thr Ser Arg Ala Glu Ile Arg Lys Ile Tyr Gln Asn 225 230 235 Gly Arg Gly Ser Val Arg Met Arg Ala Val Trp Asn Lys Glu Asp Gly 245 250 255 Ala Val Val Ile Thr Ala Leu Pro His Gln Val Ser Gly Ala Lys Val 260 265 270 Leu Glu Gln Ile Ala Ser Gln Met Arg Asn Lys Lys Leu Pro Met Val 275 280 285 Asp Asp Leu Arg Asp Glu Ser Asp His Glu Asn Pro Thr Arg Leu Val 290 295 300 Ile Val Pro Arg Ser Asn Arg Val Asp Met Glu Gln Val Met Asn His 305 310 315 Leu Phe Ala Thr Thr Asp Leu Glu Lys Ser Tyr Arg Ile Asn Leu Asn 325 330 Met Ile Gly Leu Asp Gly Arg Pro Ala Val Lys Asn Leu Leu Glu Ile 340 345 350 Leu Thr Glu Trp Leu Ala Phe Arg Arg Asp Thr Val Arg Arg Arg Leu 355 360 365 Asn His Arg Leu Glu Lys Val Leu Lys Arg Leu His Ile Leu Glu Gly 375 380 Leu Leu Val Ala Phe Leu Asn Ile Asp Glu Val Ile Glu Ile Ile Arg 390 395 Thr Glu Asp Glu Pro Lys Pro Ala Leu Met Ser Arg Phe Gly Ile Ser 405 410 415 Glu Thr Gln Ala Glu Ala Ile Leu Glu Leu Lys Leu Arg His Leu Ala 425 420 Arg Leu Glu Glu Met Lys Ile Arg Gly Glu Gln Asn Glu Leu Glu Lys 440 435 445 Glu Arg Asp Gln Leu Gln Ala Ile Leu Ala Ser Glu Arg Lys Met Asn 455 460 Thr Leu Leu Lys Lys Glu Leu Gln Ala Asp Ala Asp Ala Phe Gly Asp 470 475 Asp Arg Arg Ser Pro Leu His Glu Arg Glu Glu Ala Lys Ala Met Asn 485 490 495 Glu His Asp Met Leu Pro Ser Glu Pro Val Thr Ile Val Leu Ser Gln 505 510 500 Ser Gly Trp Val Arg Ser Ala Lys Gly His Asp Ile Asp Ala Pro Gly 525 515 520 Leu Ser Tyr Lys Ser Gly Asp Ser Phe Lys Ala Ala Val Lys Gly Lys 535 530 540 Ser Asn Gln Pro Val Ala Phe Ile Asp Ser Thr Gly Arg Ser Tyr Ala 555 550 Ile Asp Pro Ile Thr Leu Pro Ser Ala Arg Gly Gln Gly Glu Pro Leu 565 570 Thr Gly Lys Leu Thr Leu Pro Pro Gly Ala Thr Val Glu His Met Leu 580 585 590 Met Glu Ala Asp Asp Gln Lys Leu Leu Met Ala Ser Asp Ala Gly Tyr

```
10
Lys Met Lys Lys Phe Ala Ala Ile Ala Ala Ile Met Met Met Thr Thr
                         25
                                      30
Ala Pro Val Phe Ala Ala Gln Gly Gly Phe Ser Gly Pro Ser Ala Thr
     35
                      40
Gln Asn Gln Thr Gln Thr Gln Gln Gly Gly Phe Val Asp Asn Asn Ala
                  55
Asn Leu Thr Thr Ala Ala Lys Val Lys Asp Leu Lys Asp Asp Ala Trp
               70
                                75
Val Lys Leu Arg Gly Asn Ile Thr Glu Arg Leu Ser Asp Asp Arg Tyr
          85
                            90
Thr Phe Arg Asp Glu Ser Gly Thr Val Val Val Glu Ile Asp His Lys
        100
                       105
Arg Trp Asn Gly Val Thr Val Thr Pro Gln Asp Lys Val Glu Leu Gln
    115 120 125
Gly Lys Ile Asp Lys Asp Trp Asn Glu Phe Glu Ile Asp Val Lys Gln
 130 135 140
Val Ile Lys Leu Asn Lys
<210> 8552
<211> 755
<212> PRT
<213> Enterobacter cloacae
<400> 8552
Gly Gln Gln Pro Ala Gln Tyr Pro Phe Ile Ser Pro Gly Lys Pro Ala
1 5
                      10
Tyr Asn Pro Ala Pro Phe Val Tyr Phe Phe Phe Gly Ser Ile Met Ser
                        25
Ala Ile Ser Leu Ile Gln Pro Asp Arg Asp Leu Phe Ser Trp Pro Gln
35 40
                                      4.5
Tyr Trp Ala Ala Cys Phe Gly Pro Ala Pro Phe Leu Pro Met Ser Arg
50 55
Glu Glu Met Asp Gln Leu Gly Trp Asp Ser Cys Asp Ile Ile Leu Val
           70
                            75
Thr Gly Asp Ala Tyr Val Asp His Pro Ser Phe Gly Met Ala Ile Cys
                            90
Gly Arg Met Leu Glu Ala Gln Gly Phe Arg Val Gly Ile Ile Ser Gln
        100 105
                                         110
Pro Asp Trp Asn Ser Lys Asp Asp Phe Met Arg Leu Gly Lys Pro Asn
 115 120 125
Leu Phe Phe Gly Val Thr Ala Gly Asn Met Asp Ser Met Ile Asn Arg
                   135 140
Tyr Thr Ala Asp Arg Lys Leu Arg His Asp Asp Ala Tyr Thr Ala Asp
145 150 155
Asn Val Ala Gly Lys Arg Pro Asp Arg Ala Thr Leu Val Tyr Thr Gln
            165
                            170
Arg Cys Lys Glu Ala Trp Lys Asp Val Pro Val Ile Leu Gly Gly Ile
         180
                         185
                             190
Glu Ala Ser Leu Arg Arg Thr Ala His Tyr Asp Tyr Trp Ser Asp Thr
     195
                      200
                             205
Val Arg Arg Ser Val Leu Val Asp Ser Lys Ala Asp Met Leu Ile Phe
  210 215
                                   220
Gly Asn Gly Glu Arg Pro Leu Val Glu Val Ala His Arg Leu Ala Gln
               230
                                235
Gly Glu Ala Val Ser Glu Ile Arg Asp Val Arg Asn Thr Ala Ile Met
            245
                            250 255
Val Lys Glu Ala Leu Pro Gly Trp Ser Gly Val Asp Ser Arg Ile Ile
                         265
         260
```

Asp Met Pro Gly Lys Ile Asp Pro Ile Pro His Pro Tyr Gly Asp Asp

```
280
Leu Pro Cys Ala Asp Asn Lys Pro Val Glu Pro Lys Lys Ala Glu Ala
                    300
             295
Lys Ala Val Val Gln Pro Pro Arg Pro Lys Pro Trp Glu Lys Thr
      310 315
Tyr Val Leu Leu Pro Ser Tyr Glu Lys Val Lys Ser Asp Lys Val Leu
         325 330 335
Tyr Ala His Ala Ser Arg Ile Leu His His Glu Thr Asn Pro Gly Cys
   340 345 350
Ala Arg Ala Leu Met Gln Lys His Gly Glu Arg Tyr Ile Trp Val Asn
 355 360 365
Pro Pro Ala Ile Pro Leu Ser Thr Glu Glu Met Asp Ser Val Phe Ala
 370 375 380
Leu Pro Tyr Lys Arg Val Pro His Pro Ser Tyr Gly Ser Ser Arg Ile
385 390 395
Pro Ala Tyr Glu Met Ile Arg Phe Ser Ile Asn Ile Met Arg Gly Cys
        405 410 415
Phe Gly Gly Cys Ser Phe Cys Ser Ile Thr Glu His Glu Gly Arg Ile
       420 425 430
Ile Gln Ser Arg Ser Glu Glu Ser Ile Val Asn Glu Ile Glu Ala Ile
435 440 445
Arg Asp Thr Val Pro Gly Phe Thr Gly Val Ile Ser Asp Leu Gly Gly
450 455 460
Pro Thr Ala Asn Met Tyr Met Leu Arg Cys Lys Ser Pro Arg Ala Glu
465 470 475 480
Gln Thr Cys Arg Arg Leu Ser Cys Val Tyr Pro Ser Ile Cys Glu His
       485 490 495
Met Asp Thr Asn His Glu Pro Thr Ile Asn Leu Tyr Arg Arg Ala Arg
     500 505 510
Asp Leu Lys Gly Ile Lys Lys Ile Leu Ile Ala Ser Gly Val Arg Tyr
515 520 525
Asp Ile Ala Val Glu Asp Pro Arg Tyr Ile Lys Glu Leu Ala Thr His
530 535
                             540
His Val Gly Gly Tyr Leu Lys Ile Ala Pro Glu His Thr Glu Glu Gly
545 550 555 560
Pro Leu Ser Lys Met Met Lys Pro Gly Met Gly Ser Tyr Asp Arg Phe
        565 570
Lys Gln Leu Phe Asp Thr Tyr Ser Lys Gln Ala Gly Lys Glu Gln Tyr
                     585 590
Leu Ile Pro Tyr Phe Ile Ser Ala His Pro Gly Thr Arg Asp Glu Asp
595 600 605
Met Val Asn Leu Ala Leu Trp Leu Lys Gln Arg Arg Phe Arg Leu Asp
610 615
                              620
Gln Val Gln Asn Phe Tyr Pro Ser Pro Leu Ala Asn Ser Thr Thr Met
625 630
                         635 640
Tyr Tyr Thr Gly Lys Asn Pro Leu Ser Lys Ile Gly Tyr Lys Ser Glu
          645 650
Asp Val Val Pro Lys Gly Asp Lys Gln Arg Arg Leu His Lys Ala
       660 665 670
Leu Leu Arg Tyr His Asp Pro Lys Asn Trp Pro Leu Ile Arg Gln Ala
         680 685
675
Leu Glu Glu Met Gly Lys Lys His Leu Ile Gly Ser Arg Arg Asp Cys
              695
Leu Val Pro Ala Pro Thr Leu Glu Glu Met Arg Glu Ala Arg Arg Gln
705 710 715
Asn Arg Asn Thr Arg Pro Ala Leu Thr Lys His Thr Pro Ile Ala His
           725 730 735
Gln Arg Ser Asn Gly Val Ala Gly Thr Lys Lys Asn Val Lys Arg Lys
        740
                      745
Thr Gly 755
```

```
<210> 8553
<211> 251
<212> PRT
<213> Enterobacter cloacae
<400> 8553
Phe Ala Ser Trp Arg Tyr Arg Val Gly Asn Asn Leu Met Gln Thr Asp
                                 1.0
Leu Ser Val Trp Gly Met Tyr Gln His Ala Asp Ile Val Val Lys Ile
        20
                          25
                                               3.0
Val Met Ile Gly Leu Ile Leu Ala Ser Val Ile Thr Trp Ala Ile Phe
                      40
                                           45
Phe Ser Lys Ser Ala Glu Leu Leu Ser Gln Lys Arg Arg Leu Lys Arg
                  5.5
Glu Gln Lys Gln Leu Ala Glu Ala Arg Ser Leu Asp Gln Ala Ser Asp
        70 75
Ile Thr Ser Ser Phe His Ala Lys Ser Leu Thr Thr Leu Leu Val Asn
             8.5
                            90
Glu Ala Gln Asn Glu Leu Glu Leu Ser Ala Gly Ser Glu Asp Asn Glu
                          105
Gly Ile Lys Glu Arg Thr Gly Phe Arg Leu Glu Arg Arg Val Ala Ala
                        120
Val Gly Arg His Met Gly Arg Gly Asn Gly Tyr Leu Ala Thr Ile Gly
 130 135
                                       140
Ala Ile Ser Pro Phe Val Gly Leu Phe Gly Thr Val Trp Gly Ile Met
145 150
                                    155
Asn Ser Phe Ile Gly Ile Ala Gln Thr Gln Thr Thr Asn Leu Ala Val
              165
                                170
Val Ala Pro Gly Ile Ala Glu Thr Leu Leu Ala Thr Ala Ile Gly Leu
       180
                             185
                                               190
Val Ala Ala Ile Pro Ala Val Val Ile Tyr Asn Ile Phe Ala Arg Met
                         200
Ile Gly Ser Tyr Lys Ala Thr Leu Gly Asp Val Ala Ala Gln Val Leu
 210 215
                                        220
Leu Leu Gln Ser Arg Asp Leu Asp Leu Asn Ala Ser Ala Val Lys Pro
              230 235
Val His Ala Ala Ser Lys Leu Arg Val Gly
              245
<21.0> 8554
<211> 449
<212> PRT
<213> Enterobacter cloacae
<400> 8554
Cys Arg Asn Phe Arg Ser Leu Ser Leu Arg Leu Arg Ser Lys Asn Phe
                                 10
Leu Cys Glu Phe Leu Ile Ile Phe Ser Ala Tyr Ser Ile Ser Ile Arg
                             25
Met His Ile Leu Thr Ile Val Val Val Trp Thr Ser Arg Arg Ile Lys
       35
                         4.0
                                            45
Ile Gly Leu Ala Asn Met Thr Lys Lys Gln Leu Glu Thr Thr Leu Val
Gln Ala Gly Arg Ser Lys Lys Tyr Thr Gln Gly Ser Val Asn Ser Val
                  70
                                    75
Ile Gln Arg Ala Ser Ser Leu Val Phe Asp Thr Val Glu Asp Lys Lys
              85
                                90
Ile Ala Thr Arg Asn Arg Ala Lys Gly Gly Leu Phe Tyr Gly Arg Arg
          100
                             105
Gly Thr Leu Thr His Phe Ser Leu Gln Glu Ala Met Cys Glu Leu Glu
```

```
120
Gly Gly Ala Gly Cys Ala Leu Phe Pro Cys Gly Ala Ala Ala Val Ala
       135 140
Asn Thr Ile Leu Ala Phe Val Glu Gln Gly Asp His Val Leu Met Thr
     150 155
Asn Thr Ala Tyr Glu Pro Ser Gln Asp Phe Cys Thr Lys Ile Leu Ser
         165 170 175
Lys Leu Gly Val Thr Thr Ser Trp Phe Asp Pro Leu Ile Gly Ala Gly
     180 185 190
Ile Ala Gly Leu Ile Gln Pro Asn Thr Arg Val Val Phe Leu Glu Ser
195 200 205
Pro Gly Ser Ile Thr Met Glu Val His Asp Val Pro Ala Ile Val Lys
210 215 220
Ala Val Arg Ser Ile Ala Pro Glu Ala Ile Ile Met Ile Asp Asn Thr
225 230 235 240
Trp Ala Ala Gly Val Leu Phe Lys Ala Leu Glu Phe Asp Ile Asp Ile
          245 250 255
Ser Ile Gln Ala Ala Thr Lys Tyr Leu Ile Gly His Ser Asp Gly Met
       260 265 270
Ile Gly Thr Ala Val Ser Asn Ala Arg Cys Trp Asp Gln Leu Arg Glu
275 280 285
Asn Ala Tyr Leu Met Gly Gln Met Val Asp Ala Asp Thr Ala Tyr Met
290 295
                              300
Thr Ser Arg Gly Ile Arg Thr Leu Gly Val Arg Leu Arg Gln His His
305 310 315
Glu Ser Ser Leu Gln Ile Ala Gln Trp Leu Ala Leu His Pro Gln Val
          325 330 335
Glu Arg Val Asn His Pro Ala Leu Pro Gly Ser Lys Gly His Glu Tyr
 340
                    345
                                    350
Trp Gln Arg Asp Phe Thr Gly Ser Ser Gly Leu Phe Ser Phe Val Leu
355 360 365
Lys Lys Arg Leu Asn Asp Ala Glu Leu Ala Ser Tyr Leu Asp Asn Phe
370 375 380
Thr Leu Phe Ser Met Ala Tyr Ser Trp Gly Gly Phe Glu Ser Leu Ile
385 390 395 400
Leu Pro Asn Gln Pro Glu Gln Ile Ala Ala Leu Arg Pro Gly Gly Glu
         405 410
Val Asp Phe Glu Gly Thr Leu Ile Arg Leu His Ile Gly Leu Glu Asn
     420 425 430
Val Asp Asp Leu Ile Ala Asp Leu Ser Ala Gly Phe Glu Arg Ile Val
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<210> 8555 <211> 280 <212> PRT

<213> Enterobacter cloacae

435

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90
Arg His Val Asp Val Thr Val Phe His Gln Arg Ala Glu Met Leu His
          100
Lys Gln Arg Thr Glu Gln Arg Gly Asp Val Gln Ala Ile Gly Val Arg
     115
                 120
Ile Arg Glu Asn Ala Asp Leu Ala Val Ala Gln Leu Ala Gln Ile Val
           135
Ala Val Arg Ile Asp Thr Asp Arg Asn Arg Asp Val Val Tyr Phe Leu
        150 155
Arg Gly Gln His Phe Ile Arg Arg Asp Leu Pro Gly Val Glu Asp Leu
          165
                 170
                                  175
Thr Leu Glu Arg His Asp Arg Leu Ile Phe Thr Ile Pro Arg Leu Leu
        180 185 190
Gly Arg Ser Ala Cys Arg Val Ser Phe His Gln Glu Gln Leu Gly Ala
     195 200
                            205
Val Glu Ile Leu Arg Gly Thr Val Arg Gln Leu Ala Arg Gln Arg Gly
 210 215 220
Ala Ala Gly Gln Leu Phe Thr His His Phe Leu Arg Arg Ala Gln Thr
225 230 235
Thr Leu Gly Thr Gly Asp Arg His Phe Ser Gln His Phe Arg Gly Leu
           245 250
Asn Val Leu Val Gln Pro Gln Gly Lys Gly Ile Phe His His Ala Gly
         260
                          265
Asp Glu Arg Arg Thr Leu Ala
<210> 8556
<211> 126
<212> PRT
<213> Enterobacter cloacae
<400> 8556
Gln Gly Val Asn His Gly Asp Pro His Ala Val Gln Ala Ala Gly Glu
                             1.0
Leu Val Val Phe Val Gly Glu Leu Thr Ala Arg Val Gln Thr Thr Glu
                          2.5
Asp Gln Leu Asn Gly Gly Asn Thr Leu Phe Arg Val Asp Ile Tyr Arg
     3.5
                      4.0
His Ala Ala Ala Val Val Asp Asp Phe Gln Arg Leu Ile Gly Val Gln
                   55
                                     60
Asp Asn Val His Ala Phe Gly Met Ala Cys Gln Arg Phe Val His Thr
                70
                                 75
Val Ile Asn Tyr Phe Leu Ala Gln Val Val Trp Ala Arg Arg Ile Gly
             8.5
                              9.0
Val His Pro Arg Ala Ala Ala Asn Arg Leu Lys Pro Gly Glu Tyr Leu
         100
              105
Asn Gly Ile Ser Val Ile Gly Leu Arg His Asp Leu Ser
      115
                       120
<210> 8557
<211> 223
<212> PRT
<213> Enterobacter cloacae
<400> 8557
Ile Gly Phe Ser Gly Arg Gly Cys Gly Trp Leu Glu Asp Ala Gly Arg
                              10
Phe Thr Phe Thr Ser Thr Val Ala Ser Gly Ala Ala Thr Ile Lys Ile
                          25
Ile Ser Arg Thr Ser Met Thr Ser Ile Asn Gly Val Thr Leu Ile Ser
      35
                       4.0
```

```
Cys Ile Ser Pro Leu Ser Ser Arg Phe Ser Leu Arg Arg Ile Ala Ile
Gln Ser Thr Tyr Ala Gln Phe Gly Arg Arg Met Asn Arg Phe Asn Gly
                70
                                75
Ala Gly Val Gln Val Gln Ile Ala Ala Leu Gln Gln Gln Asn Leu Arg
                            90
Gly Asn Val Thr Gln Cys Gly Phe Val Thr Ala Asn His Ala Arg Glu
        100
                         105
                                         110
Asp Val Ile Asp Asn Asn Arg Arg Asp Ser Gly Asn Gln Thr Asp Ser
   115 120
Arg Cys Gln Gln Arg Phe Cys Asp Thr Arg Arg Asp Asp Arg Lys Val
 130 135 140
Ser Gly Leu Arg Leu Gly Asp Thr Asp Lys Ala Val His Asp Ala Pro
145 150 155
Asp Gly Thr Glu Gln Ala Asp Glu Arg Gly Asp Ser Ala Asp Ser Arg
         165 170 175
Gln Val Ala Val Thr Ala Ala His Met Thr Thr His Gly Arg Asn Ala
        180 185 190
Thr Leu Gln Thr Glu Ala Gly Thr Leu Phe Asn Ala Phe Val Ile Phe
 195 200 205
Thr Ala Cys Gly Glu Phe Gln Leu Val Leu Arg Phe Val His
         215
<210> 8558
<211> 230
<212> PRT
<213> Enterobacter cloacae
<400> 8558
Arg Tyr Ile Cys Cys Ser Thr Gly Lys Ser Met Ala Val Ile Gln Asn
                            10
Ile Ile Thr Ala Leu Trp Gln His Asp Phe Ala Ala Leu Ala Asp Pro
                         25
His Val Val Gly Ile Val Tyr Phe Val Met Phe Ala Thr Leu Phe Leu
                    40
Glu Asn Gly Leu Leu Pro Ala Ser Phe Leu Pro Gly Asp Ser Leu Leu
                55
Leu Leu Ala Gly Ala Leu Ile Gly Lys Gly Val Met Asp Phe Ala Pro
              7.0
                              75
Thr Met Val Ile Leu Thr Ser Ala Ala Ser Leu Gly Cys Trp Leu Ser
            8.5
                            90
Tyr Leu Gln Gly Arg Trp Leu Gly Asn Thr Arg Val Val Lys Gly Trp
        100 105 110
Leu Ala Gln Leu Pro His Lys Tyr His Gln Arg Ala Thr Cys Met Phe
     115
                      120
Asp Arg His Gly Leu Leu Ala Leu Leu Ala Gly Arg Phe Leu Ala Phe
 130 135 140
Val Arg Thr Leu Leu Pro Thr Met Ala Gly Ile Ser Gly Leu Ser Asn
145 150 155
Arg Arg Phe Gln Phe Phe Asn Trp Leu Ser Ala Leu Leu Trp Val Gly
             165 170
                                            175
Val Val Thr Thr Leu Gly Tyr Ala Leu Asn Met Ile Pro Phe Val Lys
         180 185 190
Arg His Glu Asp Gln Val Met Thr Phe Leu Met Val Leu Pro Ile Phe
      195 200 205
Leu Leu Val Ala Gly Leu Val Gly Thr Ile Ala Val Val Ile Lys Lys
 210
                   215
Lys Tyr Cys Ser Ala
225
```

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<211> 451
<212> PRT
<213> Enterobacter cloacae
<400> 8559
Arg Met Lys Leu Thr Gln Arg Leu Ser Leu Lys Leu Arg Leu Thr Leu
                        10
Leu Phe Leu Leu Leu Ser Leu Ala Ala Trp Phe Ala Ala Ser Val Val
  20 25
                                    3.0
Ala Trp His Gln Thr Thr Asp Lys Leu Asp Lys Leu Phe Asp Thr Gln
35 40 45
Gln Met Leu Phe Ala Lys Arg Leu Leu Thr Met Asp Val Asp Glu Leu
50 55 60
Arg Ala Pro Glu Arg Met Arg Glu Val Pro Lys Lys Ala Lys His Gly
    70 75
His Leu Asp Asp Asp Ala Leu Ala Phe Ala Ile Phe Thr Ala Asp Gly
       85 90 95
Ser Met Val Leu Asn Asp Gly Glu Asn Gly Arg Asp Ile Pro Tyr Leu
      100 105 110
Tyr Arg Arg Asp Gly Phe Asp Asp Gly Arg Leu Gln Asp Asp Asn Asp
115 120 125
Glu Trp Arg Phe Leu Trp Leu Thr Ser Pro Asp Gly Lys Tyr Arg Val
130 135 140
Val Val Gly Gln Glu Trp Glu Tyr Arg Gln Asp Met Ala Leu Asp Val
145 150 155 160
Val Ser Ser Gln Leu Thr Pro Trp Leu Val Ala Leu Pro Ile Met Leu
          165 170 175
Leu Leu Ile Val Leu Leu Ser Arg Glu Leu Lys Pro Leu Lys Lys
     180 185 190
Leu Ala Gln Thr Leu Arg Ser Arg Ser Pro Asp Ala Thr Asp Thr Leu
195 200 205
Pro Thr His Gly Val Pro Thr Glu Val Arg Pro Leu Leu Asp Ala Leu
210 215 220
Asn His Leu Phe Ala Arg Thr Gln Glu Met Met Ala Arg Glu Arg Arg
225 230 235
Phe Thr Ser Asp Ala Ala His Glu Leu Arg Ser Pro Leu Ala Ala Leu
           245 250
Lys Val Gln Thr Asp Val Ala Gln Leu Ser Leu Asp Asp Pro Gly Ala
           265 270
        260
Gln Ser Lys Ala Leu Gly Gln Leu His Ala Gly Ile Asp Arg Ala Ser
    275 280 285
Arg Leu Val Asp Gln Leu Leu Thr Leu Ser Arg Leu Asp Ser Leu Asp
290 295 300
Asn Leu Asp Asp Val Glu Pro Val Met Met Ala Asp Leu Leu Gln Ser
305 310
                           315
Ala Val Leu Asp Ile Trp His Pro Ala Gln Gln Ala Gly Ile Asp Val
          325 330
Arg Leu Asn Val Asn Ala Pro Glu Val Met Arg His Gly Gln Pro Leu
   340 345
                                   350
Leu Leu Ser Leu Leu Ala Arg Asn Leu Leu Asp Asn Ala Val Arg Tyr
   355
                   360
                                365
Ser Pro Arg Gly Ser Val Val Asp Val Thr Leu Asn Thr Gln Ser Phe
  370
                375
                              380
Thr Val Arg Asp Asn Gly Pro Gly Ile Ser Thr Asp Ala Leu Thr Arg
385 390
                            395
Leu Gly Glu Arg Phe Tyr Arg Pro Pro Gly Gln Asp Ala Thr Gly Ser
           405
                410 415
```

Gly Leu Gly Leu Ser Ile Val Lys Arg Ile Ala Ala Leu His Gly Met

445

440

425 His Val Ser Leu Gly Asn Ala Pro Glu Gly Gly Phe Ala Val Thr Val

420

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Ser Trp
  450
<210> 8560
<211> 151
<212> PRT
<213> Enterobacter cloacae
<400> 8560
Gln Lys Asp Gly Met Gly Leu Phe Asn Phe Val Lys Glu Ala Gly Glu
Lys Leu Trp Asp Asn Leu Thr Asp His Lys Gly Gln Ser Asp Lys Ile
         20 25
Thr Glu His Leu Lys Lys Leu Asn Ile Pro Gly Ser Asp Lys Val Gln
                                     45
    3.5
                 40
Val Asn Val Thr Asp Gly Lys Ala Ser Val Thr Gly Asp Gly Leu Thr
                   55 60
Gln Glu Gln Lys Glu Lys Ile Gln Val Ala Val Gly Asn Ile Ala Gly
                               75
                70
Val Ser Glu Val Glu Asn Asn Ile Thr Ala Thr Asp Ala Lys Asp Glu
            85 90
Ala Thr Tyr Tyr Thr Val Lys Ser Gly Asp Thr Leu Ser Ala Ile Ser
         100 105 110
Lys Thr Val Tyr Gly Asp Ala Asn Gln Tyr Asn Lys Ile Phe Glu Ala
115 120 125
Asn Arg Pro Met Leu Ser Ser Pro Asp Lys Ile Tyr Pro Gly Gln Thr
                    135
Leu Arg Ile Pro Lys Ala
<210> 8561
<211> 300
<212> PRT
<213> Enterobacter cloacae
<400> 8561
Glu Asn Leu Lys Arg Trp Phe Ile Lys Thr lle Arg Gln Glu Lys Val
                              1.0
Glu Phe Tyr Cys Thr Met Arg Asp Thr Pro Thr Thr Asp Leu Leu Glu
                          25
Leu Ile Ala Leu Asn Asp Thr Val Ala Ser Phe Ser Arg Leu Phe Ala
 35
                       40
Asn Thr Val Arg Tyr His His Trp His Gln Cys Leu Glu Ile Leu Tyr
                    55
                                     60
Val Glu Glu Gly Phe Gly Val Ala Ile Val Asp Asn Arg His Tyr Thr
                               75
                7.0
Met Arg Pro Gly Arg Leu Phe Phe Phe Pro Pro Phe Thr Leu His Lys
            85
                              90
Val Met Val Asp Glu Gln Ala Glu Ala Ile Tyr Arg Arg Thr Ile Ile
         100
                           105 110
His Leu Asp Gln His Ala Val Leu Lys Ile Leu Arg Asp Phe Pro Gln
      115
                       120
                                        125
Thr Arg Gln Arg Leu Glu Arg Leu Ser Arg Arg Gly Gly Glu Ala Trp
                    135
                                      140
Val Ala Asp Leu Ala His Cys His His Ile Asp His Leu Phe Ser
                 150
                                  155
Cys Tyr Lys Pro Pro Met Asn Gly Glu Ser Ile Ala Ser Leu Leu Ile
             165
                              170
                                             175
Gly Leu Phe Ala Met Leu Pro Asp Asp Arg Asp Gly Glu Pro Gly Asn
```

185 Ser Gln Gly Ile Ala Ser Gln Val Met Ile Trp Leu Asp Glu His Tyr

```
200
Gln Glu Lys Phe Arg Leu Asp Ala Leu Ala Ala Glu Leu Gly Lys Ser
                  215
                                     220
Arg Ser Tyr Val Ser Arg Arg Phe His Ala Glu Thr Gly Glu Lys Ile
                230
                                  235
His Asp Tyr Leu Asn Thr Leu Arg Leu Arg Lys Ala Cys Glu Cys Leu
            245
                     250
Leu His Thr Asp Ser Ser Val Arg Asp Ile Ala Ala Gln Ala Gly Phe
          260
                          265
                                   270
Ser Asp Val Thr Trp Phe Ile Ser Ala Phe Lys Lys Gly Ile Gly Glu
      275
              280
Thr Pro Leu Gln Tyr Arg Lys Asn His Ser Ser
                    295
   290
<210> 8562
<211> 414
<212> PRT
<213> Enterobacter cloacae
<400> 8562
Arg Leu Pro Ala Thr Met Ser Ser Ile Arg Leu Pro Ser Ala Pro Pro
                    10
   5
Arg Phe Phe Thr His Tyr Arg Glu Gln Ala Met Asn Asn Phe Asn Leu
                           25
                                       3.0
His Thr Pro Thr Arg Ile Leu Phe Gly Lys Asn Ala Ile Ala Asp Leu
                       40
                                         45
Arg Ala Gln Ile Pro Thr Asp Ala Arg Val Leu Ile Thr Tyr Gly Gly
       55
Gly Ser Val Lys Lys Thr Gly Val Leu Asp Gln Val Tyr Ser Ala Leu
                70
                                 7.5
Glu Gly Leu Asp Val Arg Glu Phe Gly Gly Ile Glu Pro Asn Pro Ser
           8.5
                             90
Tyr Glu Thr Leu Met Asn Ala Val Lys Ile Ala Arg Glu Glu Gln Ile
                          105
Thr Phe Leu Leu Ala Val Gly Gly Ser Val Leu Asp Gly Thr Lys
                       120 125
Phe Ile Ala Ala Ala His Tyr Ala Asp Gly Ile Asp Pro Trp His
                   135
                                   140
Ile Leu Glu Thr Gly Gly Ser Asp Ile Ser Ser Ala Ile Pro Met Gly
145 150 155
Ser Val Leu Thr Leu Pro Ala Thr Gly Ser Glu Ser Asn Lys Gly Ala
            165
                              170 175
Val Ile Ser Arg Lys Thr Thr Gly Asp Lys Gln Ala Phe Met Asn Glu
         180
                           185
His Val Gln Pro Val Phe Ala Ile Leu Asp Pro Val Tyr Thr Tyr Thr
      195
                       200
                                       205
Leu Pro Ala Arg Gln Val Ala Asn Gly Val Val Asp Ala Phe Val His
                    215
                                      220
Thr Val Glu Gln Tyr Val Thr Tyr Pro Val Asn Ala Lys Ile Gln Asp
                 230
                                  235
Arg Phe Ala Glu Gly Ile Leu Leu Thr Leu Ile Glu Glu Gly Pro Lys
             245
                               250
Ala Leu Lys Glu Pro Asp Asn Tyr Asp Val Arg Ala Asn Val Met Trp
                           265
                                270
          260
Ala Ala Thr Gln Ala Leu Asn Gly Leu Ile Gly Ala Gly Val Pro Gln
                        280
                                         285
Asp Trp Ala Thr His Met Leu Gly His Glu Leu Thr Ala Met His Gly
                    295
   290
                                      300
Leu Asp His Ala Gln Thr Leu Ala Val Val Leu Pro Ala Leu Trp Asn
                 310
                                  315
Glu Lys Arg Asp Ala Lys Arg Ala Lys Leu Leu Gln Tyr Ala Glu Arg
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330 Val Trp Asn Ile Thr Asp Gly Ser Asp Asp Ala Arg Ile Asp Ala Ala 340 345 350 Ile Glu Ala Thr Arg His Phe Phe Glu Ser Leu Gly Val Pro Thr Arg 355 360 Leu Ser Gly Tyr Gly Leu Asp Gly Ser Ser Ile Pro Ala Leu Leu Ala 370 375 380 Lys Leu Glu Ala His Gly Met Thr Gln Ile Gly Glu His Gly Asp Ile 385 390 395 Thr Leu Asp Val Ser Arg Arg Ile Tyr Glu Ala Ala Arg <210> 8563 <211> 282 <212> PRT <213> Enterobacter cloacae <400> 8563 Ala Pro Glu Gly Gly Lys Met Ala Asn Gln Thr Val Ile Lys Leu Gln 10 Asp Gly Asn Val Met Pro Gln Leu Gly Leu Gly Val Trp Lys Ala Gly 2.5 Asn Asp Glu Val Val Ser Ala Ile His Lys Ala Leu Glu Val Gly Tyr 40 Arg Ser Ile Asp Thr Ala Ala Ala Tyr Lys Asn Glu Asp Gly Val Gly 55 Lys Ala Leu Ala Ser Ala Gly Val Pro Arg Asp Glu Leu Phe Ile Thr 75 65 70 Thr Lys Leu Trp Asn Asp Asp Gln Lys Arg Pro Arg Glu Ala Leu Gln 8.5 Glu Ser Leu Glu Lys Leu Gln Leu Asp Phe Val Asp Leu Tyr Leu Met 100 105 110 His Trp Pro Val Pro Ala Ile Asp His Tyr Val Asp Ala Trp Lys Gly 120 125 115 Met Ile Glu Leu Gln Lys Glu Gly Leu Ile Lys Ser Ile Gly Val Cys 130 135 140 Asn Phe Gln Val His His Leu Gln Arg Leu Ile Asp Glu Thr Gly Val 150 155 Ala Pro Val Ile Asn Gln Ile Glu Leu His Pro Leu Met Gln Gln Arg 165 170 175 Gln Leu His Ser Trp Asn Ala Thr His Lys Ile Gln Thr Glu Ser Trp 180 185 Ser Pro Leu Ala Gln Gly Gly Glu Gly Val Phe Asp Gln Lys Ile Ile 195 200 205 Arg Glu Leu Ala Asp Lys Tyr Gly Lys Thr Pro Ala Gln Ile Val Ile 210 215 220 Arg Trp His Leu Asp Ser Gly Leu Val Val Ile Pro Lys Ser Val Thr 225 230 235 Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Trp Asp Phe Arg Leu Asp 245 250 Lys Asp Glu Leu Gly Glu Ile Ala Lys Leu Asp Gln Gly Lys Arg Leu 260 265 Gly Pro Asp Pro Asp Gln Phe Gly Gly 275 <210> 8564 <211> 226 <212> PRT <213> Enterobacter cloacae

<400> 8564

Arg His Gln Gly Gly Asn Met Arg Ile Leu Leu Val Glu Asp Asp Lys Leu Ile Gly Asp Gly Ile Lys Ala Gly Leu Ser Lys Met Gly Phe Asn 2.0 Val Asp Trp Phe Thr Asp Gly Lys Thr Gly Gln Ala Ala Leu Tyr Thr 35 4.0 Ala Pro Tyr Asp Ala Val Val Leu Asp Leu Thr Leu Pro Glu Ile Asp 5.0 55 60 Gly Leu Glu Ile Leu Arg Ala Trp Arg Glu Ser Gly Lys Ser Glu Pro 70 7.5 Val Leu Ile Leu Thr Ala Arg Asp Ala Leu Asn Gln Arg Val Glu Gly 90 85 Leu Arg Leu Gly Ala Asp Asp Tyr Leu Cys Lys Pro Phe Ala Leu Ile 100 105 110 Glu Val Ala Ala Arg Leu Glu Ala Leu Val Arg Arg Ser His Gly Gln 115 120 125 Ala Arg Ser Glu Leu Arg His Gly Lys Val Thr Leu Asp Pro Ala Ser 135 140 Leu Val Ala Thr Leu Glu Gly Glu Thr Leu Val Leu Lys Pro Lys Glu 150 155 Phe Ala Leu Leu Glu Leu Leu Met Arg Asn Ala Gly Arg Val Leu Pro 165 170 Arg Lys Ala Ile Glu Glu Lys Leu Tyr Asn Trp Asp Asp Asp Val Ser 180 185 Ser Asn Ala Val Glu Val His Val His His Leu Arg Arg Lys Leu Gly 195 200 Ser Asp Phe Ile Arg Thr Val His Gly Ile Gly Tyr Thr Leu Gly Asp

Ala 225

<210> 8565 <211> 233 <212> PRT

<213> Enterobacter cloacae

<400> 8565

Pro Ser Ala Gly Lys Ile Ile Ala Leu Ser Ala Lys Asp Phe Ala His 10 Phe Ala Tyr Phe Ser Ala Pro Ser Ser Arg Val Glu Tyr Pro Ala Tyr 20 25 Ser His His Arg Gly Gln Ile Met Ser Asn Ile Leu Ile Ile Asn Gly 35 45 4.0 Ala Lys Glu Phe Ala His Ser Lys Gly Gln Leu Asn Asp Thr Leu Thr 55 50 Glu Val Ala Asp Gly Phe Leu Arg Asp Ala Gly His Asp Val Lys Val 70 7.5 65 Val Arg Ala Asp Ser Asp Tyr Asp Val Lys Ala Glu Val Gln Asn Phe 90 85 Leu Trp Ala Asp Val Val Ile Trp Gln Met Pro Gly Trp Trp Met Gly 105 100 Ala Pro Trp Thr Val Lys Lys Tyr Met Asp Asp Val Phe Thr Glu Gly 115 His Gly Ser Leu Tyr Ala Ser Asp Gly Arg Thr Arg Ser Asp Ala Ser 135 140 Lys Lys Tyr Gly Ser Gly Gly Leu Ile Gln Gly Lys Lys Tyr Met Leu 150 155 Ser Leu Thr Trp Asn Ala Pro Leu Glu Ala Phe Thr Glu Lys Asp Gln 165 170 Phe Phe Glu Gly Val Gly Val Asp Gly Ala Tyr Leu Pro Phe His Lys 180 185

```
Ala Asn Gln Phe Leu Gly Met Glu Pro Leu Pro Thr Phe Ile Val Asn
                          200
Asp Val Ile Lys Met Pro Asp Val Pro Arg Tyr Ile Ala Glu Tyr Arg
   210
                    215
Lys His Leu Ala Glu Ile Phe Ala
                  230
<210> 8566
<211> 109
<212> PRT
<213> Enterobacter cloacae
<400> 8566
Lys Glu Leu Ile Met Leu Thr Val Ile Ala Glu Ile Arg Thr Arg Pro
                                   10
Gly Gln His His Arg Gln Ala Val Leu Asp Glu Phe Ala Lys Ile Ile
                              25
                                                   30
Pro Thr Val Leu Lys Glu Glu Gly Cys His Gly Tyr Ala Pro Met Val
                          40
Asp Ala Ala Thr Ser Ala Ser Phe Gln Ala Thr Ala Pro Asp Ser Ile
                      55
Ile Met Val Glu Gln Trp Glu Thr Val Ala His Leu Glu Ala His Leu
                   70
                                       7.5
Gln Thr Ala His Met Lys Ala Trp Ser Asp Ala Val Lys Gly Asp Val
                               90
Leu Glu Thr His Ile Arg Ile Leu Glu Gln Gly Val
<210> 8567
<211> 413
<212> PRT
<213> Enterobacter cloacae
<400> 8567
Pro His Thr Thr Asn Glu Glu His Leu Met Asn Thr Thr Thr Thr Arg
                                   10
Ala Val Ser Arg Trp Val Ile Leu Met Leu Ala Leu Gly Ala Gly Phe
                               25
                                                   3.0
Ser Val Ala Ser Ile Tyr Tyr Ala Gln Pro Leu Leu Pro Leu Met Gly
                           40
Ser Asp Leu Asn Leu Ser Ile Glu Gly Met Gly Met Val Pro Thr Leu
                       55
                                           60
Thr Gln Ala Gly Tyr Ala Leu Gly Ile Leu Phe Leu Leu Pro Leu Gly
                   70
                                       7.5
Asp Arg His Asp Arg Arg Thr Leu Ile Leu Ile Lys Ser Ala Ala Leu
               85
                                   90
Ala Leu Phe Leu Leu Gly Cys Ser Leu Thr Gly Gln Leu His Ser Leu
           100
                               105
                                                   110
Leu Leu Thr Ser Leu Leu Ile Gly Met Ala Ala Thr Met Ala Gln Asp
                           120
       115
Ile Val Pro Ala Ala Ala Ile Leu Ala Pro Glu Gly Lys Gln Gly Lys
                       135
Thr Val Gly Thr Val Met Thr Gly Leu Leu Leu Gly Ile Leu Leu Ser
                   150
                                       155
Arg Thr Val Ser Gly Val Val Gly Glu Ala Phe Gly Trp Arg Val Met
               165
                                   170
                                                       175
Tyr Gln Leu Ala Ala Ala Ser Ile Ala Phe Val Gly Val Val Met Trp
           180
                               185
                                                   190
Ala Val Leu Pro Arg Phe Ala Val His Ser Thr Leu Ser Tyr Pro Ala
                           200
                                       205
Leu Met Arg Ser Met Glu His Leu Trp Arg Arg Tyr Pro Ala Leu Arg
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215 Arg Ala Ala Leu Ala Gln Gly Phe Leu Ser Ile Ala Phe Ser Ala Phe 230 235 Trp Ser Thr Leu Ala Val Met Leu Leu Glu Arg Tyr His Leu Gly Ser 245 250 Ala Val Ala Gly Gly Phe Gly Ile Ala Gly Ala Ala Gly Ala Leu Ala 260 265 270 Ala Pro Leu Ala Gly Gly Leu Ala Asp Lys Leu Gly Ala Gly Lys Val 275 280 285 Thr Gln Leu Gly Ala Ala Leu Val Thr Leu Ser Phe Ala Leu Met Phe 290 295 300 Leu Met Pro Ala Leu Gly Ile His Gly Gln Leu Ile Leu Ile Ala Leu 305 310 315 Ser Ala Val Gly Phe Asp Leu Gly Leu Gln Ser Ser Leu Val Ala His 325 330 335 Gln Asn Leu Val Tyr Ser Leu Glu Pro Gln Ala Arg Gly Arg Leu Asn 340 345 350 Ala Leu Leu Phe Thr Val Ile Phe Ile Gly Met Ala Leu Gly Ser Ala 355 360 365 Leu Gly Ser Asn Ile Tyr Thr Leu Ala Gly Trp Ser Gly Val Val Ala 370 375 380 Leu Ala Thr Leu Cys Gly Ala Ile Ala Leu Ala Ile Arg Val Ile Glu 385 390 395 Ser Ala Arg Val Leu Ser Ala Gln Ala Glu Ser Val 405

<210> 8568 <211> 238 <212> PRT

<213> Enterobacter cloacae

<400> 8568

Trp Lys Thr Thr Ala Gly Arg Ile Cys Leu Ile Leu Asp Met Val Glu Arg Ala Met Arg Thr Phe Lys Arg Gly Leu Ala Ala Thr Leu Leu Leu 25 Leu Ser Pro Leu Val Gln Ala Glu Gly Leu Glu Asp Gln Leu Asn Ala 35 4.0 4.5 Phe Phe Ala Gln Lys Leu Ala Gly Phe Ser Asp Asp Val Arg Val Thr 50 55 Val Arg Thr Pro Pro Asn Leu Tyr Pro Ser Cys Glu Ala Pro Ser Phe 65 70 75 80 Ser Val Thr Gly Ser Thr Lys Leu Trp Gly Asn Val Asn Val Leu Ala 85 90 Arg Cys Ala Asn Glu Lys Arg Tyr Leu Gln Val Ala Val Gln Ala Thr 100 105 110 Gly Asn Tyr Val Val Ala Ala Val Pro Ile Pro Arg Gly Ser Leu Leu 115 120 125 Gln Pro Asp Ser Val Thr Leu Lys Arg Gly Arg Leu Asp Gln Leu Pro 130 135 140 Pro Arg Thr Met Leu Asp Ile Asn Gln Ala Gln Glu Ala Val Ser Leu 150 155 160 Arg Asp Val Ala Pro Gly Gln Ala Ile Gln Leu Ser Met Leu Arg Gln 165 170 175 Ala Trp Arg Val Lys Ala Gly Gln Gln Val Met Val Val Ala Asn Gly 180 185 190 Glu Gly Phe Ser Ile Asn Ser Glu Gly Lys Ala Leu Asn Asn Ala Ala 195 200 205 Val Ala Gln Asn Ala Arg Val Arg Met Ser Ser Gly Gln Val Val Ser 220 215

Gly Thr Val Gly Pro Asp Gly Asn Ile Leu Ile Asn Leu

235

<210> 8569

<211> 112 <212> PRT

<213> Enterobacter cloacae

230

<400> 8569

Cys Gln Ala Gln Thr Pro Arg Thr Leu Asp Glu Asp Asn Thr Met Ser 5 10

Ile Asp Arg Thr Ser Ala Leu Lys Pro Val Ser Thr Val Gln Pro Arg 25 3.0 Glu Thr Asn Glu Ala Ala Pro Gln Lys Thr Arg Leu Glu Lys Thr Ser

40 4.5 Thr Ala Asn Ser Thr Ser Val Thr Leu Ser Asp Ala Gln Ser Lys Leu 5.5 60

Met Gln Pro Gly Ser Ser Asp Ile Asn Met Glu Arg Val Glu Ala Leu

7.0 75 80 Lys Thr Ala Ile Arg Asn Gly Glu Leu Lys Met Asp Thr Ser Lys Ile 85 90 95

Ala Asp Ala Leu Ile Gln Asp Ala Gln Ser Phe Leu Gln Ser Asn 100 105

<210> 8570

<211> 207

53

.3

511

1.7

117

1.2

14 51

113

14

10

1.3

<212> PRT

<213> Enterobacter cloacae

<400> 8570

Asp His Pro Asp Ile Leu Ala Tyr Gln Asp Arg Cys Ala Asp Phe Met 1 5 10 Leu Arg Asn Ala Met Lys Lys Ile Val Ile Ala Ala Ala Leu Ile Val

20 25 Ser Gly Leu Leu Val Gly Cys Asn Gln Leu Thr Gln Tyr Thr Val Ser

4.5 35 4.0 Glu Gln Glu Ile Asn Gln Ala Leu Glu Lys His Asn Asn Phe Ser Lys 55 60

Asp Ile Gly Val Pro Gly Leu Ala Asp Ala His Ile Val Leu Thr Asn 65 70 75

Leu Ala Ser Gln Ile Gly Arg Glu Glu Pro Asn Lys Val Thr Leu Ser 90 85

Gly Asp Ala Ser Leu Asp Met Thr Ser Leu Phe Gly Asn Gln Lys Ala 100 105

Asp Ile Lys Leu Lys Leu Lys Ala Leu Pro Val Phe Asn Lys Asp Lys 115 120 125

Gly Ala Ile Phe Leu Gln Glu Met Glu Ile Val Asp Ala Val Val Thr 140 135

Pro Asp Lys Met Lys Pro Val Leu Gln Thr Leu Met Pro Tyr Leu Asn 150 155

Gln Ser Leu Gln Asn Tyr Phe Asn Gln Gln Pro Ala Tyr Val Leu Ser 175 170 165 Glu Asp Lys Ser Lys Gly Glu Ser Leu Ala Lys Lys Tyr Ala Lys Gly

205

180 185 Ile Glu Val Lys Pro Gly Glu Ile Ile Ile Pro Phe Thr Asp 200

<210> 8571

<211> 120

<212> PRT

<213> Enterobacter cloacae

<400> 8571 Leu Arg Ser Ala Arg His Gly Asn Asp Ala Cys His Val Trp Asn Gly Leu Val Tyr Ser Val Val Arg Pro Trp Thr Leu Leu Leu Asn Tyr Leu 25 Arg Phe Lys Leu Ala Asn Thr Ala Asn Gly Phe Gly Phe Cys Ala Ser 35 4.0 4.5 Ser Gly Ser Ser Pro Lys Thr Met Ser Ala Ser Asp Thr Ser Gln Cys 55 60 Ser Glu Ser Cys Thr Gly Thr Thr Gly Arg Glu Arg Met Thr Ser Ser 70 75 Ser Thr Ser Ala Arg Arg Ser Ile Ser Pro Asn Ser Leu Thr Ser Ile 85 90 Gly Ser Tyr Ala Ser Gly Ser Ala Ser Ala Cys Ser Ser Glu Arg Thr 100 Gly Leu Lys Gln Tyr Val Val

<210> 8572 <211> 1041 <212> PRT <213> Enteropacter cloacas

<213> Enterobacter cloacae

<400> 8572 Val Thr Met Lys Arg Met Leu Ile Asn Ala Thr Gln Gln Glu Glu Leu 10 Arg Val Ala Leu Val Asp Gly Gln Arg Leu Tyr Asp Leu Asp Ile Glu 2.5 Ser Pro Gly His Glu Gln Lys Lys Ala Asn Ile Tyr Lys Gly Lys Ile 35 4.0 45 Thr Arg Ile Glu Pro Ser Leu Glu Ala Ala Phe Val Asp Tyr Gly Ala 5.5 Glu Arg His Gly Phe Leu Pro Leu Lys Glu Ile Ala Arg Glu Tyr Phe 7.0 7.5 Pro Ala Asn Tyr Asn Ser His Gly Arg Pro Asn Ile Lys Asp Val Leu 8.5 90 Arg Glu Gly Gln Glu Val Ile Val Gln Ile Asp Lys Glu Glu Arg Gly 1.00 105 110 Asn Lys Gly Ala Ala Leu Thr Thr Phe Ile Ser Leu Ala Gly Ser Tyr 115 120 Leu Val Leu Met Pro Asn Asn Pro Arg Ala Gly Gly Ile Ser Arg Arg 135 140 Ile Glu Gly Asp Asp Arg Thr Glu Leu Lys Glu Ala Leu Ala Ser Leu 150 155 Glu Leu Pro Asp Gly Met Gly Leu Ile Val Arg Thr Ala Gly Val Gly 165 170 Lys Ser Ala Glu Ala Leu Gln Trp Asp Leu Ser Phe Arg Leu Lys His 180 185 190 Trp Glu Ala Ile Lys Lys Ala Ala Glu Ser Arg Pro Ala Pro Phe Leu 195 200 205 Ile His Gln Glu Ser Asn Val Ile Val Arg Ala Phe Arg Asp Tyr Leu 210 215 220 Arg Gln Asp Ile Gly Glu Ile Leu Ile Asp Asn Pro Lys Val Leu Glu 230 235 240 Leu Ala Arg Gln His Ile Ala Ala Leu Gly Arg Pro Asp Phe Thr Ser 245 250 255 Lys Ile Lys Leu Tyr Thr Gly Glu Ile Pro Leu Phe Ser His Tyr Gln 265 260 Ile Glu Ser Gln Ile Glu Ser Ala Phe Gln Arg Glu Val Arg Leu Pro 275 280 Ser Gly Gly Ser Ile Val Ile Asp Thr Thr Glu Ala Leu Thr Ala Ile

295 290 Asp Ile Asn Ser Ala Arg Ala Thr Arg Gly Gly Asp Ile Glu Glu Thr 310 315 Ala Phe Asn Thr Asn Leu Glu Ala Ala Asp Glu Ile Ala Arg Gln Leu 325 330 335 Arg Leu Arg Asp Leu Gly Gly Leu Ile Val Ile Asp Phe Ile Asp Met 340 345 350 Thr Pro Val Arg His Gln Arg Ala Val Glu Asn Arg Leu Arg Glu Ala 355 360 365 Val Arg Gln Asp Arg Ala Arg Ile Gln Ile Ser His Ile Ser Arg Phe 375 380 Gly Leu Leu Glu Met Ser Arg Gln Arg Leu Ser Pro Ser Leu Gly Glu 385 390 395 Ser Ser His His Val Cys Pro Arg Cys Ser Gly Thr Gly Thr Val Arg 405 410 415 Asp Asn Glu Ser Leu Ser Leu Ser Ile Leu Arg Leu Ile Glu Glu Glu 420 425 430 Ala Leu Lys Glu Asn Thr Lys Glu Val His Ala Ile Val Pro Val Pro 435 440 445 Ile Ala Ser Tyr Leu Leu Asn Glu Lys Arg Ala Ala Val Ser Ala Ile 455 460 Glu Ala Arg Gln Gly Gly Val Arg Cys Ile Ile Val Pro Asn Asp Glu 465 470 475 Met Gln Thr Pro His Tyr His Val Leu Arg Val Arg Lys Gly Glu Glu 490 495 485 Thr Ser Thr Leu Ser Tyr Leu Leu Pro Lys Leu His Glu Glu Glu Met 500 505 510 Ala Leu Pro Ser Asp Glu Glu Pro Ala Glu Arg Lys Leu Pro Glu Gln 515 525 520 Pro Ala Leu Ala Thr Phe Ile Met Pro Glu Ala Pro Pro Glu Ala Thr 530 535 540 Leu Glu Lys Pro Ala Ala Lys Pro Ala Val Gln Lys Ala Ala Pro Ala 550 555 Ala Ala Lys Ala Gln Pro Glu Gln Pro Gly Leu Leu Ser Arg Ile Phe 565 570 575 Gly Ala Leu Lys Lys Met Phe Ala Gly Glu Glu Val Gln Pro Glu Gln 580 585 590 Pro Lys Glu Ala Pro Lys Glu Ala Lys Pro Glu Arg Gln Gln Asp Arg 600 605 595 Arg Lys Arg Gln Asn Asn Arg Arg Asp Arg Asn Asp Arg Asn Asp Arg 610 615 620 Ser Asp Arg Asn Glu Arg Arg Asp Asn Arg Ser Glu Asn Asn Glu Gly 630 635 Arg Glu Gln Arg Glu Asp Asn Arg Arg Asn Arg Arg Glu Lys Gln Gln 645 650 Gln Asn Val Glu Asp Arg Glu Ile Arg Gln Gln Ala Gly Asp Glu Ser 665 670 Glu Lys Ser Lys Gln Arg Asp Glu Gln Gln Pro Arg Arg Glu Arg Asn 680 685 675 Arg Arg Arg Asn Asp Glu Lys Arg Gln Ala Gln Gln Glu Val Lys Asn 695 700 Leu Asn Arg Glu Ala Pro Val Glu Gln Gln Asp Thr Glu Gln Glu Glu 710 715 Arg Thr Gln Val Met Pro Arg Arg Lys Gln Arg Gln Leu Thr Gln Lys 735 730 Val Arg Val Gly Ala Val Gln Ala Glu Glu Asn Asp Val Ile Ala Val 740 745 750 Glu Ala Ala Glu Ser Thr Thr Gly Thr Gln Val Ala Lys Val Asp Leu 765 755 760 Pro Ala Val Val Glu Asn Gln Val Glu Gln Asp Glu Ser Ser Glu Asn 780

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Arg Asp Asn Ala Gly Met Pro Arg Arg Ser Arg Arg Ser Pro Arg His
                             795
785
         790
Leu Arg Val Ser Gly Gln Arg Arg Arg Arg Tyr Arg Asp Glu Arg Tyr
          805 810
Pro Thr Gln Ser Pro Met Pro Leu Thr Val Ala Cys Ala Ser Pro Glu
       820 825
Met Ala Ser Gly Lys Val Trp Ile Arg Tyr Pro Val Ala Arg Pro Glu
  835 840 845
Gln Ala Ile Glu Glu Gln Ala Val Thr Gln Glu Val Ile Ala Pro Val
 850 855 860
Ala Ala Val Glu Asp Val Val Ser Glu Ala Ala Thr Val Val Glu Pro
865 870 875 880
Gln Val Val Asp Thr Ala Ala Pro Gln Ala Val Glu Val Glu Thr Thr
         885 890 895
His Pro Glu Val Ile Ala Ala Pro Val Asp Ala Ala Pro Gln Ile Ile
        900 905 910
Ala Glu Glu Asp Thr Val Val Ala Glu Glu Val Ala Glu Asp Ala Glu
                    920
                                   925
Pro Val Ser Ala Ala Glu Glu Thr Ala Asp Val Ala Val Glu Thr Val
                 935 940
Thr Glu Glu Val Val Gln Asp Val Glu Ile Gln Val Glu Pro Val Val
              950 955
Glu Glu Val Lys Ala Pro Glu Val Lys Ser Glu Pro Ile Glu Val Val
           965
                          970
Ala Ala Val Ala Pro Ala His Val Ala Thr Ala Pro Met Thr Arg Ala
        980
                       985
Pro Ala Pro Glu Tyr Val Pro Glu Ala Pro Arg His Ser Asp Trp Val
     995
                    1000
                                  1005
Arg Pro Ala Phe Asn Phe Glu Gly Lys Gly Ala Ala Gly Gly His Ser
1010 1015 1020
Ala Thr His Met Ala Thr Ala Pro Ala Thr Arg Pro Gln Pro Val Glu
              1030
                             1035
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<210> 8573 <211> 155 <212> PRT <213> Enterobacter cloacae

<400> 8573 Phe Arg Thr His Arg Val Ser Ser Arg Val Thr Asn Arg Met Ser Arg 10 Leu Ser Glu Ile Leu Asp Gln Met Thr Val Val Leu Asn Asp Leu Lys 30 20 25 Thr Val Met Asp Ala Glu Gln His His Leu Ser Ser Gly Gln Ile Asn 4.5 4.0 Gly Ser Ala Leu Gln Arg Ile Thr Glu Asp Lys Ser Ser Leu Leu Ala 60 55 Thr Leu Asp Tyr Leu Glu Lys Gln Arg Arg Ala Glu Gln Asp Ala Lys 70 80 75 Arg Ser Ala Asn Asp Glu Ile Asn Glu Arg Trp Gln Thr Ile Thr Glu 85 90 Lys Thr Gln His Leu Arg Asp Leu Asn Gln His Asn Gly Trp Leu Leu 110 100 105 Glu Gly Gln Ile Ile Arg Asn Gln Gln Ala Leu Glu Val Leu Lys Pro 120 Tyr Lys Glu Pro Gly Leu Tyr Gly Ala Asp Gly Gln Thr Ala Thr Ala 140 130 135 Arg Ile Thr Gly Gly Lys Lys Ile Ser Ile

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<210> 8574
<211> 544
<212> PRT
<213> Enterobacter cloacae
<400> 8574
Gly Ala Pro Ala Ser Gln Arg Gly Ser Ser Gly Ser Arg Pro Glu Arg
                         10
Val Pro Arg Val Leu Lys Thr Gly Asp Ser Arg Arg Asn Asn Pro Pro
         20 25
Asp Ala Arg His His Ala His Ala Pro Asp Glu Arg Pro Ala Cys Pro
              40 45
Ser Ser Asp Ala Leu Leu Ala His Tyr Cys Asp Ser Gln Thr Ser Leu
   50 55 60
Pro Leu Leu Pro Val Ala Ser Ala Leu Pro Val Ser Phe Thr Ile Pro
65 70 75 80
Val Pro Ala Pro Ser Val Lys Thr Val Thr Tyr His Phe Asp Arg Phe
           85 90 95
Ser His Phe Ser Met Arg Thr Leu Tyr Gln Ser Thr Phe Leu Ile Lys
        100 105 110
Lys Tyr Cys Arg Gln Arg Val Trp Glu Lys Glu Arg Arg His Arg Arg
      115 120 125
Met Leu Ala Cys Ser Pro Phe Ile Phe Pro Gly Gly Lys Met Ser Arg
130 135 140
Val Ser Gln Ala Arg Ser Leu Gly Lys Tyr Phe Leu Leu Val Asp Asn
              150 155 160
Met Leu Val Val Leu Gly Phe Phe Val Val Phe Pro Leu Ile Ser Ile
           165 170 175
Arg Phe Val Asp Gln Met Gly Trp Ala Ala Leu Met Val Gly Ile Ala
                      185 190
         180
Leu Gly Leu Arg Gln Phe Val Gln Gln Gly Leu Gly Val Phe Gly Gly
      195 200 205
Ala Ile Ala Asp Arg Phe Gly Ala Lys Pro Met Ile Val Thr Gly Met
               215 220
Leu Leu Arg Ala Ala Gly Phe Ala Thr Met Ala Ile Ala His Glu Pro
               230 235 240
225
Trp Leu Leu Trp Phe Ser Cys Phe Leu Ser Gly Ile Gly Gly Thr Leu
                        250 255
            245
Phe Asp Pro Pro Arg Thr Ala Leu Val Val Lys Leu Ile Arg Pro Gln
                        265
                           270
         260
His Arg Gly Arg Phe Phe Ser Ile Leu Met Met Gln Asp Ser Ala Gly
                     280
                                    285
      275
Ala Val Val Gly Ala Leu Leu Gly Ser Trp Leu Leu Gln Tyr Asp Phe
                  295
                               300
Arg Leu Val Cys Ala Thr Gly Ala Val Leu Phe Ile Leu Cys Ala Leu
                              315
               310
Phe Asn Gly Leu Phe Leu Pro Ala Trp Lys Leu Ser Thr Val Lys Ala
                           330 335
            325
Pro Val Arg Glu Gly Leu Asp Arg Val Leu Ser Asp Lys Arg Phe Val
                        345 350
         340
Thr Tyr Val Leu Thr Leu Thr Gly Tyr Tyr Met Leu Ala Val Gln Val
                                    365
                     360
Met Leu Met Leu Pro Ile Met Val Asn Asp Ile Ala Gly Thr Pro Ala
                                 380
                  375
Ala Val Lys Trp Met Tyr Ala Ile Glu Ala Cys Leu Ser Leu Thr Leu
                              395
               390
Leu Tyr Pro Ile Ala Arg Trp Ser Glu Arg Arg Phe Arg Leu Glu His
                        410 415
Arg Leu Met Ala Gly Leu Leu Met Thr Leu Ser Met Met Pro Ile
                        425
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4334
Gly Leu Val Ser Ser Leu Gln Gln Leu Phe Met Leu Ile Cys Thr Phe
                        440
    435
Tyr Ile Gly Ser Ile Ile Ala Glu Pro Ala Arg Glu Thr Leu Ser Ala
                    455
                                        460
   450
Ser Leu Ala Asp Ala Arg Ala Arg Gly Ser Tyr Met Gly Phe Ser Arg
                                   475
465 470
Leu Gly Leu Ala Leu Gly Gly Ala Leu Gly Tyr Thr Gly Gly Gly Trp
             485 490
                                                  495
Leu Phe Asp Ala Gly Lys Ala Leu His Gln Pro Glu Leu Pro Trp Val
                505 510
          500
Met Leu Gly Met Val Gly Phe Met Thr Leu Ile Ala Leu Trp Trp Gln
    515 520
                               525
Phe Ser Asp Lys Arg Ser Thr Arg Gly Met Leu Glu Pro Gly Ala
                    535
<210> 8575
<211> 119
<212> PRT
<213> Enterobacter cloacae
<221>UNSURE
<222>(114)
<400> 8575
Asn Arg Lys Leu Asp Gly Lys Thr Leu Lys Asn Cys Arg Pro Leu Leu
                                10
Ser Asn Arg Gln Tyr Asn Cys Ile Asn Lys Gln Tyr Ile Thr Gln Gly
           20
                             25
Ala Phe Met Arg Ile Glu Val Thr Ile Ala Lys Ser Thr Val Leu Pro
                         4.0
       35
Ala Gly Ala Leu Asp Ala Leu Ala Gly Glu Leu Ser Arg Arg Ile Asn
                     55
Ser Thr Phe Pro Glu Asn Asp Gly Ala Val Thr Val Arg Tyr Ala Thr
                  7.0
                                    75
Ala Asn His Leu Ser Val Ile Gly Gly Ala Lys Glu Asp Lys Glu Arg
                                90
Ile Ser Glu Ile Leu Gln Glu Thr Trp Glu Ser Ala Asp Asp Trp Phe
                             105
           100
Met Xaa Ser Gln Thr Asp
       115
```

<210> 8576 <211> 208 <212> PRT <213> Enterobacter cloacae

<400> 8576 Asn Gly Trp His Arg Tyr Ala Ile Ser Gly Asp Lys Asn Met Pro Asn Leu Val Leu Ala Ser Thr Ser Pro Tyr Arg Arg Met Leu Leu Glu Lys 3.0 20 Leu Gly Ile Pro Phe Glu Cys Ala Ala Pro Glu Val Asp Glu Thr Pro 45 40 Gln Pro Gly Glu Ser Pro Arg His Leu Val Thr Arg Leu Ala Lys Glu 55 Lys Ala Gln Ser Leu Ala Val Arg Tyr Pro Ala His Leu Ile Ile Gly 75 70 Ser Asp Gln Val Cys Val Leu Asp Gly Glu Ile Thr Gly Lys Pro Tyr 90 Thr Glu Glu Ile Ala Cys Gln Gln Leu Leu Arg Ala Arg Gly Ser Ile

100 105 Val Thr Phe Tyr Thr Gly Leu Ala Leu Tyr Asn Ser Ala Ser Gly His 120 115 Leu Gln Thr Glu Cys Glu Pro Phe Asp Val His Phe Arg His Leu Ser 130 135 140 Glu Gln Glu Ile Met Asp Tyr Val Arg Arg Glu Arg Pro Leu Asn Cys 150 155 Ala Gly Ser Phe Lys Ser Glu Gly Leu Gly Ile Ala Leu Phe Asp Lys 165 170 175 Leu Asp Gly Arg Asp Ser Asn Thr Leu Val Gly Leu Pro Leu Ile Ala 180 185 190 Leu Cys Gln Met Leu Arg Arg Glu Glu Cys Asn Pro Leu Thr Met 200

<210> 8577 <211> 368 <212> PRT

<213> Enterobacter cloacae

<400> 8577 Phe Val Ser Gly Lys Asn Ser His Leu Met Thr Asp Leu Phe Gln Ala 10 Glv Ala Ser Met Thr Val Gln Ser Gln Val Leu Lys Ile Arg Arg Pro 25 20 Asp Asp Trp His Ile His Leu Arg Asp Gly Asp Met Leu Lys Thr Val 35 4.0 Val Pro Tyr Thr Ser Glu Ile Tyr Gly Arg Ala Ile Val Met Pro Asn 55 Leu Val Pro Pro Val Thr Thr Val Glu Ala Ala Ile Ala Tyr Arg Gln 7.0 7.5 Arg Ile Leu Asp Ala Val Pro Ala Gly His Asp Phe Thr Pro Leu Met 90 8.5 Thr Cys Tyr Leu Thr Asp Ser Leu Asp Pro Asn Glu Val Glu Arg Gly 100 105 Phe Asn Glu Gly Val Phe Thr Ala Ala Lys Leu Tyr Pro Ala Asn Ala 125 120 115 Thr Thr Asn Ser Ser His Gly Val Thr Ser Ile Asp Ala Ile Met Pro 135 140 130 Val Leu Glu Arg Met Gln Lys Leu Gly Met Pro Leu Leu Val His Gly 155 150 Glu Val Thr His Ala Asp Ile Asp Ile Phe Asp Arg Glu Ala Arg Phe 165 170 Ile Glu Thr Val Met Glu Pro Leu Arg Gln Arg Leu Pro Gly Leu Lys 180 185 190 Val Val Phe Glu His Ile Thr Thr Lys Asp Ala Ala Glu Tyr Val Arg 200 205 195 Asp Gly Asn Glu Leu Ile Ala Ala Thr Ile Thr Pro Gln His Leu Met 215 220 210 Phe Asn Arg Asn His Met Leu Val Gly Gly Val Arg Pro His Leu Tyr 230 235 Cys Leu Pro Ile Leu Lys Arg Asn Ile His Gln Gln Ala Leu Arg Glu 250 245 Leu Val Ala Ser Gly Pne Pro Arg Ala Phe Leu Gly Thr Asp Ser Ala 265 270 260 Pro His Ala Arg His Arg Lys Glu Ala Ser Cys Gly Cys Ala Gly Cys 285 280 Phe Asn Ala Pro Thr Ala Leu Ala Ser Tyr Ala Thr Val Phe Glu Glu 295 300 290 Met Asn Ala Leu Asp His Phe Glu Ala Phe Cys Ser Leu Asn Gly Pro 315 310 Arg Phe Tyr Gly Leu Pro Ile Asn Asp Thr Phe Ile Glu Leu Glu Arg

<211> 540

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330
            325
Lys Glu Ser Gln Val Glu Ala Ser Ile Ala Leu Thr Asp Asp Thr Leu
               345
    340
Ile Pro Phe Leu Ala Gly Glu Thr Val Asn Trp Thr Val Lys Arg
                     360
<210> 8578
<211> 356
<212> PRT
<213> Enterobacter cloacae
<400> 8578
Arg Gly Ala Leu Cys Ala Gly Arg Arg Ile Arg His Ala Ser Ile Lys
                           1.0
Arg Lys Pro Asp Arg Ala Arg Gly Ser Pro Gly Arg Arg Gly Cys Arg
    20
                        25
Ala Glu Ala Ala Ser Gly Cys Val Thr Arg Thr Ser Gly Arg Leu Ile
 3.5
                     4.0
Val Thr Thr Leu Arg Ile Gly Val Val Gly Leu Gly Gly Ile Ala Gln
                55
                                 60
Lys Ala Trp Leu Pro Val Leu Gly Ala Ala Ser Asp Trp Thr Leu Gln
65 70
                   75
Gly Ala Trp Ser Pro Thr Arg Glu Lys Ala Glu Arg Ile Cys Lys Thr
         85 90
Trp Arg Ile Pro Tyr Ala Gly Ser Leu Gln Asp Leu Ala Arg Glu Cys
        100 105 110
Asp Ala Val Phe Val His Thr Ser Thr Ala Thr His Tyr Gln Val Val
 115 120 125
Ser Glu Leu Leu Asn Ala Gly Val His Val Cys Val Asp Lys Pro Leu
 130 135 140
Ala Glu Asn Val Gln Asp Ala Glu Arg Leu Ile Glu Leu Ala Ala Arg
145 150 155 160
Lys Lys Leu Thr Leu Met Val Gly Phe Asn Arg Arg Phe Ala Pro Leu
           165 170
Tyr Gln Gln Leu Lys Ala Gln Pro Gly Ser Phe Ala Ser Leu Arg Met
         180 185 190
Asp Lys His Arg Thr Asp Ser Val Gly Pro Asn Asp Leu Arg Phe Thr
     195 200 205
Leu Leu Asp Asp Tyr Leu His Val Val Asp Thr Ala Leu Trp Leu Ser
                                 220
                215
Asn Gly Lys Ala Gln Leu Gln Ser Gly Thr Leu Leu Thr Asn Glu Gln
               230 235 240
Gly Glu Met Val Tyr Ala Glu His His Pne Ala Val Glu His Met Gln
                           250 255
            245
Val Thr Thr Ser Met His Arg Arg Ala Gly Ser Gln Arg Glu Ser Val
                        265 270
         260
Gln Ala Val Met Asp Gly Ala Leu Tyr Asp Val Thr Asp Met Arg Glu
      275
                     280
Trp Arg Glu Glu Lys Gly Asn Gly Val Val Ala Leu Pro Val Pro Gly
   290
                  295
                                  300
Trp Gln Ser Thr Leu Glu Gln Arg Gly Phe Val Gly Cys Ala Arg His
             310
                              315
Phe Ile Thr Cys Val Gln Asn Gln Thr Val Pro Glu Thr Ser Gly Glu
            325 330 335
Gln Ala Ile Leu Ala Gln Arg Ile Val Glu Arg Leu Trp Arg Glu Ala
                         345
                                        350
         340
Met Ser Glu
      355
<210> 8579
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<212> PRT <213> Enterobacter cloacae

<400> 8579 Thr Lys Arg Arg Leu Leu Ala Leu Pro Gly Gly Ala Phe Ala Tyr Pro Ser Trp Lys Ser Val Gly Leu Trp Asn Phe Thr Leu Met Asn Leu Leu 20 25 Lys Ser Leu Ala Ala Val Ser Ser Met Thr Met Phe Ser Arg Val Leu 40 Gly Phe Ala Arg Asp Ala Ile Val Ala Arg Val Phe Gly Ala Gly Met 5.5 60 Ala Thr Asp Ala Phe Phe Val Ala Phe Lys Leu Pro Asn Leu Leu Arg 70 75 80 Arg Ile Phe Ala Glu Gly Ala Phe Ser Gln Ala Phe Val Pro Ile Leu 85 90 95 Ala Glu Tyr Lys Ser Lys Gln Gly Glu Asp Ala Thr Arg Val Phe Val 100 105 Ala Tyr Val Ser Gly Leu Leu Thr Leu Ala Leu Ala Ile Val Thr Val 115 120 125 Leu Gly Met Leu Ala Ala Pro Trp Val Ile Met Val Thr Ala Pro Gly 130 135 140 Phe Ala Asp Thr Ala Asp Lys Phe Ala Leu Thr Thr Gln Leu Leu Arg 145 150 155 Ile Thr Phe Pro Tyr Ile Leu Leu Ile Ser Leu Ala Ser Leu Val Gly 165 170 175 Ala Ile Leu Asn Thr Trp Asn Arg Phe Ser Val Pro Ala Phe Ala Pro 180 185 Thr Phe Leu Asn Val Ser Met Ile Gly Phe Ala Leu Phe Ala Ala Pro 195 200 205 His Phe Asn Pro Pro Val Leu Ala Leu Ala Trp Ala Val Thr Val Gly 210 215 220 Gly Val Leu Gln Leu Ala Tyr Gln Leu Pro His Leu Lys Lys Ile Gly 225 230 235 Met Leu Val Leu Pro Arg Ile Ser Phe Lys Asp Ala Gly Ala Met Arg 245 250 255 Val Ile Lys Gln Met Gly Pro Ala Ile Leu Gly Val Ser Val Ser Gln 260 265 270 Ile Ser Leu Ile Ile Asn Thr Ile Phe Ala Ser Phe Leu Val Ser Gly 275 280 285 Ser Val Ser Trp Met Tyr Tyr Ala Asp Arg Leu Met Glu Phe Pro Ser 295 300 Gly Val Leu Gly Val Ala Leu Gly Thr Ile Leu Leu Pro Ser Leu Ser 310 315 Lys Ser Phe Ala Ser Gly Asn His Asp Glu Tyr Cys Arg Leu Met Asp 325 330 Trp Gly Leu Arg Leu Cys Phe Leu Leu Ala Leu Pro Ser Ala Val Ala 340 345 350 Leu Gly Ile Leu Ala Lys Pro Leu Thr Val Ser Leu Phe Gln Tyr Gly 360 365 Lys Phe Thr Ala Phe Asp Ala Ala Met Thr Gln Arg Ala Leu Val Ala 375 380 Tyr Ser Val Gly Leu Met Gly Leu Ile Val Val Lys Val Leu Ala Pro 390 395 Gly Phe Tyr Ser Arg Gln Asp Ile Lys Thr Pro Val Lys Ile Ala Ile 405 410 Val Thr Leu Ile Met Thr Gln Leu Met Asn Leu Ala Phe Ile Gly Pro 425 Leu Lys His Ala Gly Leu Ser Leu Ser Ile Gly Leu Ala Ala Cys Leu 440 Asn Ala Gly Leu Leu Tyr Trp Gln Leu Arg Lys Gln Asp Ile Phe Thr

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455
Pro Gln Pro Gly Trp Ala Ser Phe Leu Leu Arg Leu Ala Ile Ala Val
                       475 480
              470
Val Val Met Ala Ala Ala Leu Val Gly Met Leu Tyr Val Met Pro Glu
           485
                   490 495
Trp Ala Gln Gly Thr Met Pro Tyr Arg Leu Met Arg Leu Met Ala Val
        500
                505 510
Val Ala Val Gly Val Val Ala Tyr Phe Ala Thr Leu Ala Val Leu Gly
    515 520 525
Phe Lys Val Lys Glu Phe Ala Arg Arg Thr Val
          535
<210> 8580
<211> 256
<212> PRT
<213> Enterobacter cloacae
<400> 8580
Tyr Arg Glu Glu His Asp Ala Gln Asn Thr His Ser Arg Pro Val Lys
                          10
Glu Thr Arg Met Ser Ile Ala Val Asn Val Asn Asp Pro Thr Asn Thr
 20
                        2.5
                                     3.0
Gly Val Asn Ser Thr Ser Ser Ala Thr Gly Ser Ser Ser Leu Thr Gly
35
                     40
                             45
Ser Asn Ala Ser Asp Leu Gln Ser Ser Phe Leu Thr Leu Leu Val Ala
50
               5.5
                         60
Gln Leu Lys Asn Gln Asp Pro Thr Asn Pro Met Gln Asn Asn Glu Leu
65 70
                      75
Thr Thr Gln Leu Ala Gln Ile Ser Thr Val Ser Gly Ile Glu Lys Leu
 85
                         90
Asn Thr Thr Leu Gly Ser Val Ser Gly Gln Ile Asp Asn Ser Gln Ser
100 105
                                        110
Leu Gln Ala Ala Asn Leu Ile Gly His Gly Val Met Ile Pro Gly Thr
                    120 125
Thr Ile Leu Ala Gly Thr Ser Thr Thr Asp Gly Thr Ser Thr Thr Thr
                 135 140
Thr Thr Pro Phe Gly Val Glu Leu Gln Gln Pro Ala Asp Lys Val Thr
145 150 155
Ala Thr Ile Lys Asp Ala Ser Gly Asn Val Val Arg Thr Ile Glu Ile
           165 170 175
Gly Glu Leu Lys Ala Gly Val His Thr Phe Thr Trp Asp Gly Ser Leu
        180 185
                                       190
Thr Asp Gly Thr Lys Ala Pro Asn Gly Ser Tyr Gln Val Ala Ile Ser
                     200
                                    205
Ala Ser Asn Gly Thr Thr Gln Leu Val Ala Gln Pro Leu Gln Phe Ala
                 215
                                 220
Leu Val Gln Gly Val Ile Lys Gly Ser Asp Gly Asn Lys Leu Asp Leu
225 230 235
Gly Thr Ser Gly Thr Thr Leu Asp Glu Val Arg Gln Ile Ile
            245
                           250
<210> 8581
<211> 272
<212> PRT
<213> Enterobacter cloacae
<400> 8581
Pro Thr Ser Gly Tyr Glu Leu Thr Gly Leu Pro Met Ile Ser Ser Leu
                          10
Trp Ile Ala Lys Thr Gly Leu Asp Ala Gln Gln Thr Asn Met Asp Val
```

25

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Ile Ala Asn Asn Leu Ala Asn Val Ser Thr Asn Gly Phe Lys Arg Gln
     35
                     4.0
Arg Ala Val Phe Glu Asp Leu Leu Tyr Gln Thr Ile Arg Gln Pro Gly
Ala Gln Ser Ser Glu Gln Thr Thr Leu Pro Ser Gly Leu Gln Ile Gly
               70
                              75
Thr Gly Val Arg Pro Val Ala Thr Glu Arg Leu His Ser Gln Gly Asn
           85
                           90
Leu Ser Gln Thr Asn Asn Ser Lys Asp Val Ala Ile Lys Gly Gln Gly
        100
             105
                                       110
Phe Phe Gln Val Gln Leu Pro Asp Gly Thr Ser Ala Tyr Thr Arg Asp
     115 120 125
Gly Ser Phe Gln Val Asp Gln Asn Gly Gln Leu Val Thr Ala Gly Gly
 130
      135 140
Phe Gln Val Gln Pro Ala Ile Thr Ile Pro Ala Asn Ala Leu Ser Ile
      150 155
Thr Ile Gly Arg Asp Gly Ile Val Ser Val Thr Gln Gln Gly Gln Ala
           165 170
                                          175
Ala Pro Val Gln Val Gly Gln Leu Asn Leu Thr Thr Phe Met Asn Asp
      180
                       185
Thr Gly Leu Glu Ser Ile Gly Glu Asn Leu Tyr Thr Glu Thr Gln Ser
 195
                        205
                    200
Ser Gly Thr Pro Asn Glu Ser Thr Pro Gly Leu Asn Gly Ala Gly Leu
210 215 220
Leu Tyr Gln Gly Tyr Val Glu Thr Ser Asn Val Asn Val Ala Glu Glu
            230 235
Leu Val Asn Met Ile Gln Val Gln Arg Ala Tyr Glu Ile Asn Ser Lys
 245 250
Ala Val Ser Thr Thr Asp Gln Met Leu Gln Lys Leu Thr Gln Leu
                        265
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<210> 8582 <211> 252 <212> PRT

<213> Enterobacter cloacae

180

<400> 8582 Gly Val Ala Arg Cys Gly Lys Arg Arg Thr Gly Ser Leu Phe Ser Lys 10 Met Lys Ala Met Gln Lys Asn Ala Ala Phe Arg Tyr Pro Ile Leu Thr 2.5 3.0 Val Leu Ala Val Thr Leu Ser Gly Cys Ala Trp Ile Pro Ser Lys Pro 40 Leu Val Gln Gly Ala Thr Thr Ala Gln Pro Val Pro Gly Pro Ala Pro Val Val Asn Gly Ser Ile Phe Gln Thr Ala Gln Pro Ile Asn Tyr Gly 75 7.0 Tyr Gln Pro Leu Phe Glu Asp Arg Arg Pro Arg Asn Val Gly Asp Thr 8.5 90 Leu Thr Ile Val Leu Gln Glu Asn Val Ser Ala Ser Lys Ser Ser Ser 100 Ala Asn Ala Ser Arg Asp Gly Lys Thr Asn Phe Gly Phe Asp Thr Val 115 120 Pro Arg Tyr Leu Gln Gly Leu Phe Gly Asn Ala Arg Ala Asp Val Glu 135 140 Ala Ser Gly Gly Asn Thr Phe Asn Gly Lys Gly Gly Ala Asn Ala Ser 150 155 Asn Thr Phe Ser Gly Thr Leu Thr Val Thr Val Asp Gln Val Leu Val 165 170 Asn Gly Asn Leu His Val Val Gly Glu Lys Gln Ile Ala Ile Asn Gln

Gly Thr Glu Phe Ile Arg Phe Ser Gly Val Val Asn Pro Arg Thr Ile 195 200 Ser Gly Thr Asn Thr Val Pro Ser Thr Gln Val Ala Asp Ala Arg Ile 210 215 220 Glu Tyr Val Gly Asn Gly Tyr Ile Asn Glu Ala Gln Asn Met Gly Trp 230 235 Leu Gln Arg Phe Phe Leu Asn Leu Ser Pro Met 245 250

<210> 8583 <211> 367 <212> PRT <213> Enterobacter cloacae

<400> 8583

Pro Met Tyr Lys Phe Leu Phe Ala Val Ala Leu Ser Leu Val Ala Thr - 5 10 Val Ala Gln Ala Asp Arg Ile Arg Asp Leu Thr Ser Val Gln Gly Val 20 25 Arg Glu Asn Ser Leu Ile Gly Tyr Gly Leu Val Val Gly Leu Asp Gly 35 40 45 Thr Gly Asp Gln Thr Thr Gln Thr Pro Phe Thr Thr Gln Ser Leu Asn 50 55 Asn Met Leu Ser Gln Leu Gly Ile Thr Val Pro Ala Gly Thr Asn Met 65 70 75 Gln Leu Lys Asn Val Ala Ala Val Met Val Thr Ala Ser Tyr Pro Ala 85 90 95 Phe Ala Arg Gln Gly Gin Thr Ile Asp Val Val Val Ser Ser Met Gly 100 105 110 Asn Ala Lys Ser Leu Arg Gly Gly Thr Leu Leu Met Thr Pro Leu Lys 115 120 125 Gly Val Asp Ser Gln Val Tyr Ala Leu Ala Gln Gly Asn Ile Leu Val 130 135 140 Gly Gly Ala Gly Ala Ser Ala Gly Gly Ser Ser Val Gln Val Asn Gln 145 150 155 160 Leu Asn Gly Gly Arg Ile Thr Asn Gly Ala Ile Ile Glu Arg Glu Leu 165 170 175 Pro Thr Gln Phe Gly Thr Gly Asn Thr Ile Asn Leu Gln Leu Asn Asn 180 185 190 Glu Asp Phe Thr Met Ala Gln Gln Ile Ala Asp Thr Ile Asn Arg Ser 195 200 205 Arg Gly Tyr Gly Ser Ala Thr Ala Leu Asp Ala Arg Thr Val Gln Ile 210 215 220 Arg Thr Ser Thr Gly Ser Ser Asn Gln Val Arg Met Leu Ala Asp Ile 225 230 235 Gln Asn Met Glu Val Asn Val Pro Val Gln Asp Ala Lys Val Ile Ile 245 250 Asn Ser Arg Thr Gly Ser Val Val Met Asn Arg Glu Val Thr Leu Asp 260 265 Ser Cys Ala Val Ala Gln Gly Asn Leu Ser Val Thr Val Asn Arg Ser 280 285 Ala Asn Val Ser Gln Pro Asp Thr Pro Phe Gly Gly Gly Gln Thr Val

Val Thr Pro Gln Thr Gln Ile Asp Leu Arg Gln Ser Gly Gly Ser Leu 315 Gln Ser Val Arg Ser Ser Ala Asn Leu Asn Ser Val Val Arg Ala Leu 325 330 Asn Ala Leu Gly Ala Thr Pro Met Asp Leu Met Ser Ile Leu Gln Ser 340 345

Met Gln Ser Ala Gly Cys Leu Arg Ala Lys Leu Glu Ile Ile 360

290 295

305 310

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<210> 8584
<211> 318
<212> PRT
<213> Enterobacter cloacae
<400> 8584
Met Leu Thr Asp Ser Lys Leu Leu Thr Ser Ala Ala Trp Asp Ala Gln
                          10
Ser Leu Asn Glu Leu Lys Thr Lys Ala Gly Lys Asp Pro Ala Ala Asn
                        25
Ile Arg Pro Val Ala Arg Gln Val Glu Gly Met Phe Val Gln Met Met
                  4.0
Leu Lys Ser Met Arg Glu Thr Leu Pro Lys Asp Gly Met Phe Ser Ser
            5.5
Asp Ser Thr Arg Leu Tyr Thr Ser Met Tyr Asp Gln Gln Ile Ala Gln
            70 75
Gln Met Thr Ala Gly Lys Gly Leu Gly Leu Ala Asp Met Ile Val Lys
         85
                90
Gln Thr Ala Ala Ala Gln Gly Leu Pro Pro Glu Glu Ala Pro Gln Gln
      100 105 110
Val Pro Leu Lys Phe Asp Leu Glu Lys Val Thr Ser Tyr Gln Asn Gln
 115 120 125
Ala Leu Thr Gln Met Val Arg Lys Ala Met Pro Lys Pro Ala Glu Thr
 130 135 140
Arg Asp Glu Pro Leu Ser Gly Asp Ser Lys Asp Phe Leu Ala Gln Leu
145 150 155 160
Ser Leu Pro Ala Arg Leu Ala Ser Glu Glu Ser Gly Val Pro His His
       165 170
Leu Ile Leu Ala Gln Ala Ala Leu Glu Ser Gly Trp Gly Gln Arg Gln
 180 185
                                       190
Ile Arg Arg Glu Asn Gly Glu Pro Ser Phe Asn Ile Phe Gly Val Lys
 195 200 205
Ala Thr Ser Ser Trp Lys Gly Pro Thr Thr Glu Ile Thr Thr Glu
 210 215 220
Tyr Glu Asn Gly Ala Ala Val Lys Val Lys Ala Lys Phe Arg Val Tyr
225 230
                            235
                                           240
Ser Ser Tyr Leu Glu Ala Leu Ser Asp Tyr Val Gly Leu Leu Ser Arg
         245 250 255
Asn Pro Arg Tyr Thr Ala Val Thr Gin Ala Ala Thr Pro Glu Gln Gly
      260 265 270
Ala Gln Ala Leu Gln Asn Ala Gly Tyr Ala Thr Asp Pro Asn Tyr Ala
 275 280 285
Arg Lys Leu Thr Ser Met Ile Gln Gln Leu Lys Ser Met Ser Glu Lys
 290 295 300
Val Ser Lys Ala Tyr Ser Thr Asp Leu Glu Asn Leu Phe
<210> 8585
<211> 561
<212> PRT
<213> Enterobacter cloacae
<400> 8585
Pro Ser Ser Gly Leu Val Ser Glu Arg Ile Lys Gly Thr Pro Met Ser
                           1.0
Ser Leu Ile Asn Ser Ala Met Ser Gly Leu Ser Ala Ala Gln Ser Ala
                       25
Leu Asn Thr Val Ser Asn Asn Ile Ser Ser Tyr Asn Val Ala Gly Tyr
               40
Thr Arg Gln Thr Thr Ile Leu Gly Ala Ser Asn Ser Thr Leu Thr Gly
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Gly Gly Trp Val Gly Asn Gly Val Tyr Val Ser Gly Val Gln Arg Glu 75 Tyr Asp Ala Phe Ile Thr Asn Gln Leu Arg Ala Ala Gln Asn Gln Ser 85 90 Ser Gly Leu Thr Thr Arg Tyr Gln Gln Met Ser Lys Ile Asp Asp Val 100 105 110 Leu Ser Asp Thr Thr Asn Ser Leu Ser Ala Asn Leu Gln Asp Phe Phe 115 120 125 Lys Ser Leu Gln Thr Leu Val Ser Asn Ala Glu Asp Pro Ala Ala Arg 130 135 140 Asn Asp Gln Tyr Leu Arg Asp Gln Asp Ala Gln Val Asn Thr Ala Ile 165 170 175 Ser Thr Ser Val Asp Gln Ile Asn Asn Tyr Ala Lys Gln Ile Ala Asn 180 185 190 Leu Asn Asp Gln Ile Ser Arg Leu Thr Gly Val Gly Ala Gly Ala Ser 195 200 205 Pro Asn Glu Leu Leu Asp Gln Arg Asp Gln Leu Val Ser Glu Leu Asn 210 215 220 Lys Ile Val Gly Val Asp Val Thr Val Gln Asp Ser Gly Thr Tyr Asn 225 230 235 Ile Ser Ile Ala Asn Gly Tyr Thr Leu Val Gln Gly Ser Asn Ala Ser 245 250 255 Gln Leu Ala Ala Val Lys Ser Ser Ala Asp Pro Ala Arg Thr Thr Ile 260 265 270 Ala Tyr Val Asp Ala Ala Ala Gly Asn Val Glu Ile Ser Glu Lys Gln 275 280 285 Ile Thr Thr Gly Ser Leu Gly Gly Leu Leu Thr Phe Arg Ser Gln Asp 290 295 300 Leu Asp Gln Ala Arg Asn Thr Leu Asn Gln Met Ala Leu Ala Phe Ala 305 310 315 320 Asp Ala Met Asn Thr Gln His Gln Ala Gly Phe Asp Ala Asn Gly Asp 325 330 335 Lys Gly Gly Lys Leu Phe Asp Phe Gly Ser Pro Ala Val Leu Ser Asn 340 345 350 Gly Lys Asn Thr Gly Ser Ala Ser Val Thr Ala Thr Met Thr Asp Ser 355 360 365 Thr Lys Val Gln Ala Thr Asn Tyr Lys Val Glu Tyr Asn Gly Thr Asp 370 375 380 Trp Thr Ile Thr Arg Leu Ser Asp Asn Thr Ser Phe Thr Ala Lys Pro 390 395 Asp Ala Ser Gly Asn Leu Ser Phe Asp Gly Leu Asn Val Lys Ile Ser 405 410 Gly Ser Ala Asn Asn Lys Asp Ser Phe Ile Val Lys Pro Val Asn Asp 420 425 430 Val Ile Val Asn Met Asp Val Ala Ile Ser Asp Glu Ser Lys Leu Ala 435 440 445 Met Ala Ser Ala Gln Gly Ser Gly Glu Ser Asp Asn Thr Asn Gly Gln 455 Lys Leu Leu Asp Leu Gln Ser Ala Lys Leu Val Gly Gly Asn Lys Thr 465 470 475 480 Phe Asn Asp Ala Tyr Ala Ala Leu Val Ser Thr Val Gly Ser Thr Thr 485 490 Ala Ser Leu Lys Thr Ser Ser Glu Thr Lys Val Asn Val Val Thr Gln 500 505 Leu Thr Lys Gln Gln Gln Ser Ile Ser Gly Val Asn Leu Asp Glu Glu 515 520 525 Tyr Gly Asn Leu Gln Arg Tyr Gln Gln Tyr Tyr Leu Ala Asn Ala Gln 535 540

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4343
Val Leu Gln Thr Ala Ser Thr Leu Phe Asp Ala Leu Ile Asn Ile Arg
545
                  550
<210> 8586
<211> 65
<212> PRT
<213> Enterobacter cloacae
<400> 8586
Lys Ile Asn Thr Ser Tyr Ala Ile Ala Ala Trp Met Ile Gly Gln Thr
                               1.0
Lys Leu Val Ile Pro Ser Thr Ser Leu Gln Asn Pro Asp Leu Thr Arg
        20
                            25
Lys Thr Asp Ser Leu Phe His Cys Ser Pro Gly Tyr Ser Lys Met Thr
 35
                      40
Phe Thr Asn Tyr His Pro Val Thr His Ser Phe Phe Thr Ser Thr Gly
                     55
65
<210> 8587
<211> 178
<212> PRT
<213> Enterobacter cloacae
<400> 8587
Tyr Ala Arg Pro Met Gln Lys Val Lys Leu Pro Leu Thr Leu Asp Pro
          5
                               10
Val Arg Thr Ala Gln Lys Arg Leu Asp Tyr Glu Gly Ile Tyr Ser Ser
 20
                            25
                                              30
Asp Gln Ala Glu Arg Ile Ala Glu Ser Val Val Ser Val Asp Ser Asp
 35
                        4.0
Val Glu Cys Ser Met Ser Phe Ala Ile Asp Asn Gln Arg Leu Ala Val
 50
                     55
                                     60
Leu Thr Gly Asp Ala Lys Val Thr Val Thr Leu Glu Cys Gln Arg Cys
                 70
                                   7.5
Gly Lys Pro Phe Val Gln His Val His Thr Thr Tyr Cys Phe Ser Pro
            8.5
                               90
Val Arg Ser Asp Glu Gln Ala Glu Ala Leu Pro Glu Ala Tyr Glu Pro
                           105
                                             110
Ile Glu Val Asn Glu Phe Gly Glu Ile Asp Leu Leu Ala Leu Val Glu
      115 120
                                         125
Asp Glu Val Ile Leu Ser Leu Pro Val Val Pro Val His Asp Ser Glu
                    135
                                      140
His Cys Glu Val Ser Glu Ala Asp Met Val Phe Gly Glu Leu Pro Asp
145 150
                                   155
                                                    160
Glu Ala Gln Lys Pro Asn Pro Phe Ala Val Leu Ala Ser Leu Lys Arg
              165
                               170
Lys
<210> 8588
<211> 207
<212> PRT
<213> Enterobacter cloacae
```

<400> 8588
Gln Ala Glu Gln Lys Arg Arg Glu Gly Val Val Thr Met Phe Gly Tyr
1
5
10
15

Arg Ser Asn Val Pro Lys Val Arg Leu Thr Thr Asp Arg Leu Val Val 20 Arg Leu Val His Glu Arg Asp Ala Trp Arg Leu Ala Asp Tyr Tyr Ala Glu Asn Arg Gln Phe Leu Lys Pro Trp Glu Pro Val Arg Asp Glu Ser 60 His Cys Tyr Pro Ser Gly Trp Gln Ala Arg Leu Ser Met Ile Ala Glu 7.0 Phe His Lys Gln Gly Ser Ala Phe Tyr Phe Ala Leu Leu Asp Pro Glu 90 Glu Lys Glu Ile Val Gly Ile Ala Asn Phe Ser Asn Val Val Arg Gly 100 105 110 Ser Phe His Ala Cys Tyr Leu Gly Tyr Ser Ile Gly Gln Lys Trp Gln 115 120 Gly Gln Gly Leu Met Phe Glu Ala Leu Thr Ala Ala Ile Arg Tyr Met 130 135 140 Gln Arg Thr Gln His Ile His Arg Ile Met Ala Asn Tyr Met Pro His 145 150 155 Asn Lys Arg Ser Gly Asp Leu Leu Ala Arg Leu Gly Phe Glu Lys Glu 165 170 175 Gly Tyr Ala Lys Asp Tyr Leu Leu Ile Asp Gly Glu Trp Arg Asp His 180 185 190 Val Leu Thr Ala Leu Thr Thr Gln Glu Trp Thr Ala Gly Arg 200 <210> 8589 <211> 220 <212> PRT <213> Enterobacter cloacae <400> 8589 Gly Glu Lys Met Lys Tyr Gln Leu Asn Gly Ala Glu Ala Arg Val Ile Gly Cys Leu Leu Glu Lys Gln Val Thr Thr Pro Glu Gln Tyr Pro Leu 20 25 30 Ser Val Asn Ala Val Thr Met Ala Cys Asn Gln Lys Thr Asn Arg Glu 40 Pro Val Met Asn Leu Gly Glu His Glu Val Gln Asp Ile Leu Asp Glu 55 Leu Val Lys Arg His Tyr Leu Arg Thr Val Ser Gly Phe Gly Asn Arg 70 75 Val Thr Lys Tyr Glu Gln Arg Phe Cys Asn Ser Glu Phe Gly Asp Leu 8.5 90 Lys Leu Ser Ala Ala Glu Val Ala Val Ile Thr Thr Leu Leu Leu Arg 105 Gly Ala Gln Thr Pro Gly Glu Leu Arg Ala Arg Ala Ser Arg Met His 115 120 125 Glu Phe Gln Asp Met Gln Asp Val Glu Gln Thr Leu Glu Gly Leu Ala 130 135 140

Ser Arg Glu Asp Gly Pro Tyr Val Val Arg Leu Pro Arg Glu Pro Gly

Lys Arg Glu Ser Arg Tyr Met His Leu Phe Ser Gly Asp Val Glu Pro 170

Ser Ala Leu Ala Val Val Ser Asp Thr Pro Ala Ser Asn Glu Ser Leu

Thr Ala Arg Val Ala Ala Leu Glu Asp Glu Val Ala Gly Leu Lys Gln 200

155

185 190

160

175

Arg Leu Asp Ala Leu Leu Ala His Leu Gly Asp 215

145 150

165

180

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<211> 147
<212> PRT
<213> Enterobacter cloacae
<400> 8590
Asn Phe Leu Ile Ser Gly Gly Asp Met Leu Asp Lys Leu Asp Ala Ala
Leu Arg Phe Gln Glu Ala Leu Asn Leu Arg Ala Gln Arg Gln Glu
       20
                          2.5
                                             3.0
Ile Leu Ala Ala Asn Ile Ala Asn Ala Asp Thr Pro Gly Tyr Gln Ala
                        40
                                       4.5
Arg Asp Ile Asp Phe Ser Ser Glu Leu Lys Lys Val Met Glu Arg Gly
                     5.5
                             60
Arg Ala Glu Gly Thr Gly Val Ser Leu Ala Leu Thr Ser Ser Arg His
               7.0
                            75
Ile Pro Ala Gln Ala Met Thr Ala Pro Thr Thr Asp Leu Leu Tyr Arg
           8.5
                         90
Ile Pro Asp Gln Pro Ser Leu Asp Gly Asn Thr Val Asp Met Asp Arg
         100 105
Glu Arg Thr Gln Phe Ala Asp Asn Ser Leu Gln Tyr Gln Thr Gly Leu
 115 120
                                       125
Thr Leu Leu Gly Gly Gln Ile Lys Gly Met Met Thr Val Leu Gln Gly
 130
                    135
Gly Asn
145
<210> 8591
<211> 135
<212> PRT
<213> Enterobacter cloacae
<400> 8591
Met Ala Leu Leu Asn Ile Phe Asp Ile Ala Gly Ser Ala Leu Thr Ala
Gln Ser Lys Arg Leu Asn Val Ala Ala Ser Asn Leu Ala Asn Ala Asp
        20
                           25
                                             30
Ser Val Thr Gly Pro Asp Gly Gln Pro Tyr Arg Ala Lys Gln Val Val
    3.5
                       40
Phe Gln Val Asp Ala Ala Pro Gly Ala Ala Thr Gly Gly Val Lys Val
 5.0
                    55
                                      60
Ala Asp Val Val Glu Ser Gln Ala Pro Asp Lys Leu Val Tyr Glu Pro
                 7.0
                                75
                                                    80
Gly Asn Pro Leu Ala Asp Ala Ser Gly Tyr Val Lys Met Pro Asn Val
           85
                              90
Asp Val Val Gly Glu Met Val Asn Ser Met Ser Ala Ser Arg Ser Tyr
          100
                        105
Gln Ala Asn Val Glu Val Leu Asn Thr Val Lys Ser Met Met Leu Lys
      115
                       120
Thr Leu Thr Leu Gly Gln
  130
<210> 8592
<211> 256
<212> PRT
<213> Enterobacter cloacae
<400> 8592
Arg Glu Ser Ala Met Asp His Ala Ile Tyr Thr Ala Met Gly Ala Ala
                              10
Ser Gln Thr Leu Asn Gln Gln Ala Val Thr Ala Ser Asn Leu Ala Asn
```

25

Ala Ser Thr Pro Gly Phe Arg Ala Gln Leu Asn Ala Leu Arg Ala Val Pro Val Glu Gly Leu Ser Leu Pro Thr Arg Thr Leu Val Thr Ala Ser Thr Pro Gly Ala Asp Met Thr Pro Gly Gln Met Asp Tyr Thr Ala Arg 75 Pro Leu Asp Val Ala Leu Gln Gln Asp Gly Trp Leu Ala Val Gln Thr 85 90 Ala Asp Gly Glu Gly Tyr Thr Arg Asn Gly Asn Ile Gln Val Ser 100 105 110 Ala Thr Gly Gln Leu Thr Ile Gln Gly His Pro Val Met Gly Glu Ala 115 120 125 Gly Pro Leu Thr Val Pro Glu Gly Ser Glu Leu Thr Ile Ala Ala Asp 130 135 140 Gly Thr Ile Ser Ala Leu Asn Pro Gly Asp Pro Ala Asn Thr Val Ala 150 155 Pro Val Gly Arg Leu Lys Leu Val Lys Ala Glu Gly Asn Glu Val Gln 165 170 175 Arg Gly Asp Asp Gly Met Phe Arg Leu Thr Gln Ala Ala Gln Ala Thr 180 \$180\$Arg Gly Ala Thr Leu Gln Ala Asp Pro Thr Ile Arg Val Met Ser Gly 195 200 205 Val Leu Glu Gly Ser Asn Val Lys Pro Val Glu Ala Met Thr Asp Met 210 215 220 Ile Ala Ser Ala Arg Arg Phe Glu Met Gln Met Lys Ile Ile Ser Ser 225 230 235 240 Val Asp Glu Asn Ala Gly Lys Ala Asn Gln Leu Leu Ala Met Ser 245

<210> 8593 <211> 319

<212> PRT <213> Enterobacter cloacae

<400> 8593

Lys Met Arg Ile Ser Thr Gln Met Met Tyr Glu Gln Ser Met Arg Gly 10 Val Thr Asn Ser Gln Ser Leu Trp Leu Ser Tyr Gly Glu Gln Met Ser 3.0 Thr Gly Lys Arg Ile Asn Arg Pro Ser Asp Asp Pro Ile Ala Ala Ser 4.0 4.5 Gln Ala Val Val Leu Ser Gln Ala Gln Thr Gln Asn Ser Gln Tyr Ala 55 60 Leu Ala Arg Ser Phe Ala Thr Thr Lys Val Ser Leu Glu Glu Asn Val 7.5 70 Leu Ser Gln Val Thr Thr Ala Ile Gln Ala Ala Gln Glu Lys Ile Val 8.5 90 Asn Ala Gly Asn Gly Thr Leu Ser Asp Asp Asp Arg Ala Ser Leu Ala 100 105 Thr Asn Leu Gln Gly Ile Arg Asp Gln Leu Met Asn Leu Ala Asn Ser 115 120 Thr Asp Gly Asn Gly Arg Tyr Ile Phe Ser Gly Tyr Lys Thr Glu Ala 135 140 Ala Ala Phe Asp Gln Thr Thr Gly Asp Tyr Lys Gly Gly Gly Thr Pro 150 155 Ile Ser Gln Gln Val Asp Ser Ala Arg Thr Met Gln Ile Ser His Thr 165 170 Gly Thr Glu Val Phe Asp Ser Phe Thr Ser Asn Ala Lys Pro Glu Pro 180 185 190 Asp Gly Ser Lys Pro Glu Thr Asn Leu Phe Lys Ile Leu Asp Ser Ala 195 200 205

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Ile Glu Ala Leu Asn Thr Pro Ile Gly Glu Asp Glu Thr Lys Ala Glu
  210
                    215
Ala Phe Thr Ala Ala Ile Asp Lys Ala Asn Arg Gly Leu Ser Asn Ser
              230
                        235
Leu Asn Asn Val Leu Thr Val Arg Ala Asp Leu Gly Ile Lys Leu Asp
             245 250
Glu Leu Gly Lys Leu Asp Ala Leu Gly Glu Asp Arg Ala Leu Gly Gln
         260
              265 270
Thr Gln Gln Met Ser Asn Leu Val Asp Val Asp Trp Asn Ser Val Ile
     275 280 285
Ser Ser Tyr Thr Met Gln Gln Ala Ala Leu Gln Ala Ser Tyr Lys Ala
 290 295 300
Phe Ser Asp Met Gln Gly Met Ser Leu Phe Gln Met Asn Arg
305 310
<210> 8594
<211> 319
<212> PRT
<213> Enterobacter cloacae
<400> 8594
Arg Met Asp Gly Asn Gly Met Lys Arg Pro Glu Arg Ile Asp Arg Val
                           10
Glu Leu Met Arg Thr Phe Val Arg Ile Val Glu Ala Gly Ser Leu Ser
 20
                          25
                                           3.0
Ala Ala Ala Arg Gln Leu Ala Thr Thr Gln Ala Thr Val Ser Arg Arg
 35
                    40
                                      4.5
Leu Gln Ser Leu Glu Thr Met Leu Gly Val Arg Leu Met Leu Arg Thr
                   55
                                    60
Thr His Thr Thr Arg Leu Thr Asp Asp Gly Glu Arg Cys Tyr Gln His
                70
                          7.5
                                                 80
Ala Arg Arg Val Ile Asp Ser Trp Leu Ala Leu Glu Asp Glu Val Gly
                          90
Gln Thr Glu Asp Glu Pro Val Gly Val Leu Arg Val Arg Ala Pro His
        100
                         105 110
Ala Phe Gly Gln Asp Gln Leu Leu Lys Pro Leu Thr Glu Phe Leu Gln
    115 120
                                        125
Arg Tyr Pro Gln Leu Ser Val Glu Trp Met Leu Asn Asp Arg Ser Val
 130 135
                                    140
Asp Phe Leu Gly Asp Asn Leu Asp Cys Ala Ile Arg Val Gly Val Glu
145 150
                                155
                                                 160
Val Asp Pro Ala Thr Val Ser Val Leu Leu Ala Glu Val Pro Arg Ser
             165
                             170
Val Val Ala Ser Pro Glu Leu Leu Ala Arg Tyr Pro Ala Val Lys Thr
         180
                         185
                                           190
Pro Glu Asp Leu Gln Gln Leu Pro Trp Ile Ala Ile Ser Ser Phe Tyr
      195 200
                                        205
Gln Arg His Val Glu Leu Phe His Asp Ala Ser Ser Ala Pro Thr Arg
 210 215
Val Thr Ile Thr Pro Arg Leu Ser Thr Asp Ser Leu Tyr Val Ala Arg
                230
                                 235
                                                  240
Asn Thr Ala Leu Thr Gly Leu Gly Val Ala Val Val Ser Ser Trp Thr
            245
                              250
Val Gln Asp Asp Ile Gln Glu Gly Arg Leu Val His Leu Leu Pro Glu
         260
                          265
Trp Gln Pro Ala Ala Leu Pro Val His Leu Val Tyr Pro Trp Ser Arg
275
                      280
                                        285
Tyr Tyr Pro Ala Arg Leu Arg Arg Phe Leu Glu Leu Met Arg Gln Ile
                 295
                                    300
Met Pro Glu Val Thr Gly Met Arg Lys Pro Leu Gln Gln Pro
```

310

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<210> 8595
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 8595
Gly Val Arg Ser Met Ala Val Gln Gln Asn Lys Pro Thr Arg Ser Lys
                                   1.0
Arg Gly Met Arg Arg Ser His Asp Ala Leu Thr Ala Val Thr Ser Leu
           20
                               25
                                                  3.0
Ser Val Asp Lys Thr Ser Gly Glu Lys His Leu Arg His His Ile Thr
       35
                          40
Ala Asp Gly Phe Tyr Arg Gly Arg Lys Val Ile Thr Lys
   50
                       55
<210> 8596
<211> 107
<212> PRT
<213> Enterobacter cloacae
<400> 8596
Ser Arg Val Ser Val Ile Arg Leu Ser Glu Glu Leu Pro Arg Ala Asn
           5
                                  10
Gly Glu Phe Thr Glu Pro Gly Cys Asp Asp Thr Leu Thr Arg Leu Thr
  20
                               2.5
Leu Ala Leu Asp Val Met Gly Gly Asp Phe Gly Pro Thr Val Thr Val
 35
                           40
Ala Ala Ala Leu Gln Ala Leu Asn Ser Asn Ser Gln Leu Lys Leu Leu
50
                       55
                                          60
Leu Phe Gly Asn Pro Asp Thr Ile Thr Pro Leu Leu Gly Lys Thr Asp
                  7.0
                                      75
Leu Asp Gln Arg Ser Arg Pro Gln Ile Ile Pro Gly Gln Ser Arg Met
              8.5
                                  90
Pro Met Met Pro Gly Leu Ala Cys Phe Pro
          100
<210> 8597
<211> 404
<212> PRT
<213> Enterobacter cloacae
<400> 8597
Val Met Ala Phe Ser Gln Ala Val Ser Gly Leu Asn Ala Ala Ala Thr
Asn Leu Asp Val Ile Gly Asn Asn Ile Ala Asn Ser Ala Thr Tyr Gly
                               25
Phe Lys Ser Gly Ser Ala Ser Phe Ala Asp Met Phe Ala Gly Ser Lys
                           40
Val Gly Leu Gly Val Lys Val Ala Gly Ile Thr Gln Asp Phe Thr Asp
                       55
Gly Thr Thr Thr Asn Thr Gly Arg Gly Leu Asp Val Ala Ile Ser Gln
                   70
                                      7.5
                                                          80
Asn Gly Phe Phe Arg Met Val Asp Ala Asn Gly Ser Val Phe Tyr Ser
               8.5
                                   90
Arg Asn Gly Gln Phe Lys Leu Asp Glu Asn Arg Asn Leu Val Asn Met
           100
                              105
Gln Gly Leu Gln Leu Thr Gly Tyr Pro Val Ala Gly Thr Pro Pro Thr
       115
                          120
Val Gln Thr Gly Ala Asn Pro Gln Ala Ile Ser Ile Pro Thr Thr Leu
   130
                       135
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Met Ala Ala Lys Ser Thr Thr Thr Ala Ser Gln Gln Ile Asn Leu Asn
145
               150
                            155
Ser Thr Asp Thr Ala Pro Thr Val Ala Phe Asp Pro Ala Asn Pro Asp
            165
                            170
                                         175
Ser Tyr Asn Lys Lys Gly Thr Val Thr Val Phe Asp Ser Gln Gly Asn
        180
                         185
                             190
Ala His Asn Met Asn Leu Phe Tyr Val Lys Asn Ala Thr Pro Ala Asn
          200
                          205
     195
Ser Trp Lys Val Tyr Ser Gln Asp Gly Ser Val Ala Gly Asp Ala Ala
 210
       215
                                   220
Lys Leu Ala Thr Thr Leu Thr Phe Asn Ala Ser Gly Val Leu Thr Gly
225 230 235 240
Gly Asp Asp Ile Lys Ile Thr Thr Gly Thr Val Pro Gly Ala Thr Pro
         245 250 255
Ala Thr Phe Asp Met Ser Phe Ala Asn Ser Met Gln Gln Asn Thr Gly
      260 265 270
Ala Asn Asn Ile Val Ala Thr Ser Gln Asn Gly Tyr Lys Pro Gly Asp
    275
                     280 285
Leu Val Ser Tyr Gln Ile Asn Asp Asp Gly Thr Val Val Gly Asn Tyr
 290 295
                                   300
Ser Asn Glu Gln Thr Gln Val Leu Gly Gln Ile Val Leu Ala Asn Phe
               310
                               315
Ala Asn Asn Glu Gly Leu Lys Ser Glu Gly Asp Asn Val Trp Ser Ala
            325
                            330 335
Thr Gln Ser Ser Gly Val Ala Leu Leu Gly Thr Ala Gly Ser Gly Asn
         340 345
                                         350
Phe Gly Thr Leu Thr Asn Gly Ala Leu Glu Ala Ser Asn Val Asp Leu
    355 360 365
Ser Lys Glu Leu Val Asn Met Ile Val Ala Gln Arg Asn Tyr Gln Ser
                375
                       380
Asn Ala Gln Thr Ile Lys Thr Gln Asp Gln Ile Leu Asn Thr Leu Val
               390
                                395
Asn Leu Arg
<210> 8598
<211> 90
<212> PRT
<213> Enterobacter cloacae
<400> 8598
Glu Ala Gln Ser Val Gly Cys Leu Cys Phe Ile Arg Lys His Ser Ala
                            10
                                          1.5
Ile Ile Arg Gly Ile Ala Trp Glu Asn Ser Pro Glu Asn Asn Pro Tyr
Thr Gly Lys Tyr Cys Asn Pro Gln Pro Ala Asn Cys Leu Lys Asp Gln
      3.5
                    4.0
                                      4.5
Tyr Val Leu Arg His Cys Cys Val Asp Asp Arg Ser Asp Lys Ile Gly
                   55
His Ser Val Asp Ile Leu Thr Lys Pro Gly Phe Asn Ala Glu Asn Gly
                70
                                                80
Phe Ile Ile Pro Leu Leu Ala Gly Leu
             8.5
<210> 8599
<211> 323
<212> PRT
<213> Enterobacter cloacae
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<400> 8599

Arg Tyr Leu Glu Ser Pro Thr Met Lys Thr Glu Thr Pro Ala Val Lys

Met Val Ala Ile Ala Asp Asp Glu Ala Gly Gln Arg Ile Asp Asn Phe 25 Leu Arg Thr Gln Leu Lys Gly Val Pro Lys Ser Met Ile Tyr Arg Ile 40 Leu Arg Lys Gly Glu Val Arg Val Asn Lys Lys Arg Val Lys Pro Glu 55 Tyr Lys Leu Glu Ala Gly Asp Glu Val Arg Ile Pro Pro Val Arg Val 7.0 Ala Glu Arg Glu Glu Glu Val Val Ser Pro Lys Leu Gln Lys Val Ala 8.5 90 Ala Leu Ser Asp Val Ile Leu Tyr Glu Asp Asp His Ile Leu Val Leu 100 105 110 Asn Lys Pro Ser Gly Thr Ala Val His Gly Gly Ser Gly Leu Ser Phe 115 120 Gly Val Ile Glu Gly Leu Arg Ala Leu Arg Pro Glu Ala Arg Phe Leu 130 135 140 Glu Leu Val His Arg Leu Asp Arg Asp Thr Ser Gly Val Leu Leu Val 145 150 155 Ala Lys Lys Arg Ser Ala Leu Arg Ser Leu His Glu Gln Leu Arg Glu 165 170 175 Lys Gly Met Gln Lys Asp Tyr Leu Ala Leu Val Arg Gly Gln Trp Gln 180 185 190 Ser His Val Lys Val Val Gln Ala Pro Leu Leu Lys Asn Ile Leu Gln 195 200 205 Ser Gly Glu Arg Ile Val Arg Val Asn Gln Glu Gly Lys Pro Ser Glu 210 215 220 Thr Arg Phe Lys Val Glu Glu Arg Tyr Glu Phe Ala Thr Leu Val Arg 225 230 235 Cys Ser Pro Val Thr Gly Arg Thr His Gln Ile Arg Val His Thr Gln 245 250 Phe Ala Gly His Pro Ile Ala Phe Asp Asp Arg Tyr Gly Asp Arg Glu 260 265 270 Phe Asp Lys Gln Leu Ala Gly Thr Gly Leu Ser Arg Leu Phe Leu His 275 280 Ala Ala Ala Leu Lys Phe Thr His Pro Asn Thr Gly Glu Val Ile Arg 290 295 300 Ile Glu Ala Pro Leu Asp Glu Gln Leu Lys Arg Cys Leu Lys Val Leu

<210> 8600 <211> 406 <212> PRT <213> Enterobacter cloacae

Arg Gly

<400> 8600 His Tyr Leu His Asn Phe Met Arg Thr Arg Thr Glu Asn Leu Thr Asp 10 Val Val Ala Pro Lys Ala Asn Trp Ser Leu Ala Leu Gly Ala Gly Leu 25 Leu Gly Ile Gly Gln Asn Gly Leu Leu Val Met Leu Pro Gln Leu Val 40 Ser Leu Thr Gly Leu Ser Leu Ser Val Trp Ala Gly Leu Leu Met Phe 55 Gly Ser Met Leu Phe Leu Pro Ala Ser Pro Trp Trp Gly Arg Gln Ser 75 7.0 Glu Arg His Gly Cys Lys Ile Val Met Leu Ala Ser Leu Gly Gly Tyr 85 9.0 Leu Ala Ser Phe Val Val Met Ala Leu Val Val Trp Ala Met Ala Asn

```
105
                                      110
Gly Ala Leu Asn Ala Leu Trp Gly Met Ala Gly Leu Val Leu Ser Arg
     115
                    120
                           125
Met Leu Tyr Gly Leu Thr Val Ser Gly Leu Val Pro Ala Ala Gln Thr
               135
                       140
Trp Ala Ile Gln Arg Ala Gly Leu Asp Lys Arg Met Ala Ala Leu Ala
       150
                  155 160
Thr Ile Ser Ser Gly Leu Ser Cys Gly Arg Leu Leu Gly Pro Pro Leu
        165 170 175
Ala Ala Leu Met Leu Gly Val Ser Pro Val Ala Pro Leu Trp Leu Met
      180 185 190
Ala Leu Ala Pro Leu Ile Ala Leu Leu Leu Val Leu Arg Glu Ala Ala
 195 200 205
Asp Pro Pro Leu Pro Pro Val Ala His Gln Ser Thr Arg Leu Gln Ala
 210 215 220
Ser Met Leu Pro Phe Leu Val Leu Ala Leu Leu Leu Ala Ala Leu Val
225 230 235
Ser Leu Met Gln Leu Gly Leu Ser Pro His Leu His Pro Leu Phe Asn
      245 250 255
Gly Asp Val Val Gln Ile Ser His His Val Ala Leu Leu Leu Ser Leu
260 265 270
Ala Ala Leu Ala Thr Leu Ala Ala Gln Phe Leu Val Val Arg Pro Gln
275 280 285
His Phe Thr Pro Arg Val Leu Leu Leu Ile Ala Ala Val Leu Met Val
290 295
                               300
Ala Gly Leu Gly Leu Met Ser Leu Ala Ser Leu Ala Leu Phe Tyr Val
305 310 315
Gly Ile Val Ile Thr Ser Leu Gly Ala Ala Met Ala Thr Pro Gly Tyr
           325
                          330
Gln Leu Leu Leu Asn Asp Arg Leu Thr Thr Gly Lys Gly Ala Gly Val
                       345
Ile Ala Thr Ser His Thr Leu Gly Tyr Gly Ala Ser Ala Leu Leu Val
355 360
                        365
Pro Val Val Thr Arg Phe Tyr Gly Glu Gln Phe Leu Ile Thr Ala Ala
370 375 380
Trp Gly Met Ala Leu Leu Phe Leu Ala Val Ser Val Trp Val Arg Ser
                             395
Thr Asp Arg Thr Pro
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<210> 8601 <211> 402 <212> PRT

<213> Enterobacter cloacae

405

<400> 8601 Pro Ser Ile Pro Ile Pro Ala Cys Trp Thr Ala Thr Thr Thr Tyr Cys 1.5 Arg Glu Arg Leu Leu Arg Val Arg Leu Ser Gly Ala Ser Thr Ala Val 20 25 Thr Ala Ser Ala Val Met Arg Trp Gln Ile Ser Leu Phe Leu Val Arg 35 40 Leu Gln Asp Ile Arg Arg Leu Cys Val Arg Lys His Gly Lys Ala Pro 55 Val Ser Pro Ala Ala Arg Cys Leu Pro Gly Leu His Leu Arg Thr His 70 75 Ala Met Pro Asp Ser His Arg Val Tyr Ser Tyr Ser Ala Val Leu Met 90 85 Gly Ser Pro Ile Leu Leu Lys Leu Phe Ser His Asp Glu Ala Leu Ala 100 105 Ser Arg Val Phe Arg Leu Ile Lys Gln Tyr Glu Asp Leu Leu Thr Val

<210> 8602 <211> 338

Asn Arg Ala His Ser Gln Val Met Asp IIe Asn His Ala Ala Gly Gln 135 140 His Pro Val Ala Val Ser Arg Pro Val Phe Glu Leu Ile Arg Cys Ala 150 155 Lys Ala Ala Ser Leu Leu Lys Asp Ser Ala Phe Asn Leu Ala Ile Gly 165 170 Pro Leu Val Lys Cys Trp Lys Ile Gly Phe Lys Gly Asp Ala Val Pro 180 185 190 Pro Ala Asp Glu Ile Ala Ala Leu Met Gly Ile Thr Asp Pro Ala Asp 200 205 Val Val Leu Asp Glu Ala Asn Ser Ser Val Phe Leu Thr Arg Gln Gly 215 Met Glu Ile Asp Leu Gly Ala Ile Ala Lys Gly Tyr Ile Ala Asp Arg 230 235 Val Arg Asp Tyr Leu His Lys Glu Gly Ala Glu Leu Gly Leu Ile Asn 245 250 255 Leu Gly Gly Asn Val Gln Thr Leu Gly Ser Pro Glu Gly Gly Trp Arg 260 265 270 Val Gly Leu Lys Lys Pro Phe Ala Gly Asp Ala Leu Ile Gly Ala Met 275 280 285 Thr Val Glu Asn Arg Ser Val Val Thr Ser Gly Thr Tyr Glu Arg Tyr 290 295 300 Phe Glu Gln Asn Gly Lys Arg Tyr His His Ile Leu Asp Pro Arg Thr 305 310 315 Gly Tyr Pro Leu Asp Asn Glu Leu Asp Ser Val Thr Ile Ile Ser Pro 325 330 Asp Ser Leu Asp Gly Asp Ile Trp Thr Thr Leu Ile Tyr Gly Met Gly 340 345 350 Val Glu Lys Gly Cys Ala Ala Leu Arg Ser Arg Pro Asp Ile Glu Ala 355 360 Ile Phe Val Thr Lys Thr Lys Glu Val Val Ile Ser Ser Met His His 370 375 380 Phe Arg Phe Thr Leu Leu Asp Asp Ser Tyr Arg Ile Thr Gly Ser Thr 385 390

<212> PRT <213> Enterobacter cloacae <400> 8602 His Ser Ala Met Lys Lys Gly Leu 11e Ile Ala Asp Asp Gly Arg 10 Phe Ile Lys Pro Cys Lys Glu Arg Arg Phe Val Ser Leu Leu Ser Gly Asp Leu Tyr Lys Thr Leu Tyr Ser Val Trp Val Leu Ile Ile Arg Arg 4.0 4.5 Gln Phe Met Ser Ile Met Leu Thr Gly Thr Ala Arg Glu Arg Arg His 55 60 Ala Ser Thr Met Asn Ile Asp Arg Leu Ser Thr Leu Asp Met Leu Asn 7.0 Val Ile His Gln Asp Asp Ala Gln Ile Thr Ser Ala Leu Thr Pro His 85 90 Leu Ser Met Leu Ala Arg Val Val Asp Asn Ala Ala Ala Thr Leu Ser 100 . 105 His Gly Gly Arg Leu Val Leu Thr Gly Ala Gly Ala Ser Gly Arg Met 120 Ala Glu Gln Ala Ala Glu Ala Phe Ala Pro Gly Lys His Pro Val Ile

135 Ala Met Thr Ala Gly Asp Asn Ala Gly Ser Tyr Ala Ser Gly Val Ala 150 155 Asp Leu Gln Thr Ile Glu Phe Gly Glu His Asp Met Met Leu Ala Leu 165 170 Ser Val Ser Gly Lys Thr Pro Trp Val Trp Gly Ala Met Arg His Ala 180 185 Trp Ser Leu Gly Ser Thr Val Ala Leu Ile Thr Glu Asp Ala Gln Ser 200 205 Glu Ala Ala Gln Leu Ala Ser Met Val Ile Ala Pro Asp Leu Gly Ala 210 215 220 Asp Val Val Ala Gly Tyr Thr Asn Ala Lys Ala Gly Ile Ala Gln Ser 230 235 Met Ile Leu His Met Ile Thr Thr Gly Leu Ala Val Arg Thr Gly Arg 245 250 255 Val Tyr Ser Asn Leu Arg Val Asp Leu Glu Ala Ser Asn Thr Arg Trp 260 265 270 Ala Glu Arg Gln Ile Ala Ile Val Met Glu Ala Gly Gly Cys Ser Arg 275 280 285 Ala Gln Ala Lys Ala Ala Leu Glu Ser Cys Asn His Gln Cys Lys Thr 290 295 300 Ala Val Leu Met Val Leu Thr Gly Leu Asn Ala Trp Lys Ala His Glu 305 310 315 Leu Leu Ala Gln Asn Asn Gly Phe Val Arg Leu Ala Leu Gln Glu Ala

<210> 8603 <211> 502 <212> PRT

<213> Enterobacter cloacae

<400> 8603 Pro Ile Ser Val Ala Val Cys Asp Pro Glu Leu Trp Tyr Ser Val Phe 10 Cys Leu Tyr Cys Pro Val Lys Arg Met Gln Glu Asn Arg Ser Val Thr 20 25 30 Val Pro Ala Pro Glu Arg Val Glu Lys Ser Thr Ala Ala Val Gln Ala 40 45 Leu Leu Arg Gln Leu Leu Glu Met Tyr Asp Ala Lys Thr Leu Ala Asn 55 60 Gln Leu Val Ala His Gly Glu Ser His Trp Ser Pro Ala Ile Leu Lys 75 70 80 Arg Leu Leu Ile Ser Asp Arg Ala Gly His Arg Leu Ser Asp Gly Glu 85 90 Phe Arg Tyr Leu Arg Asn Leu Leu Pro Arg Pro Pro Ala Ala His Pro 100 105 Asn Tyr Ala Phe Arg Phe Ile Asp Leu Phe Ala Gly Ile Gly Gly Ile 120 125 Arg His Gly Phe Glu Ala Ile Gly Gly Gln Cys Val Phe Thr Ser Glu 135 140 Trp Asn Lys His Ala Val Arg Thr Tyr Lys Ala Asn Trp Tyr Cys Asp 150 155 Pro Asp Ala His Gln Phe Asn Ala Asp Ile Arg Asp Val Thr Leu Ser 170 165 175 His Lys Thr Gly Val Ser Asp Glu Glu Ala Ala Glu His Ile Arg Asn 180 185 Thr Ile Pro Ala His Asp Val Leu Leu Ala Gly Phe Pro Cys Gln Pro 200 Phe Ser Leu Ala Gly Val Ser Lys Lys Asn Ala Leu Gly Arg Ala His

```
215
Gly Phe Ala Cys Asp Thr Gln Gly Thr Leu Phe Phe Asp Val Ala Arg
             230
                          235
Ile Ile Asp Ala Arg Arg Pro Ala Ile Phe Val Leu Glu Asn Val Lys
         245
                         250
Asn Leu Lys Ser His Asp Gly Gly Lys Thr Phe Arg Ile Ile Met Gln
        260
               265
Thr Leu Asp Glu Leu Gly Tyr Asp Val Ala Asp Ala Glu Asp Met Gly
         280
                          285
Pro Asp Asp Pro Lys Ile Ile Asp Gly Lys His Phe Leu Pro Gln His
  290 295
                        300
Arg Glu Arg Ile Val Leu Val Gly Phe Arg Arg Asp Leu Asn Leu Lys
   310 315 320
Gly Asp Phe Thr Leu Arg Asp Leu Pro Ser Leu Tyr Pro Ala Arg Arg
         325 330 335
Pro Thr Val Ala Asp Leu Leu Glu Pro Ala Val Asp Ala Lys Phe Ile
      340 345 350
Leu Thr Pro Val Leu Trp Lys Tyr Leu Tyr Arg Tyr Ala Lys Lys His
 355 360 365
Gln Ala Lys Gly Asn Gly Phe Gly Phe Gly Met Val Asn Pro Leu Asn
370 375 380
Pro Asp Ser Val Thr Arg Thr Leu Ser Ala Arg Tyr Tyr Lys Asp Gly
    390 395
Ala Glu Ile Leu Ile Asp Arg Gly Trp Asp Lys Ala Leu Gly Glu Lys
      405 410 415
Asp Phe Asp Asp Pro Gln Asn Gln Gln His Arg Pro Arg Arg Leu Thr
   420 425 430
Pro Arg Glu Cys Ala Arg Leu Met Gly Phe Glu Thr Pro Gln Gly Tyr
435 440 445
Ser Phe Arg Ile Pro Val Ser Asp Thr Gln Ala Tyr Arg Gln Phe Gly
450 455 460
Asn Ser Val Val Val Pro Ala Phe Ala Ala Val Ala Lys Leu Leu Ala
465 470 475
Ser Arg Ile Ser Lys Ala Val Gln Leu Arg Gln Ser Glu Ala Val Asn
          485
Gly Gly Arg Ser Gln
```

<210> 8604 <211> 321 <212> PRT

<213> Enterobacter cloacae

<400> 8604

Val Leu Phe His Thr Ile His Leu Ile Ser Lys Lys Arg Arg Ile Glu 1.0 Ile Leu Ala Gly Ser Ser Leu Leu Thr Leu Leu Asp Asp Ile Ala Thr 2.5 Leu Leu Asp Asp Ile Ser Val Met Gly Lys Leu Ala Ala Lys Lys Thr 4.0 Ala Gly Val Leu Gly Asp Asp Leu Ser Leu Asn Ala Gln Gln Val Ser 50 55 60 Gly Val Arg Ala Asn Arg Glu Leu Pro Val Val Trp Gly Val Ala Lys 65 70 75 Gly Ser Phe Ile Asn Lys Val Ile Leu Val Pro Leu Ala Leu Leu Ile 90 85 Ser Ala Phe Ile Pro Trp Ala Ile Thr Pro Leu Leu Met Ile Gly Gly 100 105 Ala Phe Leu Cys Phe Glu Gly Ala Glu Lys Val Leu His Met Phe Ala 120 Ala Arg Lys Glu Lys Asp Thr Pro Glu Met Arg Gln Gln Arg Leu Glu

```
135
Ala Leu Ala Ala Gln Asp Pro Lys Thr Phe Glu Arg Asp Lys Val Lys
         150
                      155
Gly Ala Ile Arg Thr Asp Phe Ile Leu Ser Ala Glu Ile Val Ala Ile
           165
                    170
                                       175
Thr Leu Gly Ile Val Ser Glu Ala Pro Leu Met Asn Gln Val Leu Ile
              185
        180
                          190
Leu Ser Gly Ile Ala Ile Leu Val Thr Ile Gly Val Tyr Gly Leu Val
  195
         200 205
Gly Leu Ile Val Lys Leu Asp Asp Ile Gly Phe Trp Leu Glu Lys Lys
 210
      215 220
Ser Ser Ala Ile Ala Arg Gly Ile Gly Lys Ser Leu Leu Val Val Ala
225 230 235
Pro Trp Leu Met Lys Thr Leu Ser Val Val Gly Thr Leu Ala Met Phe
        245 250 255
Leu Val Gly Gly Ile Ile Val His Gly Val Ala Ser Leu His His
      260 265 270
Met Ile Glu His Phe Ala Ser Gly Gln Gly Ala Val Val Ala Ala Ile
275 280
                       285
Leu Pro Thr Leu Leu Asn Leu Val Leu Gly Phe Ile Val Gly Leu Ile
290 295
                      300
Val Val Ala Val Val Lys Leu Val Glu Lys Val Arg Gly Lys Ser His
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<210> 8605 <211> 336 <212> PRT <213> Enterobacter cloacae

<400> 8605

Phe Ser Tyr Leu Ser Arg Leu Ala Gln Glu Gly Leu Gln Phe Lys Asn 1.0 Leu Arg Pro Ile Ile Lys Asn Ala Leu Trp Gly Lys Ile Pro Arg Lys 20 25 3.0 Asn Arg Val Glu Asn Asp Val Ala Ser Leu Ile Tyr Ser Phe Ala Glm 35 40 Leu Glu Ala Phe Thr Ala Val Ala Glu His Gly Ser Leu Met Lys Ala 55 60 Ala Ser Lys Leu Gly Lys Asp Arg Thr Thr Leu Arg Asp Leu Ile Asp 70 75 Phe Leu Glu Asp Gly Leu Gly Tyr Ala Leu Phe Leu Arg Glu Gly Arg 90 Ser Leu Arg Leu Thr Pro Glu Gly Glu Gln Leu Gln Arg Gln Ala His 100 105 110 Leu Leu Met Arg Gln Val Lys Ala Phe Glu Ala Phe Ala Arg Thr Val 115 120 125 Pro Asp Ser Ala Thr Gln Asp Ile Ala Leu Val Tyr Asp Pro Phe Thr 135 140 Pro Arg Ala Phe Leu Gln Ala Leu Ile Ala Thr Leu Ala Thr Lys Lys 145 150 155 Thr Arg Leu Ser Leu Thr Ser Ala Ser Arg Asp Glu Ala Glu Ala Met 165 170 175 Leu Ala Asn Gly Gln Ala Asp Leu Gly Ile Cys Gln Ala Arg Asn Arg 180 190 185 Ser Val Gly Asn Glu Met Glu Trp Arg Ala Leu Gly Ala Ile Glu Met 195 200 205 Asp Phe Tyr Ala Ala Thr Ala Leu Phe Ala Glu Val Ala Ser Pro Val 215

Ser Leu Leu Asp Leu Ser Leu Val Pro Gln Val Val Met His Ala Ala

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230
                                235
Ser Asp Glu Pro Val Ala Arg Arg Leu Gln Ile Ser Gly His Thr Leu
         245
                         250
Phe Thr Asn Glu Leu Glu Met Leu Arg Gly Leu Leu Glu Gln Gly Cys
         260
                       265
Gly Trp Gly Phe Leu Pro Thr His Leu His Ala Thr Gln Trp Lys Asn
      275
             280
                                      285
Val Lys Arg Leu Pro Thr Glu Val Gly Ser Gln Gly Ile Ser Gln Thr
 290
         295
                          300
Met Val Thr Ile Trp Lys Pro Gly Ser Asp Lys Arg Gly Leu Ile Asn
          310 315 320
Asp Thr Leu Ser Gln Leu Pro Ala Leu Trp Lys Arg Ser Ala Leu
                330
<210> 8606
<211> 184
<212> PRT
<213> Enterobacter cloacae
<400> 8606
Leu Asn Cys Trp Pro His Val Ser Ala Arg Pro Phe Ser Phe Val Arg
1 5
                   10
Val Arg Pro Ser Met Ala Asp Val His Asn Lys Ala Thr Arg Ser Lys
20 25
Asn Met Arg Ala Ile Gly Thr Arg Asp Thr Ala Ile Glu Lys Arg Ile
                     4.0
Ala Gly Leu Leu Thr Ala Val Gly Phe Glu Phe Arg Val Gln Asp Ala
50 55
Thr Leu Ala Gly Arg Pro Asp Phe Val Ile Asp Ala Tyr Gln Cys Ile
                               7.5
               70
Ile Phe Thr His Gly Cys Phe Trp His His His Asp Cys Tyr Leu Phe
          85
                            90
Lys Val Pro Ala Thr Arg Thr Asp Phe Trp Leu Asp Lys Ile Gly Arg
 100 105 110
Asn Val Glu Arg Asp Lys Arg Asp Val Ser Gln Leu Tyr Ala Gln Gly
115 120 125
Trp Arg Val Leu Ile Val Trp Glu Cys Ala Leu Arg Gly Arg Met Lys
 130 135 140
Leu Asn Asp Val Glu Leu Thr Glu Arg Leu Glu Glu Trp Ile Cys Gly
145 150 155
Gly Gly Gln Ala Ala Gln Ile Asp Thr Gln Gly Ile His Pro Ile Thr
      165
                          170
Val Ser Pro Pro His Thr Ser
         180
<210> 8607
<211> 394
<212> PRT
<213> Enterobacter cloacae
<400> 8607
Pro Leu Phe Tyr Arg Cys Pro Asp Phe Phe His Ser Pro Asp Leu Ala
                            10
                                            15
Arg Ser Cys Gly Thr Gly Arg Cys Leu Tyr Leu Gln Pro Ser Val Thr
                         25
         20
Ile Trp Lys Arg Leu Pro Val Arg Trp Thr Asp Ser Phe Ser Ser Ala
                    4.0
Ser Ile Lys Cys Cys Phe Phe Ala Thr Ala Gly Met Met Arg Trp Asp
Thr Pro Leu Ala Phe Gly Ala Leu His Asp Ala Val Lys Arg Phe Ala
```

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Gln Leu Arg Thr Ser Pro Thr Trp Gln Ile Ala Val Asp Lys Arg Arg
Thr Leu Pro Ile Asn Gly Val Ser Asp Ala Phe Val Glu Lys Thr Thr
        100
                         105
                                        110
Leu Leu Asn Arg Asp Asp Glu Tyr Leu Asp Asn Glu Leu Ser Ala Ala
                     120 125
Leu Glu Val Gly Tyr Leu Leu Arg Leu Ala Ser Ser Pro Ser Arg Asn
                135 140
 130
Glu Glu Arg Val Ile Tyr Val Ser Arg Ala Gly Phe Phe Leu Glu Thr
    150 155 160
Asp Thr Pro Gly Asn Ser Ser Asp Ile Val Gln Arg Tyr Tyr His Leu
       165 170 175
Val Thr Gln Pro Trp Phe Thr Gln Gln Ser Glu Arg Glu Asn Arg Ala
      180 185 190
Arg Ala Val Arg Trp Phe Ile Ser Pro Pro Ser Ser Phe Val Gly Lys
 195 200 205
Lys Pro Leu Ile Thr Ala Ser Val Pro Val Tyr Tyr His His Val Trp
 210 215 220
Tyr Gly Val Val Ala Met Asp Phe Thr Phe Ala Thr Leu Arg Arg Leu
225
      230 235
Leu Val Glu Ala Val Gly Asp Asn Pro Glu Gly Glu Tyr Gln Leu Tyr
           245 250 255
Asp Ser Arg Leu Thr Leu Leu Ala Thr Ser Glu Ser Pro Ala Val Asp
 260 265 270
Val Asn His Phe Asp Ala Arg Glu Leu Ala Gln Ile Ala His Ala Ile
                     280
Glu Ser Asp Ser Glu Gly Gly Ile Arg Leu Gly Ser Arg Phe Val Ser
                  295 300
Trp Glu Arg Leu Asp His Phe Asp Gly Val Ile Leu Arg Val His Thr
              310 315
Leu Asp Glu Gly Val Arg Gly Asp Phe Gly Ser Ile Ser Ile Val Leu
           325 330
Ala Leu Leu Trp Ala Leu Phe Thr Ala Met Leu Leu Ile Ser Trp Leu
        340 345
                                         350
Val Ile Arg Arg Met Val Ser Asn Met Tyr Ser Met Gln Asn Ser Leu
                     360 365
Gln Trp Gln Ala Trp His Asp Pro Leu Thr Arg Leu His Asn Leu His
                  375
                                  380
His Glu Ala Gly Ala Ile Arg Asn Tyr Asn
<210> 8608
<211> 314
<212> PRT
<213> Enterobacter cloacae
<400> 8608
Ile Ser Ser Tyr Pro Thr Met Leu Lys Asp Pro Val Ser Met Pro Val
                            10
Asn Phe Asp Leu Asn Asp Leu Tyr Ala Phe Arg Ala Leu Leu Glu Tyr
                         25
Gly Asn Phe Arg Leu Ala Ala Glu Ser Ile Cys Leu Ser Gln Ser Ala
  35
                     40
                                 4.5
Leu Ser Arg Arg Ile Glu Lys Leu Glu Ala Ala Leu Gly Thr Lys Leu
Phe Asp Arg Thr Thr Arg Arg Val Thr Leu Thr Leu Tyr Gly Gln Thr
             7.0
                             75
Phe Ala Asp Arg Cys Gly Gln Leu Leu Ala Asp Val Glu Ser Met Leu
           85
                      90
Ser Asp Ile Asp Lys Ala Ser Glu Glu Arg Thr Gly Leu Ile Thr Val
```

```
Ala Thr Val Pro Ser Ala Ala Cys Tyr Phe Met Pro Asp Val Ile Arg
      115
                     120
Arg Phe Gln Ser Arg Tyr Pro Arg Val Arg Ile Lys Leu Ile Asp Ser
                  135
                                     140
Ser Ala Gly Asn Val Ile Glu Ala Val Thr Arg Gly Gln Ala Asp Phe
       150 155 160
Gly Ile Cys Phe Ala Arg Ser Leu Gln Pro Asp Ile Glu Phe Val Pro
          165 170 175
Leu Val Glu Asp Val Tyr Val Ala Ala Cys Arg Arg Asp Ser Pro Leu
        180 185 190
Ala Lys Arg Lys Ser Leu Thr Trp Gln Ala Phe Tyr Gln Gln Asp Tyr
     195 200 205
Ile Gly Leu Asp Lys Thr Ser Gly Asn Arg Asn Leu Leu Asp Gln Arg
 210 215 220
Val Gly His Ile Arg Pro Glu Arg Pro Ser Ile Cys Glu Thr Arg His 225 230 235
Val Thr Thr Met Leu Gly Met Val Glu Ala Gly Ile Gly Ile Ala Ala
         245
                              250 255
Val Pro Ala Met Ser Met Pro Arg Ala Glu His Ser Leu Leu Thr Ser
260 265 270
Val Pro Leu Thr Glu Pro Glu Val Arg Arg Thr Val Gly Leu Ile Arg
 275 280 285
Arg Arg Gly Arg Ile Gln Ser Tyr Ile Ala Ala Glu Leu Glu Thr Leu
 290 295
                                     300
Ile Thr Glu Gln Tyr Arg Glu Val His
<210> 8609
<211> 935
<212> PRT
<213> Enterobacter cloacae
<400> 8609
Phe Leu Lys Phe Gly Val Ser Ile Met Ser Thr Asn Glu Arg Ile Leu
                         10
Ser Pro Phe Thr Leu Pro Asn Gly Thr Glu Leu Lys Asn Arg Leu Leu
                           25
Met Ala Pro Met Thr Thr Cys Thr Gly Tyr Tyr Asp Gly Thr Val Thr
                     4.0
Ser Glu Leu Val Glu Tyr Tyr Arg Ala Arg Ala Gly Ser Ile Gly Thr
                  55
Ile Ile Val Glu Cys Cys Phe Val Asp Asp Leu Gly Leu Ala Phe Pro
                                 75
Gly Ala Ile Gly Ile Asp Asn Asp Glu Lys Ile Ala Gly Leu Ala Lys
                           90
Ile Ala Asp Val Ile Lys Ser Lys Gly Ser Lys Ala Leu Leu Gln Ile
                          105
          100
Tyr His Gly Gly Arg Met Val Asp Pro Lys Leu Ile Gly Gly Arg Thr
115 120 125
Pro Val Gly Pro Ser Ala Val Ala Ala Pro Arg Asp Gly Ala Ala Thr
                    135
 130
                                     140
Pro Val Ala Leu Thr Ala Glu Glu Val Glu Gly Met Ile Gly Lys Phe
                150
                                 155
Gly Glu Ala Val Arg Arg Ala Ile Gln Ala Gly Phe Asp Gly Val Glu
             165
                              170
Ile His Gly Ala Asn Thr Tyr Leu Ile Gln Gln Phe Phe Ser Pro Asn
          180
                        185
Ser Asn Gln Arg Asp Asp Glu Trp Gly Gly Ser Arg Glu Asn Arg Ala
      195
                       200
                                         205
Lys Phe Pro Leu Ala Val Leu Asp Ile Thr His Lys Met Val Arg Gln
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Tyr Ala Asp Asp Ala Phe Ile Ile Gly Tyr Arg Phe Ser Pro Glu Glu 225 230 235 Leu Glu Val Pro Gly Ile Arg Phe Glu Asp Thr Leu Tyr Leu Leu Glu 245 250 Lys Leu Ala Ala Arg Gly Val Asp Tyr Leu His Phe Ser Leu Gly Asp 260 265 Ala Leu Arg Pro Ser Ile Val Asp Thr Gln Asp Pro Thr Pro Leu Ile 280 285 Glu Lys Tyr Cys Ala Met Arg Ser Asp Thr Leu Ala Gln Val Pro Val 295 300 Met Gly Val Gly Gly Val Val Asn Ala Thr Asp Val Asn Glu Ala Leu 310 315 320 Asp His Gly Tyr Asp Leu Ile Ala Val Gly Arg Ala Thr Ile Ala Tyr 325 330 335 Pro Asp Trp Thr Asp Arg Ile Ala Ala Gly Glu Ser Leu Glu Leu Phe 340 345 350 Met Asp Ser Thr Arg Arg Glu Glu Leu Ser Ile Pro Glu Pro Leu Trp 355 360 365 Arg Phe Ser Leu Val Glu Ala Met Ile Arg Asp Met Ser Met Gly Glu 370 375 380 Ser Lys Phe Lys Pro Gly Thr Phe Ile Glu Lys Val Gln Asp Asp Ala 385 390 395 Asn Glu Leu Val Ile Asn Val Ser Leu Glu Thr Asp Arg Ile Ala Asp 405 410 Ile Glu Leu Ala Ser Gly Pro Ser Glu Asp Val Glu Phe Val Thr Ser 420 425 430 Phe Glu Glu Ile Arg Ser Arg Ile Leu Asp Ala Asn Thr Pro His Val 435 440 445 Asp Ala Ile Thr Gly Ala Thr Ser Gln Ser Glu Ala Val Lys Lys Ala 450 455 460 Val Ser Lys Ala Met Leu Lys Ser Ser Lys Ala Leu Ala Ala Glu Glu 470 475 Gly Ala Asp Pro Asn Glu Thr Lys Ser Val Asp Val Val Val Gly 485 490 Ser Gly Gly Ala Gly Leu Ala Ala Ala Ile Gln Ala His Asp Glu Gly $500 \hspace{1cm} 505 \hspace{1cm} 510 \hspace{1cm}$ Ala Ser Val Leu Ile Val Glu Lys Met Pro Thr Ile Gly Gly Asn Thr 515 520 525 Ile Lys Ala Ser Ala Gly Met Asn Ala Ala Glu Thr Arg Phe Gln Arg 530 535 540 Val Lys Gly Ile Gln Asp Ser Lys Glu Leu Phe Tyr Gln Glu Ser Leu 550 555 Lys Gly Gly Asn Lys Asn Asn Pro Glu Leu Leu Arg Arg Phe Val 565 570 Glu Asn Ala Pro Gln Ala Ile Glu Trp Leu Ala Thr Arg Gly Ile Met 580 585 590 Leu Asn Asp Ile Thr Thr Thr Gly Gly Met Ser Ile Asp Arg Thr His 595 600 Arg Pro Lys Asp Gly Ser Ala Val Gly Gly Tyr Leu Ile Ser Gly Leu 610 615 620 Val Arg Asn Val Asn Lys Arg Asn Ile Glu Val Met Leu Asp Thr Ser 630 635 Val Ser Asp Ile Ile Phe Glu Asn Gly Glu Val Thr Gly Val Arg Leu 645 650 Thr Thr Glu Glu Asn Glu Thr Leu Thr Val Ala Thr Lys Ser Val Ile 660 665 670 Val Ala Thr Gly Gly Phe Ser Ala Asn Ser Glu Met Val Val Lys Tyr 675 680 Arg Pro Asp Leu Ala Gly Phe Val Thr Thr Asn His Lys Gly Ala Thr 695 700 Gly Gly Gly Ile Ala Leu Leu Glu Arg Ile Gly Ala Gly Thr Val Asp

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Met Gly Glu Ile Gln Ile His Pro Thr Val Glu Gln Lys Thr Ser Tyr
                    730
            725
Leu Ile Ser Glu Ser Ile Arg Gly Gly Gly Ala Ile Leu Val Asn Gln
                         745
         740
Gln Gly Asn Arg Phe Tyr Asn Glu Met Ser Thr Arg Asp Lys Val Ser
                 760
Ala Ser Ile Ile Ala Leu Pro Glu Lys Tyr Ala Tyr Ile Val Phe Asp
          775
                              780
Glu His Val Arg Val Lys Asn Lys Ala Ala Asp Glu Tyr Ile Ala Lys
          790 795
Gly Phe Val Thr Ser Ala Ser Ser Pro Lys Ala Leu Ala Glu Ala Leu
           805 810 815
Gly Met Asp His His Gln Phe Leu Ala Thr Leu Glu Arg Tyr Asn Gly
         820
              825
                             830
Phe Val Glu Lys Gln His Asp Asp Phe Gly Arg Thr Thr Ala Leu
    835 840
                          845
Arg Ala Pro Ile Asn Glu Gly Pro Phe Tyr Ala Ile Gln Ile Ala Pro
 850
       855 860
Gly Val His His Thr Met Gly Gly Val Thr Ile Asn Thr Asp Thr Cys
865 870 875
Val Leu Asp Ser Asn His Asn Val Leu Pro Gly Ala Phe Ala Ala Gly
        885 890 895
Glu Val Val Gly Gly Ile His Gly Gly Asn Arg Ile Gly Gly Asn Ala
      900 905 910
Val Ala Asp Ile Ile Ile Phe Gly Thr Leu Ala Gly His Gln Ala Ala
915 920
Met Arg Ser Lys Thr Arg
 930
<210> 8610
<211> 257
<212> PRT
<213> Enterobacter cloacae
<400> 8610
Phe Tyr Leu Leu Lys Ile Leu Ile Arg Met Tyr Tyr Asn Ser Leu Ser
                            10
Phe Glu Gln Gln Asp Gly Met Met Glu Leu Ala Gln Trp Gln His Arg
 20 25
Tyr Glu Arg Trp Leu Asp Glu Asn His Phe Thr Asp Asp Ala Ala His
          4.0
Asp Ile Ala His Phe Arg Arg Val Trp Met Thr Ala Gln Gly Ile Met
 50 55
Ala Asp Glu Asp Ser Asp Pro Leu Val Val Leu Thr Ala Cys Tyr Phe
               70
                               75
His Asp Ile Val Ser Leu Pro Lys Asn His Pro Glu Arg Ser His Ser
            85
                            90
Ser Arg Leu Ala Ala Arg Lys Thr Arg Glu Ile Leu Ser Arg Asp Phe
        100
                         105
Pro Asp Phe Pro Pro Asp Arg Tyr Ala Ala Val Glu His Ala Ile Glu
 115 120
                                      125
Ala His Ser Phe Ser Ala Gly Ile Ala Pro Gln Ser Leu Glu Ala Lys
 130 135
                                   140
Ile Val Gln Asp Ala Asp Arg Leu Glu Ala Leu Gly Ala Ile Gly Leu
             150
Ala Arg Val Phe Ala Val Ser Gly Ala Leu Gly Ala Ala Leu Phe Asp
       165
                            170
Ala Asp Asp Pro Phe Ala Gly Thr Arg Ala Leu Asp Asp Lys Ala Phe
         180
                       185
Ala Leu Asp His Phe Gln Thr Lys Leu Leu Arg Leu Pro Asp Thr Met
```

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4361
                           200
Gln Thr Ala Arg Gly Arg Lys Leu Ala Arg His Asn Ala Asp Phe Leu
  210
                      215
                                         220
Ile Gln Phe Met Ala Lys Leu Ser Ala Glu Leu Gln Gly Asp Tyr Leu
                230
                                  235
Gly Thr Asp Ser Gln Ile Leu Thr His Phe Arg Arg Ser Val Arg Ser
                                 250
<210> 8611
<211> 71
<212> PRT
<213> Enterobacter cloacae
<400> 8611
Lys Arg Phe Thr Leu Ile Gln Glu Ala Gly Met Val Phe Leu Ile Ser
                               10
Asp Glu Val Lys Pro Lys Asn Gly Gly Pro Gly Met Ile Val Thr Gly
 20
                              25
Tyr Ser Ser Gly Met Val Glu Cys Arg Trp His Asp Gly Tyr Gly Ile
 35
                          40
                                            4.5
Lys Arg Glu Ala Phe Arg Glu Asp Glu Leu Gln Pro Ala Asn Lys Arg
50 55
Gln Lys Arg Asp Lys Ala
<210> 8612
<211> 86
<212> PRT
<213> Enterobacter cloacae
<400> 8612
Ser His Asn Ala Arg Pro Cys Arg Ala Phe Leu Leu Ala Glu Asp Leu
                                 10
Ser Tyr Arg Met Val Ser Asp Asn Gln Gly Val Cys Val Gln His Asp
                             25
Thr Phe Val Val Lys Gln Ser Phe Leu Gln Trp Leu His Lys Arg Ser
                          40
Asn Pro Ser Leu Ile Val Asn Leu Cys Phe Ile Val Val Leu Ile Phe
                      55
Ser Thr Leu Leu Thr Trp Arg Glu Val Val Val Leu Glu Asp Ala Tyr
Ile Ser Ser Pro Ala
              85
<210> 8613
<211> 173
<212> PRT
<213> Enterobacter cloacae
<400> 8613
Ala Pro Arg Ser Val Leu Leu Val Leu Trp Ile Val Glu Ile Phe Phe
                                  10
Ala Gln Arg Leu Ile Pro Ala Pro Ile Asp Lys Asn Phe Arg Ala Ile
                              25
                                                  30
Phe Val Ile Ala Arg Arg Gln Arg Thr Arg His Ala Val Arg Ile Lys
                          4.0
                                              4.5
Arg Ile Asp His Ala Lys Pro Lys Ala Ile Ala Phe Gly Leu Met Leu
                      55
Phe Gly Ile Ala Ile Glu Val Phe Pro Gln His Arg Gly Gln Asn Glu
```

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Phe Arg Ile Asp Gly Gly Leu Gln Gln Ile Gly His Arg Arg Ala Ala
                              90
Arg Arg Ile Gln Arg Arg Gln Ile Thr Gln Arg Lys Ile Ala Phe Gln
         100
                          105
Val Glu Ile Ala Ala Glu Ala His Gln His Asn Thr Phe Ala Val Leu
      115
                       120 125
Trp Gln Glu Val Phe Ala Val Asp Asn Phe Arg Ile Val Arg Pro His
 130 135 140
Ile Leu Cys Ile Arg His Val Val Thr Gln Phe Ile Gln Arg Leu His
145 150 155
Asp Asn Ala Glu Gly Phe Ala Ala Val Met Thr Leu
            165
<210> 8614
<211> 216
<212> PRT
<213> Enterobacter cloacae
<400> 8614
Ile Leu Asp Val Leu Gln His Lys Asn Cys Arg Ala Ala Gly Ile Asn
                           10
Asn Pro Gly Asn Val Lys Lys Gln Cys Ala Leu Arg Ile Thr Gly Lys
20
                          25
Ala Val Cys Ala Ser Gln Arg Val Leu Phe Arg His Ala Ser Gln Arg
35
                       4.0
                                        45
Glu Arg Leu Thr Arg Lys Ala Cys Gln Gln His Ile Val Arg Arg Asn
                  5.5
                                    60
Gly Ile Ala Asn Val Phe Gly Gly Leu Phe Ile Ala Asp Ala Ser Phe
       70
                                7.5
Val Ala Gln Arg Asp Ile Thr Asn Ile Arg Val Glu Leu Val Arg Val
            85
                             90
Gly Val Ala Ile Pro Val Gly Phe Ile Gly Thr Asp Gly Met Phe Ile
                        105
                                           110
Pro Phe Thr Gly Glu Asp Thr Let Pro Ala Asn Ser Phe Lys Ala Met
                       120
                              125
Ala Asn Ala Ala Asp Thr Gly Lys Glu Ile Asp Lys Ala Lys Gly Ile
  130 135
                                     140
Ile Arg Met Arg Ser Arg Arg Thr Arg Gln Gln Val Ala Gln Ile Thr
               150 155
Glu Leu Ala Val Ala Gln Ala Val Pro Cys Pro Val Ala Tyr Gln Gln
            165 170
Pro Leu Glu Tyr Arg Arg Ala Pro Val Thr Leu Ala Met Gly His Gln
                              190
         180 185
Leu Val Cys Gln Arg Phe Ser Ile Ile His Phe Gln Gln Leu Thr Gln
    195 200
Glu Cys Leu His Gly Cys Arg
  210
<210> 8615
<211> 393
<212> PRT
<213> Enterobacter cloacae
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<400> 8615

Arg Glu Tyr Ile Met Lys Arg Lys Val Leu Ala Ile Leu Val Pro Ala 15 Leu Leu Met Ala Gly Ala Ala Asn Ala Ala Glu Met Tyr Asn Lys Asn 25 30 Gly Asn Lys Val Asp Leu Tyr Gly Lys Val Asp Ala Arg His Thr Phe 35 40

```
Ser Asp Asn Pro Gly Asp Asp Gly Asp Glu Thr Tyr Val Gln Val Gly
Phe Lys Gly Glu Thr Gln Ile Thr Asn Asp Leu Thr Gly Tyr Gly Gln
              70
                             75
Trp Glu Tyr Lys Thr Tyr Ala Asn Asp Thr Glu Gly Ala Gly Asp Thr
          85
                          90
Ser Phe Asn Arg Leu Ala Phe Ala Gly Leu Lys Tyr Gly Glu Tyr Gly
     100
                       105
Ser Phe Asp Tyr Gly Arg Asn Tyr Gly Val Val Tyr Asp Val Glu Ala
   115 120 125
Trp Thr Asp Met Leu Pro Val Phe Gly Gly Asp Ser Tyr Thr Trp Thr
 130 135 140
Asp Asn Tyr Met Val Gly Arg Thr Asn Gly Val Ala Thr Tyr Arg Asn
145 150 155
Asn Asp Phe Phe Gly Leu Val Asp Gly Leu Asn Phe Ala Leu Gln Tyr
      165 170 175
Gln Gly Ala Asn Glu Gly Ala Asn Ala Asn Glu Asn Glu Glu Gly Thr
       180 185 190
Lys Asn Gly His Asp Asp Val Arg Phe Gln Asn Gly Asp Gly Phe Gly
 195 200 205
Met Ser Thr Thr Tyr Asp Phe Asp Phe Gly Leu Thr Leu Gly Ala Ala
210 215 220
Tyr Ser Ser Ser Asp Arg Thr Asn Asp Gln Val Ala Tyr Gly Ala Gly
225 230
                             235
Thr Tyr Asn Arg Phe Ser Lys Tyr Ala Gly Gly Glu Arg Ala Glu Ala
           245 250
Trp Thr Ile Gly Ala Lys Tyr Asp Ala Asn Asp Val Tyr Leu Ala Met
        260 265
                                      270
Met Tyr Ala Glu Thr Arg Asn Met Thr Pro Tyr Gly Asn Gly Gly Ile
   275 280
                                   285
Ala Asn Lys Thr Gln Asn Phe Glu Ala Val Ala Gln Tyr Gln Phe Asp
 290 295
                                300
Phe Gly Leu Arg Pro Ser Leu Ala Trp Val Tyr Ser Lys Gly Ile Asp
305 310 315
Leu Gly Gly Asn Asp Tyr His Pro Gly Asn Gly Tyr Asp Tyr Val Asp
               330 335
           325
Gln Asp Leu Val Asn Tyr Ile Asp Val Gly Met Thr Tyr Ser Phe Asn
     340
                       345
                                      350
Lys Asn Phe Ser Thr Tyr Val Asp Tyr Lys Ile Asn Leu Leu Asp Glu
    355
                    360
                                   365
Asp Asp Ala Phe Tyr Asn Asp Asn Gly Ile Ala Thr Asp Asp Ile Val
              375
Gly Ile Gly Met Ile Tyr Gln Phe
              390
<210> 8616
<211> 548
<212> PRT
<213> Enterobacter cloacae
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<400> 8616

Pro Phe Leu Phe His Arg Gly Val Leu Met Ser Asp Leu Gln Pro Phe l 5 10 15 Pro Pro Thr Arg Lys Arg Pro Met Lys Leu Asn Thr Leu Val Thr Leu 20 25 30

Met Val Cys Ala Ile Ile Gly Ser Val Leu Leu Val Val Phe Ala Leu
35
40
45
Turn Ser Val Cle Ile The The Ale Ale Ale Ale Val Val Val De The

Tyr Ser Val Gln Ile Thr Arg Ala Thr Arg Asp Asp Val Lys Asp Thr 50 60
Ala Leu Gly Ile Ala Arg Thr Leu Ala Asp Ser Pro Glu Ile Lys Arg 65 70 75 80

Gly Leu Met Glu Ser Pro Gln Ala Gly Ile Ile Gln Pro Ile Ala Glu Ala Val Thr Lys Arg Asn Asp Leu Leu Phe Thr Val Val Thr Asp Leu 100 105 Arg Gly Ile Arg Tyr Ser His Pro Asn Glu Ala Leu Leu Gly Leu His 115 120 Phe Ile Gly Asp Asp Leu Thr Pro Ala Leu Glu Gly Lys Glu Asn Val 135 140 Ser Val Asn Arg Gly Ala Leu Ala Glu Ala Leu Arg Val Phe Thr Pro 150 155 Val Tyr Asp Asp Gln His Asp Gln Ile Gly Val Val Val Val Gly Ile 165 170 175 Ser Leu Asn Lys Val Glu Asp Gln Ile Ala Arg Gly Arg Leu Asn Ala 180 185 190 Val Trp Thr Ile Leu Phe Ser Val Leu Met Ser Ser Val Ala Ile Trp 195 200 205 Gly Leu Val Arg Val Leu Lys Arg Ile Leu Phe Gly Leu Glu Pro Tyr 210 215 220 Glu Ile Ser Ala Leu Phe Glu Gln Arg Gln Ala Met Leu Gln Ser Leu 230 235 240 Arg Glu Gly Val Met Ala Val Asp Met His Gly Arg Val Thr Met Ile 245 250 255 Asn His Thr Ala Arg Glu Ile Leu Leu Leu Ser Ser Gly Glu His Ser 260 265 270 Glu Ser Ser Gly Glu Pro Leu Leu Ala Ser Leu Arg Glu Val Ala Lys 275 280 285 Thr Gly Ile Ala Arg Gln Asp Gln Glu Ile Gly Cys Asn Gly Arg Leu 290 295 300 Leu Leu Cys Asn Met Val Pro Val Lys Ser Gln Asn Gln Val Ile Gly 305 310 315 Ala Ile Ser Thr Phe Arg Asp Lys Thr Glu Ile Ser Gln Leu Met Gln 325 330 335 Arg Ile Asp Gly Met Val Asn Tyr Val Asp Ala Leu Arg Ser His Thr 340 345 His Glu Phe Met Asn Lys Leu His Val Ile Leu Gly Leu Leu His Met 355 360 365 Lys Arg Tyr Asp Lys Leu Glu Glu Tyr Ile Ile Gln Thr Ala Gln Asn 370 375 380 Tyr Gln Thr Asp Ile Gly Ala Ile Gln Arg Lys Val Lys Ser Pro Val 390 395 Ile Ala Gly Phe Leu Leu Gly Lys Ile Asn Arg Ala Lys Glu Ala Gly 405 410 Val Thr Leu Thr Leu Ala Glu Glu Ser Gln Leu Pro Asp Thr Ala Asn 420 425 430 Glu Glu Gln Val Ala Val Leu Ile Thr Val Leu Gly Asn Leu Ile Glu 440 445 Asn Ala Leu Asp Ala Met Glu Gly Gln Pro Glu Gly Glu Ile Gly Leu 455 460 Leu Leu His Tyr Gln Asn Gly Trp Leu Ser Gly Glu Val Ser Asp Asp 470 475 Gly Pro Gly Ile Asp Pro Glu Arg Leu Glu Ala Ile Phe Thr Lys Gly 485 490 495 Tyr Ser Thr Lys Gly Glu Asn Arg Gly Val Gly Leu Phe Leu Ala Arg 500 505 Gln Gln Ile Gln Asn Leu Gly Gly Asp Ile Thr Val Glu Ser Glu Pro 525 520 Gly Val Phe Thr Gln Phe Phe Val Gln Ile Pro Trp Asp Ser Glu Arg 530 535 540 Asn Ile Ala 545

<210> 8617

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<211> 485
<212> PRT
<213> Enterobacter cloacae
<400> 8617
Val Ile Val Glu Tyr Val Asn Thr Gly Gln Arg Ile Val Ile Asn Ala
Pro His Ala Ser Val Tyr Ala Leu Phe Ala Leu Ile Asn Phe His Phe
Leu Ile Gln Phe Ser Glu Thr Asp Glu His Asn Val Ala Ile Lys Leu
     35
                    40
Glu Ile Ile Met Val Ser Ser Thr Ser Pro Ala Thr Val Arg Ala Lys
                 55
                        60
Ala Gly Ala Ile Phe Arg Val Thr Ser Gly Asn Phe Leu Glu Gln Phe
         70
                             75
Asp Phe Phe Leu Phe Gly Phe Tyr Ala Thr Tyr Ile Ala His Thr Phe
        85
                          90
Phe Pro Ala Ser Ser Glu Phe Ala Ser Leu Met Met Thr Phe Ala Val
  100 105 110
Phe Gly Ala Gly Phe Leu Met Arg Pro Ile Gly Ala Ile Val Leu Gly
115 120 125
Ala Tyr Ile Asp Lys Val Gly Arg Arg Lys Gly Leu Ile Val Thr Leu
130 135 140
Ser Ile Met Ala Ala Gly Thr Phe Leu Ile Val Leu Ile Pro Ser Tyr
145 150 155 160
Gln Ser Ile Gly Leu Trp Ala Pro Leu Leu Val Leu Thr Gly Arg Leu
      165 170 175
Leu Gln Gly Phe Ser Ala Gly Ala Glu Leu Gly Gly Val Ser Val Tyr
 180 185 190
Leu Ala Glu Ile Ala Thr Pro Gly Arg Lys Gly Phe Tyr Thr Ser Trp
195 200 205
Gln Ser Gly Ser Gln Gln Val Ala Ile Met Ile Ala Ala Ala Met Gly
210 215
                                220
Phe Ala Leu Asn Val Val Leu Glu Glu Ser Ala Ile Arg Glu Trp Gly
225 230 235
Trp Arg Ile Pro Phe Leu Phe Gly Cys Leu Ile Val Pro Phe Ile Phe
      245 250 255
Phe Leu Arg Arg Lys Leu Glu Glu Thr Glu Glu Phe Ser Ala Arg Arg
        260 265 270
His His Leu Ala Met Arg Gln Val Phe Thr Thr Leu Leu Ala Asn Trp
    275 280 285
Pro Val Val Val Ala Gly Met Leu Met Val Ala Met Thr Thr Ala
 290 295
                                 300
Phe Tyr Leu Ile Thr Val Tyr Ala Pro Thr Phe Gly Lys Lys Val Leu
             310
                             315
Met Leu Ser Ala Ser Asp Ser Leu Leu Val Thr Leu Leu Val Ala Val
           325
                          330
Ser Asn Phe Ile Trp Leu Pro Val Gly Gly Ala Leu Ser Asp Arg Phe
                       345
                                      350
Gly Arg Lys Pro Val Leu Ile Ala Met Thr Leu Leu Ala Leu Ala Thr
                    360
                           365
Ser Tyr Pro Ala Leu Thr Met Leu Ala Ala Ala Pro Ser Phe Ser Met
                 375
                                 380
Met Leu Thr Val Leu Leu Trp Leu Ser Phe Leu Tyr Gly Leu Tyr Asn
              390
                              395
Gly Ala Met Ile Pro Ala Leu Thr Glu Ile Met Pro Ala Glu Val Arg
           405
                          410
Val Ala Gly Phe Ser Leu Ala Tyr Ser Leu Ala Thr Ala Val Phe Gly
        420
                       425
Gly Phe Thr Pro Val Ile Ser Thr Ala Leu Ile Glu Tyr Thr Gly Asp
```

3.5

```
440
Lys Ala Ser Pro Gly Tyr Trp Met Ser Phe Ala Ala Val Cys Ala Leu
                 455
                           460
Leu Ala Thr Leu Tyr Leu Tyr Arg Arg Arg Thr Leu Ile Leu Gln Thr
              470
                                475
Ala Val Lys Glu
            485
<210> 8618
<211> 265
<212> PRT
<213> Enterobacter cloacae
<400> 8618
Ser Leu Met Leu Thr Phe Arg Thr Val Ile Ala Ala Leu Thr Phe Ala
Thr Leu Ser Ala Gly Ala Leu Ala Gln Asp Val Thr Val Met Ile Ser
 20
                        25
                                           30
Gly Gly Phe Lys Ala Ala Leu Glu Lys Leu Thr Pro Gln Tyr Glu Ala
 35
                      40
                                       45
Gln Ser Gly Asp Arg Leu Ile Val Ile Ser Gly Pro Ser Met Gly Lys
50
                        60
         55
Thr Pro Gln Ala Ile Pro Ala Arg Leu Ala Arg Gly Glu Lys Ala Asp
                70
                                75
Val Val Ile Met Val Gly Asp Ala Leu Ala Lys Leu Glu Gln Asp Arg
            85
                             90
Arg Thr Ala Ala Gly Ser Arg Val Glu Leu Ala Asp Ser Pro Val Gly
         100 105 110
Met Val Val Lys Ala Gly Ala Pro Val Pro Asp Ile Ser Thr Val Pro
    115
                      120
                                      125
Ala Leu Arg Gln Thr Leu Leu Lys Ala His Ser Met Ala Tyr Ser Asp
                 135
                                    140
Ser Ala Ser Gly Arg Tyr Val Glu Ser Gln Leu Phe Arg Lys Leu Gly
                150
                                155
Ile Asp Gly Gln Val His Asp Lys Ala His Arg Val Glu Arg Ile Pro
            165
                             170 175
Val Ala Ser Glu Val Ala Lys Gly Lys Tyr Asp Leu Gly Phe Gln Gln
         180
                       185 190
Val Ser Glu Leu Leu Pro Val Pro Gly Val Thr Phe Val Gly Lys Leu
     195 200 205
Pro Asp Asp Ile Gln Tyr Ile Thr Arg Phe Ala Gly Ala Val Thr Gln
                   215
                                    220
Lys Ala Asp His Pro Glu Gln Gly Lys Ala Leu Leu Thr Phe Leu Ala
             230
                                235 240
Ser Pro Gln Ala Ala Ser Val Ile Thr Ala Thr Gly Leu Thr Pro Val
            245
                             250
Ser Ala Pro Arg Asp Thr Ala Arg
         260
<210> 8619
<211> 279
<212> PRT
<213> Enterobacter cloacae
<400> 8619
Pro Phe His Phe Val His Val Arg Val Thr Ser Lys Ala Met Ile Lys
                              10
Trp Pro Trp Lys Thr Asn Asp Ala Gly Arg Asn Met Ala Leu Pro Trp
         20
                       25
Asp Glu Ala Leu Ala Ile Pro Val Leu Ala Asn Leu Leu Pro Glu Glu
```

```
Gln Ser Lys Leu Ile Gln Leu Ala Glu Arg Phe Leu Gln Gln Lys Arg
                  55
Leu Val Pro Leu Gln Gly Phe Glu Leu Asp Pro Leu Lys Asn Ser Arg
               70
Ile Ala Leu Leu Phe Cys Leu Pro Val Leu Glu Leu Gly Ile Glu Trp
                           90
Leu Asp Gly Phe His Glu Val Leu Ile Tyr Pro Ala Pro Phe Ile Val
        100
                        105
                                       110
Asp Asp Glu Trp Glu Asp Asp Ile Gly Leu Val His Asn Gln Arg Met
          120
    115
                         125
Val Gln Ser Gly Gln Ser Trp Gln Gln Gly Pro Ile Ile Leu Asn Trp
 130 135 140
Leu Asp Ile Gln Asp Ser Phe Asp Ala Ser Gly Phe Asn Leu Ile Ile
      150 155
145
His Glu Val Ala His Lys Leu Asp Thr Arg Asn Gly Asp Arg Ala Ser
       165 170 175
Gly Val Pro Leu Ile Pro Leu Arg Glu Val Ala Gly Trp Glu His Asp
        180 185 190
Leu His Ala Ala Met Glu Asn Ile Gln Asp Glu Ile Asp Leu Val Gly
195 200 205
Glu Ser Ala Ala Ser Ile Asp Ala Tyr Ala Ala Thr Asp Pro Ala Glu
210 215 220
Cys Phe Ala Val Leu Ser Glu Tyr Phe Phe Ser Ala Pro Glu Leu Phe
225 230 235
Ala Pro Arg Phe Pro Ala Leu Trp Gln Arg Phe Cys Gln Phe Tyr Gln
     245 250 255
Gln Asp Pro Leu Gln Arg Leu Arg Gln Ser Glu Asp Ala Ala Ser Thr
      260
                     265
Ser Ser His Pro Phe His
```

<210> 8620 <211> 584 <212> PRT

<213> Enterobacter cloacae

<400> 8620

Gly Thr Thr Met Arg Thr Leu Leu Arg Ser Ala Gly Thr Asp Val Ala 10 Ala Gln Cys Phe Leu Asn Ala Leu Leu Arg Glu Thr Lys Asp Trp His 2.5 3.0 Tyr Leu Pro Ala Thr Arg Ala Asp Glu Leu Ser Leu Ile His Ile Pro 40 4.5 Leu Ser Pro Thr Gln Ala Ile Arg Val Pro Val Arg Tyr Phe Ser Pro 55 60 Thr Gln His His Gln Tyr Leu Phe Pro Ala Thr Leu Ile Gln Ala Asp 7.0 75 Ser Asp Gly Gly Asp Thr Val Thr Phe His Gln Leu Ile Asp Leu Ile 90 85 Ile Glu Lys Glu Thr Val Lys Gly Ala Leu Asp Ala Asp Thr Leu Ala 100 105 Arg Phe Lys Gln Arg Val Leu Glu Ser His Thr His Thr Trp Gln Ala 115 120 125 Ile Asp Leu Arg His Asn Trp Ala Asn Leu Arg Asp Lys Pro Leu Thr 130 135 140 Phe Ala Glu Ala Glu Gln Ala Leu Leu Val Gly His Ala Phe His Pro 150 155 160 Ala Pro Lys Ser His Glu Pro Phe Asn Glu Ala Glu Ala Arg Arg Tyr 165 170 175 Leu Pro Asp Phe Ala Ser Arg Phe Pro Leu Arg Trp Phe Ala Val Glu 185

```
His Glu Leu Ile Thr Gly Asp Ser Leu Asn Val Ser Leu Arg Glu Arg
                    200 205
     195
Leu Leu Arg Phe Ala Ala Gln Ser Ala Pro Ala Leu Leu Gly His Phe
                 215
                                220
Thr Asp Thr Cys Trp Leu Leu Pro Met His Pro Trp Gln Ala Asp Tyr
              230 235
Leu Leu Glu Gln Asp Trp Cys Gln Arg Leu Val Glu Lys Gly Ala Leu
           245
                          250
Arg Asp Leu Gly Glu Ala Gly Ala Pro Trp Leu Pro Thr Ser Ser Ser
            265 270
      260
Arg Ser Leu Tyr Ser Glu Thr Asn Ser Asp Met Ile Lys Phe Ser Leu
    275 280 285
Ser Val Arg Leu Thr Asn Ser Val Arg Thr Leu Ser Val Lys Glu Val
  290 295 300
Lys Arg Gly Met Arg Leu Ala Arg Leu Ala Lys Thr Ala Arg Trp Gln
305 310 315
Gly Leu Gln Ala Arg Tyr Pro Thr Met Arg Val Met Gln Glu Asp Gly
           325 330 335
Trp Ala Gly Leu Arg Asp Glu His Gly Val Ile Gln Glu Glu Ser Leu
        340 345 350
Met Ala Leu Arg Val Asn Leu Leu Phe Asp Thr Pro Glu Thr Gln Thr
355 360 365
Asn Val Leu Val Ser Leu Thr Gln Ala Ala Pro Asp Gly Gly Asp Ser
370 375
                                380
Leu Leu Ala Ala Ala Val Arg Arg Leu Ser Gln Arg Leu Asp Leu Pro
              390
                             395
Leu Ala Gln Ala Ala Arg Cys Trp Leu Asp Ala Tyr Cys Asp Arg Val
          405 410
Leu Leu Pro Leu Phe Ser Ala Glu Ala Asp Tyr Gly Leu Val Leu Leu
 420 425 430
Ala His Gln Gln Asn Ile Leu Val Glu Met Gln Gln Asp Phe Pro Val
 435 440
Gly Leu Ile Tyr Arg Asp Cys Gln Gly Ser Ala Trp Thr Glu Gly Ala
 450 455 460
Asp Ala Trp Leu Asn Glu Ala Gly Glu Thr Glu Val Glu Asn Arg Phe
465 470 475
Gly Glu Ser Gln Leu Leu Arg Tyr Phe Pro Tyr Tyr Leu Leu Leu Asn
           485 490 495
Ser Thr Leu Ala Val Thr Ala Ala Leu Ala Ala Ala Gly Phe Asp Ser
        500
                       505 510
Glu Glu Asn Leu Met Ser Arg Val Arg Asp Ala Leu Ala Glu Leu Arg
     515 520 525
Thr Thr Ala Lys Gln Thr Arg Cys Leu Asp Tyr Val Leu Asp Ser Pro
               535
                                540
Thr Trp Asn Cys Lys Gly Asn Phe Phe Cys Tyr Leu His Asp Arg Asn
              550 555
Glu Asn Thr Ile Val Asp Pro Ala Val Ile Tyr Phe Asp Phe Ser Asn
           565
                        570
Pro Phe Tyr Lys Glu Lys Ala
        580
<210> 8621
<211> 235
<212> PRT
<213> Enterobacter cloacae
<400> 8621
Pro Ser Phe Ser Gly Leu Pro Gly Val Ser Ala Met Lys Thr Tyr Asp
                          10
Phe Ile Gly Ile Gly Ile Gly Pro Phe Asn Leu Ser Ile Ala Ala Leu
```

```
Ala Glu Gly Leu Asp Gly Phe Ser Ser Leu Phe Leu Glu Arg Lys Pro
    35
                       4.0
His Phe Ser Trp His Pro Gly Met Met Val Pro Asp Cys His Met Gln
                   55
                                     60
Thr Ser Phe Leu Lys Asp Leu Val Ser Ala Val Glu Pro Thr Asn Arg
    70
                                 75
His Ser Phe Leu Asn Tyr Leu Val Gln Arg Lys Lys Phe Tyr Arg Phe
       85 90 95
Leu Thr Thr Glu Gln Arg Thr Val Ser Arg Glu Glu Phe Ala Asp Tyr
  100 105 110
Leu Cys Trp Ala Ala Asp Asn Leu Thr Asn Leu Ala Phe Ser Gln Gln
 115 120 125
Val Gln Gln Val Ser Phe Asp Glu Gln Asn Gly Leu Phe Glu Ile Val
 130 135 140
Thr Gln Arg Asp Arg Phe Leu Ala Arg His Val Cys Val Gly Ile Gly 145 \phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}
Lys Gln Ile Asn Leu Pro Asp Cys Val Thr Ala Gln Asp Asp Thr Cys
          165 170 175
Phe His Ala Ser Glu Met Met Leu Arg Thr Pro Asp Leu Ala Gly Lys 180 185 190
Arg Val Thr Val Val Gly Gly Gly Gln Ser Gly Ala Asp Leu Phe Leu
195 200 205
Asn Ile Phe Arg Gly Glu Trp Gly Gln Pro Leu Ser Leu Asn Trp Val
                 215
Ser Arg Arg Gln Gln Leu Gln Arg Val Gly
                 230
<210> 8622
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 8622
Pro Pro Lys Gly Ile Thr Thr Glu Ser Leu Leu Gly Ile Tyr Arg Ala
                        10
Met Tyr His Arg Phe Glu Val Leu Arg Glu Lys Pro Trp Ala His Leu
Met Pro Ser Arg Ser Val Thr Ala Leu Thr Arg Gln Glu Thr Gly Pro
35
                     4.0
Arg Leu Ser Ile Gln His His Leu Asp Gly Gly Arg Glu Gln Leu Glu
                 55 60
Ser Asp Val Val Ile Phe Ala Thr Gly Tyr Arg Ala Val Gln Pro Ala
                                75
              70
Phe Leu Ala Pro Leu Ser Ser Arg Leu Arg Leu Asp Glu Asp Glu Ala
             8.5
                 90
Phe Cys Ile Asn Asn Asp Phe Thr Leu Glu Trp Asp Gly Pro Gln Ser
       100
                        105 110
Asn Arg Leu Phe Ala Val Asn Ala Gly Met His Arg Leu Gly Ile Ala
      115 120
                                        125
Glu Pro Gln Leu Ser Leu Met Ala Trp Arg Ala Ala Arg Ile Leu Asn
       135 140
Arg Ala His Asp Asp Glu Pro Phe Glu Leu Ala Thr Thr Pro Gly Val
145 150
                                 155
Ile His Trp Arg Ser Thr Thr Ser Pro Glu Ser Ser Gln Val Phe Lys
                              170
             165
Ser Leu Ile Lys Thr Thr Glu Tyr
```

<210> 8623 <211> 307 <212> PRT <213> Enterobacter cloacae

```
<400> 8623
Gly Thr Met Arg Phe Arg His Leu Leu Pro Leu Ile Gly Ala Leu Phe
                             1.0
Ser Leu Tyr Ile Ile Trp Gly Ser Thr Tyr Phe Val Ile Arg Ile Gly
         20
                          25
                                          30
Val Glu Ser Trp Pro Pro Leu Met Met Ala Gly Ile Arg Phe Leu Thr
     3.5
                   4.0
                                     4.5
Ala Gly Val Leu Leu Met Ala Phe Leu Leu Leu Arg Gly His Arg Leu
                5.5
                                 60
Pro Pro Leu Arg Pro Leu Leu Asn Ala Ala Leu Ile Gly Leu Leu Leu
              70 75
Leu Ala Val Gly Asn Gly Ala Val Thr Val Ala Glu His Gln Asn Val
            85
                           90
Pro Ser Gly Ile Ala Ala Val Val Val Ala Thr Val Pro Leu Phe Thr
        100 105 110
Leu Cys Phe Ser Arg Leu Phe Gly Ile Arg Thr Arg Lys Leu Glu Trp
    115 120
Leu Gly Ile Ala Ile Gly Leu Val Gly Ile Ile Leu Leu Asn Ser Gly
       135
                                   140
Gly Asn Leu Ser Gly Asn Pro Trp Ala Ala Val Leu Ile Met Ile Gly
                150
                                155
Ser Met Ser Trp Ala Phe Gly Ser Val Tyr Gly Ser Arg Ile Glu Leu
            165 170 175
Pro Ser Gly Met Met Ala Gly Ala Ile Glu Met Leu Ala Ala Gly Ile
       180
                      185
                                          190
Val Leu Leu Met Ala Ser Ala Leu Thr Gly Glu Lys Leu Thr Ala Met
                      200
                                       205
Pro Asp Leu Ser Gly Phe Leu Ala Val Gly Tyr Leu Ala Leu Phe Gly
                   215
                                    220
Ser Ile Ile Ala Ile Asn Ala Tyr Met Tyr Leu Ile Arg Asn Val Ser
                230
                                235
Pro Ala Val Ala Thr Ser Tyr Ala Tyr Val Asn Pro Val Val Ala Val
            245
                             250
Leu Leu Gly Thr Gly Phe Ala Gly Glu Val Leu Ser Thr Ile Glu Trp
         260 265
Leu Ala Leu Gly Val Ile Val Phe Ala Val Val Leu Val Thr Leu Gly
                 280
                           285
Lys Tyr Leu Leu Pro Ala Lys Pro Ile Val Thr Arg Cys Glu Val Glu
                   295
                                    300
Lvs Pro
305
<210> 8624
<211> 523
<212> PRT
<213> Enterobacter cloacae
<400> 8624
Ser Asn Arg Ile Cys Val Pne Ala Val Arg Arg Ile Phe Asp Asn Leu
```

```
Gly Val Val Ala Ile Ala Leu Cys Ser Gln Trp Val Leu Phe Ser Pro
                      105
      100
Glu Gln Leu Ala Asp Pro Lys Phe Lys Leu Ala Gly Ala Ser Phe Lys
   115
         120
                           125
Trp Ala Val Ser Gly Phe Gly Asn Ser Thr Val Trp Leu Ile Phe Gly
      135 140
Ala Phe Met Phe Ala Ala Gly Tyr Asp Lys Thr Arg Phe Gly Arg Arg
145 150 155 160
Leu Ala Leu Ile Leu Val Lys Tyr Leu Gly Arg Arg Ser Leu Thr Leu
      165 170 175
Gly Tyr Ala Ile Thr Phe Ala Asp Leu Leu Leu Ala Pro Phe Thr Pro
    180 185 190
Ser Asn Thr Ala Arg Ser Gly Gly Thr Ile Tyr Pro Ile Ile Ala Asn
 195 200 205
Leu Pro Pro Leu Tyr Gly Ser Lys Pro Asn Asp Pro Ser Ala Arg Lys
210 215 220
Ile Gly Ser Tyr Leu Met Trp Val Ala Ile Thr Ala Ala Cys Ile Thr
225 230 235 240
Ser Ser Met Phe Leu Ser Ala Leu Ala Pro Asn Leu Leu Ala Leu Ala
      245 250 255
Leu Val Lys Ser Thr Val Gly Ile Asp Ile Ser Trp Gly Thr Trp Phe
 260 265 270
Leu Ala Phe Leu Pro Leu Gly Ile Leu Leu Ile Leu Thr Met Pro Leu
275 280 285
Leu Ala Tyr Trp Phe Tyr Pro Pro Glu Val Lys Val Asn Asn Glu Val
290 295 300
Pro Leu Trp Ala Thr Arg Glu Leu Glu Lys Leu Gly Lys Leu Ser Arg
305 310 315 320
Asn Glu Ile Leu Leu Val Phe Val Cys Cys Ala Leu Leu Met Trp 325 330 335
Ile Phe Ala Ala Ala Trp Ile Glu Pro Ala Met Ala Ala Leu Leu Ile
  340 345
Val Gly Leu Met Leu Trp Thr Gly Val Leu Glu Trp Asn Asp Ile Thr
355 360 365
Gly Asn Lys Ala Ala Trp Asn Thr Phe Val Trp Phe Ala Thr Leu Val
 370 375 380
Ala Leu Ala Asp Gly Leu Ser Ser Thr Gly Phe Ile Ser Trp Leu Gly
385 390 395 400
Lys Glu Gly Gly Leu Leu Met Ser Gly Ile Ser Pro Gly Val Ala Thr
        405 410 415
Ile Val Leu Leu Ala Phe Tyr Leu Leu His Tyr Leu Phe Ala Ser
       420 425 430
Thr Thr Ala His Thr Thr Ala Leu Leu Pro Ala Met Leu Thr Ile Ala
435 440 445
Ser Thr Ile Pro Gly Met Asn Met Glu Val Phe Val Leu Leu Met Val
 450 455 460
Thr Ser Leu Gly Val Met Gly 1le Ile Thr Pro Tyr Gly Thr Gly Pro 465 \phantom{\bigg|}470\phantom{\bigg|}470\phantom{\bigg|}475\phantom{\bigg|}
Ser Pro Ile Tyr Tyr Gly Ser Gly Tyr Leu Pro Thr Lys Asp Tyr Trp
           485 490 495
Arg Leu Gly Thr Ile Phe Gly Ala Ile Phe Leu Ala Ala Leu Leu Leu
            505
                                    510
     500
Ile Gly Tyr Pro Trp Met Ser Met Met Phe
                   520
     515
```

<210> 8625

<211> 443 <212> PRT

<213> Enterobacter cloacae

<400> 8625 Thr Glu Val Leu Pro Glu Pro Asn Val Ile Asn Met Lys Ile Lys Thr 10 Asn Arg Thr Leu Leu Ala Ala Leu Val Ile Ser Ser Leu Leu Ser Pro Ala Val Met Ala Ala Cys Asn Gly Thr Asp Leu Thr Thr Cys Pro Ala 40 Pro Phe Asp Ala Arg Leu Pro Asp Ala His Thr Met Leu Thr Trp Ser Gln Ala Asp Arg Val Val Gly Phe Arg Asn Asp Tyr Arg Asn Tyr Ala 70 75 Gly Asp Val Phe Arg His Gly Asn Ala Thr Pro Leu Leu Pro Ala Glu 90 8.5 Lys Pro Leu Thr Asp Ala Arg Tyr Gln Val Lys Gly Lys Ile Tyr Asn 100 105 110 Leu Gln Asp Tyr Leu Lys Arg Gln Asn Val Ser Gly Met Leu Val Leu 115 120 125 Lys Asn Gly Lys Val Ala Tyr Lys Tyr Leu Gly Glu Gly Asn Thr Asp 130 135 140 Ser Thr Leu Trp Thr Ser Arg Ser Val Gly Lys Ser Val Val Ser Ala 145 150 155 160 Leu Val Gly Val Ala Ile Lys Glu Gly Lys Ile His Ser Leu Asp Asp 165 170 175 Leu Val Thr Gln Tyr Glu Pro Asp Leu Lys Gly Thr Ala Trp Glu Gly 180 185 190 Val Thr Leu Lys Gln Leu Ile Thr His Thr Ser Gly Val Ala Trp Thr 195 200 205 Glu Asp Tyr Thr Asn Ala Gln Ser Asp Phe Ala Arg Leu Thr Glu Cys 210 215 220 Glu Ala Lys Pro Gly Thr Tyr Asp Cys Val Arg Thr Leu Val Lys Gly 225 230 235 Leu His Arg Glu His Pro Ala Gly Glu Asn Trp Ser Tyr Ser Ser Gly 245 250 255 Gly Ala Trp Leu Leu Gly Asp Val Leu Glu Arg Ala Thr Gly Met Thr 260 265 270 Leu Ala Ala Tyr Leu Glu Lys Ser Ile Trp Gln Pro Tyr Gly Met Ala 275 280 285 Ser Asp Gly Val Trp His Ala Tyr Ser Lys Gly Gln His Asp Val Gly 290 295 300 Ala His Gly Phe Asn Ala Thr Leu Glu Asp Trp Gly Arg Phe Gly Glu 305 310 315 Phe Ile Leu His Asn Gly Thr Leu Pro Asp Gly Lys Gln Ile Leu Pro 325 330 Glu Gly Trp Val Lys Gln Ser Ser Ala Trp Thr Gln Ala Lys Gly Ser 340 345 350 Val Ser Glu Ala His Pro Lys Gly Leu Tyr Gly Tyr Gln Trp Trp Asn 355 360 365 Asn Glu Val Pro Ala Thr Ala Thr Asn Val Glu Pro Lys Val Glu Asn 370 375 380 Ser Leu Lys Asp Ser Leu Trp Ala Leu Gly Ile Phe Gly Gln Met Ile 385 390 395 400 Met Val Asn His Lys Glu Asn Leu Val Ile Val Gln Trp Ser Thr Trp 405 410 Pro Gln Ala Glu Pro Ser Phe Ser Ala Gln Pro Leu Glu Ala Ser Leu 425 420 Met Phe Ser Ala Ile Ala Asn Ala Leu Arg 440

<210> 8626 <211> 636 <212> PRT

<213> Enterobacter cloacae

<400> 8626 Thr Ala His Gly Ala His Cys Gly Gly Thr Ala Leu Arg Gln Pro Ala Ser Val Pro Pro Ser Gly Val Arg Arg Phe Arg His Gly Glu Arg Val 2.5 Arg Leu Pro Ala Gln Thr Leu Pro Pro His His Glu Arg Ala Ser Ser 35 4.0 45 Leu Leu Pro Arg Gly Gly Thr Val Asn Ala Leu Trp Gln Lys Val Asn 55 60 Arg Glu Met Val Ala Lys Ile Leu Ala Glu Leu Glu Tyr Glu Arg Thr 70 75 Leu Arg Ala Glu Pro Asp Ser Ala Asp Tyr Trp Arg Ile Ser Met Gly 85 90 Asn Ala Cys Trp Gln Phe Arg Ala Thr Arg Gly Ile Trp Gly Trp Leu 100 105 His Ile Asp Pro Asp Thr Leu Thr Thr Thr Ser Gly Ala Ala Val Glu 115 120 125 Ala Glu Asn Ala Leu Leu Gln Leu Ala Thr Val Leu Glu Met Ser Asp 130 135 140 Ala Gln Thr Ala Glu His Met Glu Asp Leu Tyr Ala Thr Leu Arg Gly 145 150 155 160Asp Met Gln Leu Leu Gln Ala Arg Glu Thr Leu Asp Ala Asp Ala Leu 165 170 175 Ile His Leu Asp Pro Asp Glu Leu Gln Cys Leu Met Arg Gly His Pro 190 180 185 Lys Phe Ile Phe Asn Lys Gly Arg Arg Gly Trp Gly Leu Asp Ala Leu 195 200 205 Arg Leu Tyr Ala Pro Glu Tyr Arg Gly Arg Phe Arg Leu His Trp Val 215 220 Ala Val Gln Arg Asp Arg Leu Val Trp Ser Ser Asp Ala Asp Cys Asp 225 230 235 Ile Asn Ala Leu Leu Ser Ser Ala Met Asp Asp Ala Glu Arg Glu Arg 245 250 Phe Asp Ala Arg Trp Gln Glu Leu Asp Leu Asp Asp Ser Trp Leu Pro 265 270 260 Val Pro Leu His Pro Trp Gln Trp Gln Gln Lys Ile Ala Ile His Phe 275 280 285 Leu Ala Gln Leu Ala Arg Gly Glu Met Val Glu Leu Gly Glu Phe Gly 295 300 Asp Glu Tyr Leu Ala Gln Gln Ser Leu Arg Thr Leu Thr Asn Ala Ser 310 315 305 Arg Arg Thr Pro Tyr Asp Ile Lys Leu Pro Leu Thr Ile Tyr Asn Thr 330 325 Ser Cys Tyr Arg Gly Ile Pro Gly Lys Tyr Ile Ala Ala Gly Pro Leu 345 340 350 Ala Ser Arg Trp Leu Gln Gln Gln Phe Ala Ser Asp Ala Thr Leu Ile 355 360 365 Arg Ser Gly Ala Gln Val Leu Gly Glu Pro Ala Ala Gly Tyr Leu Ser 370 375 380 His Pro Gly Tyr Ala Ala Leu Pro Glu Ala Pro Tyr Arg Tyr Gln Glu 395 390 Met Leu Gly Val Ile Trp Arg Glu Asn Pro Ser Cys Tyr Leu Gln Asp 405 410 Gly Glu Gln Ala Val Leu Met Ala Ala Leu Met Glu Thr Asp Asn Gln 425 Gly Arg Pro Leu Ile Asp Ala Trp Ile Lys Arg Ser Gly Leu Thr Ala 440 445 Asp Ala Trp Leu Glu Lys Leu Phe Glu Ala Thr Val Ile Pro Phe Tyr 450 455 460

```
His Leu Leu Cys Arg Tyr Gly Val Ala Leu Ile Ala His Gly Gln Asn
465
                 470
Val Thr Leu Val Met Lys Asp Tyr Val Pro Gln Arg Ile Leu Leu Lys
             485
                               490
Asp Phe Gln Gly Asp Met Arg Leu Val Asp Glu Asp Phe Pro Gln Ala
         500
               505
                                             510
Gln Ser Leu Pro Glu Gln Val Lys Ala Val Thr Ala Arg Leu Ser Ala
      515
           520
                                       525
Asp Tyr Ile Ile His Asp Leu Gln Thr Gly Asn Phe Val Thr Val Leu
       535 540
  530
Arg Phe Ile Ser Arg Leu Thr Leu Gln Cys Gly Val Asn Glu Thr Arg
545
    550 555 560
Phe Tyr Gln Ile Leu Ala Leu Val Leu His Arg Tyr Met Ala Ala His
           565 570 575
Pro Asp Leu Ala Ala Arg Phe Ala Lys Phe Asp Leu Phe Lys Pro Gln
         580 585 590
Ile Ile Arg Val Ile Leu Asn Pro Val Lys Leu Thr Phe Ser Glu His
      595 600
                                         605
Asp Gly Gly Ser Arg Met Leu Pro Asn Tyr Val Cys Asp Leu Asp Asn
 610 615 620
Pro Leu Phe Leu Ala Ser Arg Glu Ser Ala Gln
                630
<210> 8627
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 8627
Asn Val Met Ala Leu Pro Ala Arg Pro Gly Glu Gln Thr Arg Tyr Ser
                              10
Ala Pro Ala Ile His Ala Leu Ser Arg His Ser Asp Pro Ser Ala Pro
                           2.5
Ser Val Pro Pro Phe Cys Thr Gly Gly Tyr Ser Phe Pro Ala Arg Pro
    35
                       4.0
Ser Pro Ala Pro Gly Tyr Ile Pro Pro Leu Pro Ser Gln Trp Gln Phe
                    55
Val Val Arg Pro Ile Trp Cys Cys Leu Pro Pro Asp Gln Arg Ala Gly
               7.0
                                  7.5
Cys Cys Thr Pro Val Leu Ser Val Pro Pro Asp Arg Trp
             8.5
<210> 8628
<211> 245
<212> PRT
<213> Enterobacter cloacae
<400> 8628
Arg Glu Glu Tyr Arg Val Ile Asn Val Leu Ile Val Asp Asp Asp Ala
                               10
Met Val Ala Asp Leu Asn Arg Leu Tyr Val Asn Arg Val Glu Gly Phe
          20
                           25
                                             30
Ser Cys Cys Gly Val Ala Ser Thr Leu Asn Gln Ala Glu Ala Leu Ile
      35
                        40
Ala Asn Pro Gly Gln Pro Ile Asp Leu Val Leu Leu Asp Val Tyr Met
                                      60
   5.0
                    55
Gln Gln Asp Asn Gly Leu Asp Leu Pro Ile Ile Arg Ala Ser Gly
                 70
                                  75
                                                    80
Arg Pro Ile Asp Val Ile Met Ile Ser Ser Ala Ser Asp Ala Ala Thr
             85
                               90
Ile Gln Thr Ser Met His Tyr Gly Val Val Asp Tyr Leu Ile Lys Pro
```

100 105 Phe Gln Phe Pro Arg Phe Glu Glu Ala Leu Asn Gly Trp Lys Ala Lys 115 120 125 Arg Ser Leu Met Gly Ser His Gln Tyr Tyr Glu Gln Ala Asp Val Asp 135 140 Arg Leu Ile His Gly Gly Ala Pro Glu Leu Ala Asp Ser Lys Lys Leu 145 150 155 Pro Lys Gly Leu Thr Pro Gln Thr Leu Arg Thr Ile Cys Gln Trp Ile 165 170 175 Asp Ser His Pro Glu Ile Glu Phe Ser Thr Asp Asp Leu Ala Asn Ala 180 185 190 Val Asn Ile Ser Arg Val Ser Cys Arg Lys Tyr Leu Ile Trp Leu Ala 195 200 205 Gln Ile Asn Ile Leu Phe Thr Ser Ile His Tyr Gly Ala Thr Gly Arg 210 215 220 Pro Val Tyr Arg Tyr Arg Leu Gln Pro Glu Gln Val Gly Leu Leu Lys 230 235 Gln Tyr Cys Gln <210> 8629 <211> 565 <212> PRT <213> Enterobacter cloacae <400> 8629 Pro Pro Asp Ile Ser Ser Gly Gly Phe Ile Phe Val Glu Gln Ala Met 10 Ser Asn Lys Pro Phe Ile Tyr Gln Asn Pro Phe Pro Leu Ala His Asp 2.0 25 Asp Thr Glu Tyr Tyr Leu Leu Thr Lys Glu His Val Ser Val Ala Glu 40 4.5 Phe Asp Gly Gln Glu Val Leu Lys Val Glu Pro Glu Ala Leu Thr Leu 55 60 Leu Ala Gln Gln Ala Phe His Asp Ala Ala Phe Met Leu Arg Pro Ser 7.0 75 His Gln Lys Gln Val Ala Ala Ile Leu Asn Asp Pro Glu Ala Ser Gln 8.5 90 Asn Asp Lys Tyr Val Ala Leu Gln Phe Leu Arg Asn Ser Glu Ile Ala 100 105 Ala Lys Gly Val Leu Pro Thr Cys Gln Asp Thr Gly Thr Ala Ile Ile 115 120 Met Gly Lys Lys Gly Gln Arg Val Trp Thr Gly Gly Gly Asp Glu Ala 135 140 Ala Leu Ser Gln Gly Val Tyr Asn Thr Tyr Ile Glu Asp Asn Leu Arg 150 155 Tyr Ser Gln Asn Ala Ala Leu Asp Met Tyr Lys Glu Val Asn Thr Gly 165 170 Thr Asn Leu Pro Ala Gln Ile Asp Leu Tyr Ser Val Asp Gly Asp Glu 180 185 190 Tyr Lys Phe Leu Cys Met Ala Lys Gly Gly Gly Ser Ala Asn Lys Thr 200 195 Tyr Leu Tyr Gln Glu Thr Lys Ala Leu Ile Thr Pro Ala Lys Leu Lys 215 Lys Tyr Leu Val Glu Lys Met Arg Tar Leu Gly Thr Ala Ala Cys Pro 230 235 Pro Tyr His Ile Ala Phe Val Ile Gly Gly Thr Ser Ala Glu Ala Thr 245 250 Leu Lys Thr Val Lys Leu Ala Ser Ala Arg Tyr Tyr Asp Gly Leu Pro 265 270

Thr Glu Gly Asn Ala His Gly Gln Ala Phe Arg Asp Val Gln Leu Glu

```
280
Gln Glu Leu Leu Gln Glu Ala Gln Asn Leu Gly Leu Gly Ala Gln Phe
                295
                               300
Gly Gly Lys Tyr Phe Ala His Asp Ile Arg Val Ile Arg Leu Pro Arg
            310
                            315
His Gly Ala Ser Cys Pro Ile Gly Met Gly Val Ser Cys Ser Ala Asp
                 330
         325
Arg Asn Ile Lys Ala Lys Ile Asn Arg Glu Gly Ile Trp Ile Glu Lys
           345 350
       340
Gly Glu Gly Asp Val Val Ser Ile Asp Leu Asn Lys Pro Met Pro Asp
 370 375 380
Ile Leu Ala Gln Leu Ser Ala His Pro Val Ser Thr Arg Leu Ser Leu
385 390 395 400
Asn Gly Thr Ile Ile Val Ala Arg Asp Ile Ala His Ala Lys Leu Lys
      405 410 415
Glu Leu Leu Asp Asn Gly Glu Glu Leu Pro Gln Tyr Val Lys Asp His
     420 425 430
Pro Ile Tyr Tyr Ala Gly Pro Ala Lys Thr Pro Glu Gly Tyr Ala Ser
435 440 445
Gly Ser Leu Gly Pro Thr Thr Ala Gly Arg Met Asp Ser Tyr Val Asp
450 455 460
Leu Leu Gln Ser Asn Gly Ala Ser Met Ile Met Leu Ala Lys Gly Asn
465 470 475
Arg Ser Gln Gln Val Thr Asp Ala Cys His Lys His Gly Gly Phe Tyr
         485 490 495
Leu Gly Ser Ile Gly Gly Pro Ala Ala Val Leu Ala Gln Asn Ser Ile
     500 505 510
Lys Ser Leu Glu Cys Val Ala Tyr Pro Glu Leu Gly Met Glu Ala Ile
515 520 525
Trp Lys Ile Glu Val Glu Asn Phe Pro Ala Phe Ile Leu Val Asp Asp
530 535 540
Lys Gly Asn Asp Phe Phe Gln Glu Ile Gln Asn Lys Gln Cys Lys Gly
Cys Ser Gln Arg
```

<210> 8630

<211> 320 <212> PRT

<213> Enterobacter cloacae

<400> 8630

Gly Met Gln Phe Asp Glu Ser Arg Gln Leu Tyr Phe Pro Leu Arg Pro 115 120 125

His Arg Pro Gln Gly Glu Val Tyr Arg Arg Tyr Asp Pro Gln Ile Lys

```
Arg Thr Leu Ser Phe Arg Val Ala Asp Val Ala Leu Asp Gly Glu Arg 145 $150$
Phe Thr Arg Trp Met Asn Thr Pro Arg Val Asn Ala Phe Trp Glu Met
            165
                        170
Ala Gly Pro Gln Ala Glu Gln Glu Asn Tyr Leu Arg Arg Gln Leu Asp
         180 185
Ser Thr Tyr Cys Tyr Pro Val Leu Gly Cys Phe Asp Asp Gln Pro Phe
      195
            200
                           205
Tyr Arg Trp Gln Pro Phe Asp Arg Gly Leu His Met Leu Val Gly Glu
         230 235
Glu Asn Trp Arg Gly Ala Gin Tyr Ile Arg Ser Trp Leu Arg Gly Leu
            245 250 255
Ser His Tyr Leu Tyr Leu Asp Glu Pro Arg Thr Ala Arg Ile Val Ala
       260 265 270
Glu Pro Arg Phe Asp Asn Gln Arg Leu Phe Arg His Leu Ala Ser Ala
 275 280 285
Gly Phe Asp Thr Val Lys Glu Phe Asp Phe Pro His Lys Arg Ser Arg
290 295 300
Leu Ile Met Ser Glu Arg His Arg Phe Phe His Glu Val Glu Leu
               310
<210> 8631
<211> 153
<212> PRT
<213> Enterobacter cloacae
<400> 8631
Asp Cys Asp Pro Ala Gly Ser Leu Pro Gly Ala Ala Arg Leu Arg Gly
                           10
Asp Trp Glu Ala Asp Gln Ser Ala Arg Leu Arg His Arg Ala Gly Arg
 20 25
Tyr Leu Leu Pro Arg Gln Arg Asn Asp Ala Ala His Ala Gly Phe Ser
                     4.0
Gly Gln Ala Arg His Arg Arg Arg Arg Pro Glu Arg Cys Gly Ser
                5.5
                                60
Val Pro Glu Tyr Leu Pro Trp Gly Met Gly Pro Ala Ala Glu Pro Gln
              70 75
Leu Gly Val Ala Pro Pro Thr Thr Thr Thr Arg Trp Met Lys Pro Gly
            85 90
Leu Leu Thr Ile Ile Phe Thr Pro Glu Tyr Val Asp Ser Phe Ser Thr
                        105 110
Phe Gly Asp Asp Ala Gly Ser Gln Met Leu Gln Glu Gln Lys Met Thr
    115 120 125
Ser Glu Gly Asp His His Arg Val Leu Ala Gly Asp Ile Pro Arg His
 130 135
                                  140
Val Pro Pro Phe Arg Ser Ala Ala
<210> 8632
<211> 407
<212> PRT
<213> Enterobacter cloacae
<400> 8632
Ile Ile Asn Lys Asp His Arg Val Leu Thr His Thr Phe Arg Ile Asn
Ile Thr Met Lys Arg Ser His Leu Trp Val Leu Asn Pro Cys Leu Leu
```

```
Ala Met Leu Ser Thr Ser Ala Trp Ala Glu Glu Gln Lys Glu Glu Asp
Ile Val Val Ser Ala Ser Arg Ala His Arg Ser Val Ala Glu Met Ala
                  55
Gln Thr Thr Trp Val Ile Glu Arg Ala Glu Ile Glu Gln Gln Val Gln
                              7.5
Gly Gly Lys Glu Ile Lys Asp Val Leu Ala Gln Leu Ile Pro Gly Met 85 \hspace{1cm} 90 \hspace{1cm} 95
Asp Val Ser Ser Gln Gly Arg Thr Asn Tyr Gly Met Asn Leu Arg Gly
     100 105 110
Arg Ser Met Met Val Met Val Asp Gly Val Arg Leu Asn Ser Ser Arg
 115 120 125
Ser Asp Ser Arg Gln Leu Asp Ser Ile Asp Pro Phe Asn Ile Asp Arg
130 135 140
Ile Glu Val Ile Ser Gly Ala Thr Ser Leu Tyr Gly Gly Gly Ser Thr
145 150 155
Gly Gly Leu Val Asn Ile Val Thr Lys Lys Gly Gln Pro Glu Thr Glu
       165 170 175
Val Glu Phe Gln Thr Gly Ala Lys Ser Gly Phe Asn Ser His Asn Asp
  180 185 190
His Asp Glu Asn Val Ser Ala Ala Val Ser Gly Gly Asn Asp Asn Ala
195 200 205
Ser Gly Arg Leu Ser Val Ser Tyr Gln Arg Tyr Gly Gly Trp Tyr Asp
                  215 220
Gly Asn Gly Asp Glu Val Ile Ile Asp Asn Thr Gln Thr Gly Leu Gln
              230 235
Tyr Ser Asp Arg Ile Asp Val Met Gly Thr Gly Thr Ile Asn Ile Asp
           245 250 255
Asp His Gln Gln Leu Gln Leu Thr Thr Gln Tyr Tyr Lys Ser Glu Ser
        260
                      265
Asp Gly Lys His Gly Leu Phe Leu Gly Glu Asn Phe Ala Ala Val Thr
275 280 285
Gly Asp Ala Lys Ala Tyr Asn Lys Asp Asn Leu Asn Ser Asp Arg Ile
290 295
Pro Gly Thr Glu Arg His Leu Ile Asn Leu Gln Tyr Ser Asn Thr Asp
    310
                              315
Phe Trp Gly Gln Asp Leu Val Ala Gln Ile Tyr Tyr Arg Asp Glu Ser
           325
                           330
Leu Thr Tyr Tyr Pro Phe Pro Thr Leu Ser Lys Gly Ala Val Thr Ser
        340 345
                                        350
Ile Gly Ala Ser Gln Gln Lys Thr Asp Phe Tyr Gly Gly Lys Leu Thr
                     360
                                     365
Leu Asn Ser Lys Pro Met Asp Asp Leu Thr Leu Thr Trp Gly Val Asp
                  375
                                 380
Ala Asp His Glu Thr Phe Asp Ala Asn Gln Gln Phe Phe Asp Leu Ser
              390
                              395
Lys Ala Ala Ala Ser Arg Gly
            405
<210> 8633
<211> 238
<212> PRT
<213> Enterobacter cloacae
<400> 8633
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Ile Leu Arg Leu Tyr Leu Ser Leu Glu Lys Val Glu Lys Lys Ser Asp 1 5 10 15 Thr Ile Glu Ser Thr Val Ser Phe Gln Val Asn Ala Met Ser Ser Asp 20 25 30 30 Lys Pro Ser His Arg Gly Ser Pro Tyr Ala Gln Glu Leu Ile Ser His 35 40 45 45

```
Leu Gln Pro His Cys Thr Thr His Lys Thr Asp Pro Gly Glu Gln Leu
Asn Leu Gln Val Asn Gly Gln Ser Met Cys Tyr Leu Ile Leu Asp Gly
                 70
Thr Val Ala Ile Tyr Arg Arg Ser Asp Asp Met Met Leu Ser Thr Ala
             85
                               90
Arg Ser Pro Ala Leu Phe Gly Leu Ala Asn Leu Thr Asp Ile Tyr Phe
          100
                                              110
Thr Asp Tyr Leu Arg Thr Val Thr Pro Cys Leu Ile Gly Val Leu Thr
                      120
   115
                                          125
Thr Asp Arg Val Ala Glu Ile Ile Lys Glu Lys Ala Leu Trp Gly Leu
 130 135 140
Leu Ser Asn His Leu Met Phe Val Tyr Asn Arg Leu Tyr His Asn Val
145
    150 155
Met Pro Lys Gly Ala Pro Thr Ala Tyr Glu Met Ile Arg Gln Gln Leu
             165 170 175
Val Leu Leu Met Gln Glu Asp Asp Ser Tyr Arg Arg Ser Val Thr Ala
         180 185
                                 190
Glu Arg Tyr Ile Arg Asp Lys Thr Gln Leu Ser Arg Ser Gly Val Met
      195 200
Arg Ile Leu Ala Asp Leu Lys Thr Gly Gly Phe Ile Glu Met Glu Glu
 210 215
                          220
Gly Arg Leu Ile Lys Ile Asn Lys Leu Pro Ala Arg Tyr
                230
<210> 8634
<211> 69
<212> PRT
<213> Enterobacter cloacae
<400> 8634
Leu Leu Phe Ile Asn Ile Met Ser Pro Thr Asp Asn Ser Ala Ala Thr
                               10
Pro Thr Lys Thr His Thr Ala Pro Ser Pro Ala Pro Thr Asp Arg Arg
          20
                            25
Ile Asp Ser Lys Ser Leu Leu Gly Glu Glu Gly Arg Val Ile Ile Glu
                        40
His Asp Gly Gln His Tyr Leu Leu Arg Gln Thr Asn Ala Gly Lys Leu
                     55
Ile Leu Thr Lys
65
<210> 8635
<211> 399
<212> PRT
<213> Enterobacter cloacae
<400> 8635
Arg Ser Ala Ala Val Gln Arg His His His Pro Arg Ala Gly Glu
                                1.0
Arg Leu Arg Glm Ser Leu Leu Val Thr Ala Gly His Pro Ala Gly Trp
          20
                            25
                                              30
Pro Gln Arg Gln Asp Leu Arg Gln Leu Ser Met Val Ile Pro Phe Gly
                        4.0
Ala Thr Ile Gln Lys Asp Lys Ile Met Gly His Tyr Thr Arg Trp Leu
                     55
                                       60
Glu Leu Lys Glu Glu His Pro Gly Lys Tyr Ala Arg Asp Ile Ala Gly
                 70
                                   75
                                                     8.0
Leu Met His Ile Ser Glu Ala Glu Leu Ala Phe Ala Arg Val Gly His
              85
                               9.0
Asp Ala Trp Arg Leu Arg Gly Glu Ile Arg Glu Ile Leu Ala Ala Leu
```

```
100
                        105
Glu Ser Val Gly Glu Thr Lys Cys Ile Cys Arg Asn Glu Tyr Ala Val
      115
                   120
His Glu Gln Ile Gly Ala Phe Thr Asn Gln His Leu Gly Gly His Ala
  130
                135
                                 140
Gly Leu Val Leu Asn Pro Arg Ala Leu Asp Leu Arg Leu Phe Leu Asn
       150
                   155
Gln Trp Ala Ser Ala Phe His Ile Ser Glu Thr Thr Ser Arg Gly Glu
       165
                170
Arg Gln Ser Ile Gln Phe Phe Asp His Gln Gly Asp Ala Leu Leu Lys
        180 185
                            190
Val Tyr Thr Thr Asp His Thr Asp Val Ala Ala Trp Gly Asp Val Leu
     195 200
                         205
Thr Arg Phe Ile Ile Ala Asp Asn Pro Ala Leu Ala Leu Lys Ala Val
 210 215 220
Glu Ala Pro Ala His Ser Asp Gly Ala Asp Ala Gly Ser Val Glu Lys
225 230 235 240
Glu Trp Arg Ala Met Thr Asp Val His Gln Phe Phe Ser Leu Leu Lys
         245 250 255
Arg His Asn Leu Ser Arg Gln Gln Ala Phe Arg Leu Val Ser Asp Asp
  260 265 270
Leu Ala Cys Lys Val Asp Asn Ser Ala Leu Ala Gln Leu Leu Glu Thr
 275 280 285
Ala Arg Gln Asp Arg Asn Glu Ile Met Ile Phe Val Gly Asn Arg Gly
290 295 300
Cys Val Gln Ile Phe Thr Gly Val Val Glu Lys Leu Thr Pro Met Lys
305 310 315
                                             320
Gly Trp Leu Asn Ile Phe Asn Pro Thr Phe Thr Leu His Leu Leu Glu
          325 330 335
Glu Thr Ile Ala Glu Thr Trp Val Thr Arg Lys Pro Thr Ala Asp Gly
      340 345 350
His Val Thr Ser Leu Glu Leu Phe Ala Ala Asp Gly Thr Gln Ile Ala
355 360 365
Gln Leu Tyr Gly Gln Arg Thr Glu Gly Glu Pro Glu Gln Ser Arg Trp
370 375
                                 380
Arg Arg Gln Ile Asp Ala Leu Thr Pro Glu Gly Leu Ala Ala
               390
<210> 8636
<211> 228
<212> PRT
<213> Enterobacter cloacae
<400> 8636
Ser His Gln Ser Val Arg Ser Gln Met Asn Thr Arg Phe Ala Pro Glu
                           1.0
Ser Glu Ile Asp Lys Ser Thr Val Leu Gly Ala Lys Pro Phe Lys His
                        25
Ile Glu Lys Ile Ile Asp Asn Val Leu Pro His Ala Glu Arg Gly Ile
                    4.0
Ile Ala Arg Gly Glu Ile Ile His Tyr Cys Ser Gly Asp Thr Arg Gln
 50 55
                                 60
Cys Phe Leu Leu His Gly Ser Val Ala Leu His Arg Arg Gly Asp
65 70
                            75
Gly Ile Val Leu Asn Ser Glu Ser Ala Pro Phe Ile Leu Gly Val Ser
                           90
          8.5
Ser Gln Leu Ser Ser Glu His Leu Tyr Val Arg Ala Leu Glu Thr Ser
       100
                       105 110
Glu Val Ala Ser Val Ser Leu Ala Arg Phe Asn His Val Val Ala Gln
                  120
Gln Asn Leu Trp Glu His Phe Ser Asn Leu Leu Ile Tyr Thr Ala Ser
```

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Arg Val Tyr Glu His Cys Ala Gln Ile Ser Gln Met Ser Ala Tyr Asp
               150
Ile Ile Arg Phe Gln Leu Val Glu Leu Met Gln Glu Pro Glu Ala Ile
          165
                       170 175
Ile Gln Asn Ile Thr Ala Ala Ala Tyr Ile Lys Ser Arg Thr Tyr Leu
        180
              185 190
Ser Arg Ser Gly Ile Met Arg Ile Leu Ala Glu Leu Arg Thr Gly Lys
 195 200 205
Tyr Ile Thr Met Glu Arg Gly Val Leu Val Glu Ile His His Leu Pro
 210
Arg Lys Tyr
225
<210> 8637
<211> 689
<212> PRT
<213> Enterobacter cloacae
<400> 8637
Leu Asn Lys Pro Asp Asn Thr Phe Ala Ser His Pro Gly Asp Pro Gln
                          10
Ala Ala Ser Ala Phe Gln Phe Leu Trp Arg Val Ala Met Pro His Leu
                         25
Gln Ser Ala Ser Leu Arg Pro Ser Leu Leu Ala Leu Ala Ile Val Ser
                   4.0
Thr Leu Pro Gly Val Thr Phe Ala Ala Ala Asp Glu Ile Thr Val Thr
                                   60
Ala Thr Gly Asn Ala Arg Ser Ala Phe Glu Ala Pro Met Met Val Ser
               70
                          7.5
Val Ile Asp Ala Thr Ala Pro Glu Asn Gln Thr Ala Ser Ser Ala Ala
           85
                            90
Asp Leu Leu Arg Lys Val Pro Gly Leu Thr Leu Asp Gly Thr Gly Arg
   100 105 110
Thr Asn Gly Gln Asp Val Asn Leu Arg Gly Tyr Asp Arg Arg Gly Val
                      120 125
Leu Val Leu Val Asp Gly Val Arg Gln Gly Thr Asp Thr Gly His Leu
 130 135
                                    140
Asn Ser Thr Phe Leu Asp Pro Ala Leu Ile Lys Arg Ile Glu Val Val
145 150 155
Arg Gly Pro Ser Ala Leu Leu Tyr Gly Ser Gly Ala Leu Gly Gly Val
                             170 175
            165
Ile Ser Tyr Asp Thr Val Asp Ala Ser Asp Leu Leu Asp Ala Gly Lys
                              190
         180
                         185
Asn Ser Gly Tyr Arg Val Phe Ala Thr Gly Ala Thr Gly Asp His Ser
                          205
      195
                      200
Ile Gly Met Gly Ala Ser Ala Tyr Gly Arg Thr Asp Thr Leu Asp Gly
   210
                   215
                                    220
Leu Val Ser Trp Ser Ser Arg Asp Arg Gly Asp Ile Arg Gln Ser Asp
                230
                                235
Gly Ala Arg Ala Pro Asn Asp Glu Ser Ile Asn Asn Met Leu Ala Lys
             245
                             250 255
Gly Ser Trp Lys Ile Asp Pro Ala Gln Thr Leu Ser Gly Ser Leu Arg
         260
                          265
                                           270
Tyr Tyr Asn Asn Asp Ala Gln Glu Pro Lys Asn Pro Gln Thr Thr Asp
      275
                       280
                                       285
Ala Ser Ser Ser Asn Pro Met Thr Asp Arg Ser Thr Ile Gln Arg Asp
                  295
   290
                                    300
Ala Gln Leu Gly Tyr Arg Ile Ala Pro Ala Gly Asn Asn Trp Leu Asn
                310
                                315
Ala Asp Ala Lys Ile Tyr Trp Ser Glu Ala Arg Ile Asn Ala Gln Asn
```

```
330
Ile Asp Ala Ser Gly Glu Phe Leu Lys Gln Thr Thr Lys Gly Gly Lys
       340
                    345 350
Val Glu Asn Arg Thr Arg Leu Phe Ser Asp Ser Phe Ala Ser His Leu
         360
                       365
Leu Thr Tyr Gly Gly Glu Tyr Tyr Arg Gln Glu Gln His Pro Gly Gly
      375
                     380
Ala Thr Thr Gly Phe Pro Asp Ala Lys Ile Asp Phe Ser Ser Gly Trp
385 390 395
Leu Gln Asp Glu Ile Thr Leu Arg Asp Leu Pro Val Thr Leu Leu Gly
      405 410 415
Gly Thr Arg Tyr Asp Asn Tyr Arg Gly Ser Ser Ser Gly Tyr Asp Asp
       420 425 430
Val Asp Ala Asp Lys Trp Ser Ser Arg Ala Gly Leu Thr Val Ser Pro
     435 440 445
Ala Asp Trp Leu Met Leu Phe Gly Ser Tyr Ala Gln Ala Phe Arg Ala
450 455 460
Pro Thr Met Gly Glu Met Tyr Asn Asp Ser Lys His Phe Ser Ile Gly 465 470 475 480
Ser Phe Tyr Thr Asn Tyr Trp Val Pro Asn Pro Asn Leu Arg Pro Glu
         485 490 495
Thr Asn Glu Thr Gln Glu Phe Gly Phe Gly Leu Arg Phe Asp Asp Leu
 500 505 510
Leu Leu Ala Asn Asp Ala Leu Glu Phe Lys Ala Ser Tyr Phe Asp Thr
515 520 525
Lys Ala Lys Asp Tyr Ile Ser Thr Thr Val Asp Phe Ala Ala Ala Thr
530 535
Thr Met Ser Tyr Asn Val Pro Asn Ala Lys Ile Trp Gly Trp Asp Met
545 550 555
Met Ala Thr Tyr Ala Thr Ser Leu Phe Asn Leu Asp Val Ala Tyr Asn
           565 570
Arg Thr Arg Gly Lys Asp Thr Asp Thr Gly Glu Tyr Ile Ser Ser Ile
 580 585 590
Asn Pro Asp Thr Val Thr Ser Lys Leu Asp Ile Pro Val Ala Gln Ser
595 600 605
Gly Phe Ser Val Gly Trp Ile Gly Thr Phe Val Glu Arg Ser Thr His
              615 620
Ile Ser Ser Ser Tyr Ser Glu Gln Pro Gly Tyr Ala Val Asn Asp Phe
             630 635
Tyr Val Ser Tyr Lys Gly Gln Gln Gln Phe Lys Gly Ile Thr Thr Thr
           645 650
Leu Val Leu Gly Asn Ala Phe Asp Lys Ala Tyr Trp Ser Pro Gln Gly
        660 665
Ile Pro Gln Asp Gly Arg Asn Gly Lys Ile Phe Val Ser Tyr Gln Trp
```

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<210> 8638
<211> 357
<212> PRT
<213> Enterobacter cloacae
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<400> 8638
His Gly Pro Ala Gly Leu Gln Arg Pro His Ala Glu Ser His Thr Thr 1
1 5 10
Ala Ala Cys Gln Ser Gly Ala Thr Ala Leu Met Ser Arg Arg Ile Thr 2
20 25 30
Leu Ser Leu Trp Leu Leu Ala Gly Ser Leu Thr Val Met Thr Ile Met 35 40
Ala Thr Gly Phe Gly Ala Leu Arg Leu Pro Val Asn Val Leu Trp Ser

```
Gly Ser Asp Glu Thr Leu Arg His Ile Trp Leu Thr Ile Arg Leu Pro
65 70 75 80
Arg Val Leu Leu Ala Leu Val Ile Gly Gly Ser Leu Ala Leu Ala Gly
                         90
Cys Val Met Gln Gly Leu Phe Arg Asn Pro Leu Ala Asp Pro Gly Leu
        100
               105
Leu Gly Ile Ser Ser Gly Ala Ala Leu Ala Val Ala Leu Trp Val Val
   115 120 125
Leu Pro Leu Ala Leu Pro Ala Leu Val Met Leu Tyr Ala Pro Met Leu
 130 135 140
Ala Ala Phe Leu Gly Ala Leu Ala Ala Thr Gly Val Ile Phe Leu Leu
145 150 155 160
Ser Lys Gln His Asp Thr Ser Leu Ser Arg Leu Leu Leu Val Gly Ile
      165 170 175
Ala Ile Asn Ala Leu Cys Gly Ala Ala Val Gly Val Leu Ser Trp Val
      180 185 190
Ser Asn Asp Ala Gln Leu Arg Gln Leu Ser Leu Trp Gly Met Gly Ser
195 200 205
Leu Gly Gln Ala Gln Trp Ser Thr Leu Leu Ala Val Thr Ser Leu Met
210 215 220
Val Pro Ala Ala Leu Ala Ile Trp Arg Cys Ala Ser Thr Leu Asn Leu
225 230 235 240
Leu Gln Leu Gly Glu Glu Glu Ala His Tyr Leu Gly Val Asp Val Ala
      245 250 255
Leu Val Gln Arg Ile Leu Leu Cys Ser Ala Leu Leu Val Ala Ala
     260 265 270
Ala Val Ala Val Ser Gly Val Ile Gly Phe Val Gly Leu Val Val Pro
275 280 285
His Leu Met Arg Met Trp Leu Gly Ala Asp His Arg Ala Thr Leu Pro
290 295
                     300
Gly Thr Val Leu Ala Gly Ala Leu Leu Leu Leu Val Ala Asp Thr Val
305 310 315
Ala Arg Thr Met Val Ala Pro Ala Glu Met Pro Val Gly Leu Leu Thr
          325 330 335
Ser Ile Leu Gly Ala Pro Trp Phe Leu Trp Leu Ile Phe Arg Arg Gly
Glu Gln His Gly
     355
```

<210> 8639 <211> 392 <212> PRT

<213> Enterobacter cloacae

<400> 8639 Arg Asp Ala Val Tyr Ile Pro Ile Ser Leu Ala Gly Val His Leu Arg 10 Lys Val Ser Phe Met Val Asn Leu Arg Gln Pro Arg Asp Val Ala Gln 25 30 Ile Leu Leu Ser Val Leu Phe Leu Ala Ile Met Ile Ile Ala Cys Leu 35 40 45 Trp Ile Val Arg Pro Phe Val Leu Gly Phe Ala Trp Ala Ala Thr Val 50 5.5 Val Val Ala Thr Trp Pro Leu Leu Leu Arg Leu Gln Lys Leu Leu Phe 70 Gly Arg Arg Gly Leu Ala Val Leu Val Met Thr Leu Leu Leu Phe Leu 85 90 Leu Phe Ile Ile Pro Ile Ala Leu Leu Val Asn Ser Leu Val Asp Ser 105 100 Ser Gly Pro Val Ile Arg Ala Val Thr Ser Gly Asp Met Thr Leu Pro

```
Asp Leu Ala Trp Leu Asn Ser Ile Pro Val Val Gly Ala Lys Leu Tyr
             135
                                  140
Ser Gly Trp His Ser Leu Leu Glu Met Gly Gly Ser Ala Leu Met Ala
          150
                            155
Lys Val Arg Pro Tyr Ile Gly Thr Thr Thr Thr Trp Phe Val Gly Gln
          165
                          170
                                    175
Ala Ala His Ile Gly Arg Phe Met Met His Cys Thr Leu Met Leu Val
       180 185 190
Phe Ser Ala Leu Leu Tyr Trp Arg Gly Glu Gln Val Ala Leu Gly Val
 1.95 200
                           205
Arg His Phe Ala Thr Arg Leu Ala Gly Lys Arg Gly Asp Ala Ala Val
 210 215 220
Leu Leu Ala Ala His Ala Val Arg Ala Val Ala Leu Gly Val Val Val
225 230
                    235
Thr Ala Leu Val Gln Ala Val Leu Gly Gly Ile Gly Leu Ala Ile Ser
       245 250 255
Gly Val Pro Tyr Ala Thr Ile Phe Thr Val Val Met Leu Met Thr Cys
      260 265 270
Leu Ala Gln Leu Gly Pro Leu Leu Val Leu Val Pro Cys Ile Ile Trp
 275 280 285
Leu Tyr Trp Thr Gly Asp Thr Thr Trp Gly Thr Val Leu Leu Val Trp
290 295 300
Ser Cys Val Val Gly Thr Met Asp Asn Val Ile Arg Pro Leu Leu Ile
305 310 315 320
Arg Met Gly Ala Asp Leu Pro Leu Ile Leu Ile Leu Ser Gly Val Ile
            325 330 335
Gly Gly Leu Ile Ala Phe Gly Met Ile Gly Leu Phe Ile Gly Pro Val
        340 345 350
Leu Leu Ala Val Thr Trp Arg Leu Phe Ser Ala Trp Val His Glu Val
355 360 365
Pro Pro Pro Gly Thr Asp Pro Asp Val Ile Leu Ser Glu Leu Glu Glu
 370 375
Leu Glu Asp Lys Asn Ala Gln
<210> 8640
<211> 353
<212> PRT
<213> Enterobacter cloacae
<400> 8640
Ile Phe Asn Phe Ser Asp Ser Phe Pro Ala Leu Asp Asn Pro Met Ile
                            10
Pro Ile Asp Ser Gly Lys Asn Leu Arg Asn Lys Ala Ala Asn Arg Lys
        20
                         25
Met Lys Ser Thr Phe Gln Glu Asn Gln Lys His His Phe Ile Leu Asn
                     4.0
Ser Asp Lys Phe Phe Ala Val Lys Leu Thr Phe Leu Ile Tyr Ala Phe
                  55
                                  60
Arg Gln Leu Arg Thr Leu Phe Arg Val Asp Lys Met Asp Asn Ala Val
               70
                               75
Asp Arg His Val Phe Tyr Ile Ser Asp Gly Thr Ala Ile Thr Ala Glu
                            90
            85
Val Leu Gly His Ala Val Met Ser Gln Phe Pro Val Ser Ile Asn Ser
         100
                         105
                                         110
Ile Thr Leu Pro Phe Val Glu Asn Glu Ser Arg Ala Lys Ala Val Lys
      115
                     120
                                      125
Asp Gln Ile Asp Ala Ile Tyr Gln Gln Thr Gly Val Arg Pro Leu Val
                  135
                                  140
Phe Tyr Ser Ile Val Ile Pro Glu Ile Arg Asn Ile Ile Leu Gln Ser
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150 155 Glu Gly Phe Cys Gln Asp Ile Val Gln Ala Leu Val Ala Pro Leu Gln 165 170 Ser Glu Leu Lys Leu Asp Pro Thr Pro Ile Ala His Arg Thr His Gly 180 185 190 Leu Asn Pro Gly Asn Leu Thr Lys Tyr Asp Ala Arg Ile Ala Ala Ile 195 200 Asp Tyr Thr Leu Ala His Asp Asp Gly Ile Ser Leu Arg Asn Leu Asp 215 Gln Ala Gln Val Ile Leu Leu Gly Val Ser Arg Cys Gly Lys Thr Pro 230 235 Thr Ser Leu Tyr Leu Ala Met Gln Phe Gly Ile Arg Ala Ala Asn Tyr 245 250 Pro Phe Ile Ala Asp Asp Met Asp Asn Leu Val Leu Pro Ala Ala Leu 260 265 270 Lys Pro Leu Gln His Lys Leu Phe Gly Leu Thr Ile Asn Pro Glu Arg 275 280 285 Leu Ala Ala Ile Arg Glu Glu Arg Arg Glu Asn Ser Arg Tyr Ala Ser 290 295 300 Met Arg Gln Cys Arg Met Glu Val Ser Glu Val Glu Ala Leu Tyr Arg 305 310 315 Lys Asn Gln Ile Pro Trp Leu Asn Ser Thr Asn Tyr Ser Val Glu Glu 325 330 335 Ile Ala Thr Lys Ile Leu Asp Ile Met Gly Leu Asn Arg Arg Met Tyr 340 345

<210> 8641 <211> 357 <212> PRT

<213> Enterobacter cloacae

<400> 8641 Ser Lys Lys Phe Leu Arg His Ser Met Asn Lys Thr Asp Glu Leu Arg 10 Thr Ala Arg Ile Asp Ser Leu Val Thr Pro Ala Glu Leu Ala Arg Leu 25 His Pro Val Ser Ala Glu Val Ala Asp His Val Thr Ala Ser Arg Arg 40 Arg Ile Glu Lys Ile Leu Asn Gly Glu Asp Lys Arg Leu Leu Val Val 55 Ile Gly Pro Cys Ser Ile His Asp Leu Asp Ala Ala Met Asp Tyr Ala 65 70 75 80 Gln Arg Leu Gln Thr Leu Arg Gly Thr Tyr Gln Asp Arg Leu Glu Ile 90 Val Met Arg Thr Tyr Phe Glu Lys Pro Arg Thr Val Val Gly Trp Lys 100 105 110 Gly Leu Ile Ser Asp Pro Asp Leu Asn Gly Ser Tyr Arg Val Asn His 120 125 Gly Ile Ala Leu Ala Arg Lys Leu Leu Gln Val Asn Lys Leu Gly 135 140 Val Pro Thr Ala Thr Glu Phe Leu Asp Met Val Thr Gly Gln Phe Ile 150 155 Ala Asp Leu Ile Ser Trp Gly Ala Ile Gly Ala Arg Thr Thr Glu Ser 165 170 Gln Ile His Arg Glu Met Ala Ser Ala Leu Ser Cys Pro Val Gly Phe 180 185 190 Lys Asn Gly Thr Asp Gly Asn Thr Arg Ile Ala Val Asp Ala Ile Arg 200 Ala Ser Arg Ala Ser His Met Phe Leu Ser Pro Asp Lys Asn Gly Gln

```
215
Met Thr Ile Tyr Gln Thr Ser Gly Asn Pro Phe Gly His Ile Ile Met
          230
                               235
Arg Gly Gly Lys Lys Pro Asn Tyr His Ala Glu Asp Ile Ala Ala Ala
           245
                      250
Cys Glu Thr Leu Ala Glu Phe Asp Leu Pro Glu His Leu Val Val Asp
         260
              265
                              270
Phe Ser His Gly Asn Cys Gln Lys Gln His Arg Arg Gln Leu Asp Val
    275 280 285
Cys Glu Glu Val Cys Gln Gln Ile Arg Ser Gly Ser Thr Ala Ile Ala
 290 295 300
Gly Ile Met Ala Glu Ser Phe Ile Lys Glu Gly Thr Gln Lys Ile Val
   310 315
Ala Gly Gln Gln Met Val Tyr Gly Gln Ser Ile Thr Asp Pro Cys Leu
         325 330 335
Ser Trp Glu Asp Ser Glu Arg Leu Leu Glu Met Leu Ala Ser Ala Val
              345 350
     340
Asp Ser Arg Phe
   355
<210> 8642
<211> 282
<212> PRT
<213> Enterobacter cloacae
<400> 8642
Arg Pro Asp Ala Gly Arg Ala Gly Gly Met Lys Asn Trp Phe Ala Leu
                            10
Leu Cys Ala Leu Pro Leu Val Ala Val Ala Ala Pro Glu Arg Ile Val
                         2.5
Ala Leu Gly Gly Asp Val Thr Glu Ile Val Tyr Ala Leu Gly Ala Glu
                     40
Ser Ser Leu Val Ala Arg Asp Ser Thr Ser Gln Trp Pro Gln Ala Thr
                                   60
Asn Ala Leu Pro Asp Val Gly Tyr Leu Arg Gln Leu Asn Ala Glu Gly
             7.0
                               75
Ile Leu Ser Val Arg Pro Thr Leu Val Leu Ala Ser Asp Gln Ala Gln
            85 90 95
Pro Ser Leu Ala Leu Lys Gln Val Glu Gln Ser His Val Arg Val Val
        100 105
                                         110
Thr Val Pro Gly Thr Pro Asp Leu Arg Ala Ile Asp Glu Lys Val Arg
     115 120
                                      125
Val Ile Ala Gln Ala Thr His His Glu Ala Gln Gly Glu Thr Leu Arg
 130
                  135
                                   140
Ser Ser Leu Arg Gln Ala Leu Ala Ala Leu Pro Ser Met Pro Leu Asn
145 150
                             155
Lys Arg Val Leu Phe Ile Leu Ser His Gly Gly Met Thr Ala Met Ala
            165
                            170
Ala Gly Gln Gln Thr Gly Ala Asp Ala Ala Ile Arg Ala Ala Gly Leu
         180
                         185
                                         190
Gln Asn Ala Met Gln Gly Phe Thr Arg Tyr Gln Pro Leu Ser Gln Glu
     195
                     200
                                      205
Gly Val Met Ala Ser Gln Pro Asp Leu Val Val Ile Ser Gln Glu Gly
   210
                   215
                                   220
Leu Asn Ala Leu Gly Gly Glu Glu Asn Leu Trp Lys Leu Pro Gly Leu
               230
                               235
Ala Gln Thr Pro Ala Gly Arg Ser Lys Gln Val Leu Ala Ile Asp Asp
                         250
            245
Met Ala Leu Leu Gly Phe Ser Val Arg Thr Pro Lys Ala Ile Gln Gln
         260
                         265
```

Leu Arg Ala Arg Ala Glu Gln Leu Pro

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<210> 8643
<211> 324
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<212> PRT

<213> Enterobacter cloacae

<400> 8643

(3 1150

113

in

ľU

1.77

13

80

13

44

Cys Ala Cys Gly Trp Ala Pro Ile Thr Gly Gln Pro Ser Pro Ala Arq 10 Tyr Ser Arg Ala Leu Tyr Cys Cys Trp Trp Arg Ile Arg Ser Arg Ala 20 25

280

Pro Trp Ser Pro Arg Gln Lys Cys Arg Ser Ala Cys Ser Pro Val Ser 45 35 40

Leu Ala Leu Pro Gly Ser Tyr Gly Ser Phe Phe Val Val Glu Asn Ser 55

Met Ala Glu Arg Tyr Thr Ala Glu Asn Leu Thr Phe Thr Arg Ser Gly 70 75

Arg Thr Leu Thr Asp Asn Val Ser Leu Ser Leu Ser Gln Gly Glu Leu 85 90 95

Val Thr Leu Ile Gly Pro Asn Gly Ala Gly Lys Ser Thr Leu Leu Arg 100 105 110

Leu Leu Thr Gly Tyr Leu Lys Pro Asp Ser Gly Gly Cys Ser Leu Ala 115 120 125

Gly Lys Ala Leu Asp Glu Trp His Pro Gln Val Leu Ser Arg Tyr Arg 130 135 140

Ala Val Met Arg Gln Gln Ser Gln Pro Glu Phe Asp Trp Gln Val Glu 145 150 155 Glu Ile Val Gly Met Gly Arg Ala Pro Trp Thr Arg His Pro Glu Pro

165 170 175 Ser Ile Val Arg Glu Val Leu Gln Leu Thr Gly Cys Leu Pro Leu Ala 180 185 190

Gly Arg Arg Tyr His Ala Leu Ser Gly Gly Glu Gln Gln Arg Val Gln 195 200

205 Leu Ala Arg Ala Leu Ala Gln Leu Trp Arg Asp Gly Thr Pro Arg Gly 220 210 215

Trp Leu Phe Leu Asp Glu Pro Thr Ser Ala Leu Asp Leu Tyr His Gln 225 230 235 240

Gln His Leu Leu Arg Leu Leu Lys Ser Leu Thr Arg Gln Gly His Leu 245 250 255 His Ala Cys Val Val Leu His Asp Leu Asn Leu Ala Ala Leu Trp Ser

265 270 Asp Arg Ile Leu Leu His Asn Gly Arg Ile Val Ser Gln Gly Ile 275 280 285

Pro Glu Thr Val Leu Gln Ala Asp Ala Leu Ala Arg Trp Tyr Gly Ala 290 295 300

Gln Val His Val Gly Arg His Pro Ala His Ala Ala Pro Gln Val Phe 310 315 320

Leu Ala Pro

<210> 8644 <211> 357

<212> PRT

<213> Enterobacter cloacae

<400> 8644

Ala Ser Arg Trp Arg Leu Phe Leu Cys Leu Lys Leu Arg Glu Tyr Val 10 15 Gln Gln Phe Gly Val Cys Thr Asp Ile Met Arg Lys Thr Met Ser His

20

25

3.0

```
Leu Ala Glu Leu Val Ala Ser Ala Thr Ala Ala Ile Asn Gln Ala Ser
      35
                      40
Asp Val Ala Ala Leu Asp Asn Val Arg Val Glu Tyr Leu Gly Lys Lys
                  55
Gly His Leu Thr Leu Gln Met Thr Thr Leu Arg Glu Leu Pro Ala Glu
               70
Glu Arg Pro Ala Ala Gly Ala Val Ile Asn Glu Ala Lys Glu Gln Val
            8.5
                            90
Gln Gln Ala Leu Asn Ala Arg Lys Ala Glu Leu Glu Ser Ala Val Leu
      100 105 110
Asn Ala Arg Leu Ala Ala Glu Thr Ile Asp Val Ser Leu Pro Gly Arg
115 120 125
Arg Ile Glu Asn Gly Gly Leu His Pro Val Thr Arg Thr Ile Asp Arg
 130 135 140
Ile Glu Ser Phe Phe Gly Glu Leu Gly Phe Thr Val Ala Thr Gly Pro
145 150 155
Glu Ile Glu Asp Asp Tyr His Asn Phe Asp Ala Leu Asn Ile Pro Gly 165 170 175
His His Pro Ala Arg Ala Asp His Asp Thr Phe Trp Phe Asp Ala Thr
        180 185 190
Arg Leu Leu Arg Thr Gln Thr Ser Gly Val Gln Ile Arg Thr Met Lys
195 200
Glu Gln Glu Pro Pro Ile Arg Ile Ile Ala Pro Gly Arg Val Tyr Arg
210 215
                                  220
Asn Asp Tyr Asp Gln Thr His Thr Pro Met Phe His Gln Met Glu Gly
       230 235
Leu Ile Val Asp Lys Asn Ile Ser Phe Thr Asn Leu Lys Gly Thr Leu
            245
                            250 255
His Asp Phe Leu Asn Asn Phe Phe Glu Glu Asp Leu Gln Val Arg Phe
         260
             265 270
Arg Pro Ser Tyr Phe Pro Phe Thr Glu Pro Ser Ala Glu Val Asp Val
     275 280
Met Gly Lys Asn Gly Lys Trp Leu Glu Val Leu Gly Cys Gly Met Val
                295
                                  300
His Pro Asn Val Leu Arg Asn Val Gly Ile Asp Pro Glu Val Tyr Ser
305 310
                               315
Gly Phe Ala Phe Gly Met Gly Met Glu Arg Leu Thr Met Leu Arg Tyr
         325 330 335
Gly Val Thr Asp Leu Arg Ala Phe Phe Glu Asn Asp Leu Arg Phe Leu
        340
                         345
Lys Gln Phe Lys
<210> 8645
<211> 358
<212> PRT
<213> Enterobacter cloacae
<400> 8645
Leu Lys Arg Pro Leu Thr Arg Pro Phe Phe Phe Ala Leu Phe Ala Lys
                            10
Pro Ala Val Lys Ser Met Ile Ser Gln Pro Asp Asn Leu Ser Phe Met
         2.0
                                         3.0
                         25
Leu Asp Leu Ala Arg Leu Gln His Arg Ser Asp Leu Arg Arg Leu Cys
      35
                     40
                                     45
Leu Leu Gly Val Leu Leu Ile Val Ser Thr Thr Val Ser Leu Cys Ala
                5.5
Gly Asp Arg Trp Leu Gly Pro Glu Ser Trp Phe Thr Pro Glu Gly Gln
            70
65
                               75
Leu Phe Val Trp Gln Ile Arg Leu Pro Arg Thr Leu Ala Val Leu Leu
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8.5

```
Val Gly Ala Ala Leu Ala Leu Cys Gly Thr Ile Met Gln Ala Leu Phe
                        105
        100
Glu Asn Pro Leu Ala Glu Pro Gly Leu Leu Gly Val Ser Asn Gly Ala
     115
                120
Gly Val Gly Leu Ile Ala Ala Val Met Leu Gly Gly Gly Glu Leu Ser
                                 140
               1.35
Gly Trp Gly Ile Ser Leu Ser Ala Ile Leu Gly Ala Leu Leu Ile Thr
          150
                            155
Leu Ile Leu Leu Arg Phe Ala Arg Arg His Leu Ser Thr Ser Arg Leu
         165 170 175
Leu Leu Ala Gly Val Ala Leu Gly Ile Ile Cys Ser Ala Leu Met Thr
        180 185 190
Trp Ala Val Tyr Phe Ser Thr Ser Phe Asp Leu Arg Gln Leu Met Tyr
 195
          200 205
Trp Met Met Gly Gly Phe Gly Gly Val Asp Trp Arg Gln Gly Trp Leu
  210
      215 220
Met Val Leu Leu Ile Pro Val Ile Leu Trp Met Val Phe Gln Ala Gln 225 230 235
Pro Leu Asn Ile Leu Ala Leu Gly Glu Thr Ser Ala Arg Gln Leu Gly
           245 250 255
Met Pro Ile Gly Phe Trp Arg Asn Val Leu Val Ile Ala Ile Gly Trp
        260 265 270
Met Val Gly Val Ser Val Ala Leu Ala Gly Ala Ile Gly Phe Ile Gly
275
                     280
                                     285
Leu Val Ile Pro His Met Leu Arg Leu Cys Gly Ile Thr Asp His Arg
      295 300
Thr Leu Leu Pro Ala Ser Ala Val Ala Gly Ala Ala Thr Leu Leu Val
               310
                   315
Ala Asp Ile Ile Ala Arg Leu Ala Leu Thr Ala Ala Glu Leu Pro Ile
           325 330
                               335
Gly Val Val Thr Ala Thr Leu Gly Ala Pro Val Phe Ile Trp Leu Leu
        340
                        345
Leu Lys Ala Gly Arg
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<210> 8646 <211> 187 <212> PRT <213> Enteropacter cloacae

355

<400> 8646 Gly Asn Ala Met Gln Ser Asp Ile Leu Asn Thr Glu Val Thr Thr Ile 10 15 Asp Gly Glu Lys Thr Thr Leu Val Gly Tyr Lys Gly Lys Val Leu Leu 20 25 3.0 Ile Val Asn Val Ala Ser Lys Cys Gly Leu Thr Pro Gln Tyr Glu Gln 35 4.0 Leu Glu Asn Ile His Lys Ala Trp Glu Lys Asp Gly Phe Thr Val Leu 55 60 Gly Phe Pro Cys Asn Gln Phe Leu Gly Gln Glu Pro Gly Ser Glu Glu 70 75 Glu Ile Lys Thr Phe Cys Ser Thr Thr Tyr Gly Val Thr Phe Pro Met 85 90 Phe Ser Lys Ile Asp Val Asn Gly Glu Asn Arg His Pro Leu Tyr Ala 100 105 Lys Leu Val Ala Ala Ala Pro Thr Ala Val Ala Pro Glu Glu Ser Gly 115 Phe Tyr Glu Arg Met Ala Ser Lys Gly Arg Ala Pro Leu Tyr Pro Asp 135 140 Asp Ile Leu Trp Asn Phe Glu Lys Phe Leu Ile Gly Arg Asp Gly Gln 150 155

4390 Val Val Gln Arg Phe Ser Pro Asp Met Thr Pro Glu Asp Pro Ile Val 170 165 Met Glu Ser Ile Lys Leu Ala Leu Ala Lys 180 <210> 8647 <211> 811 <212> PRT <213> Enterobacter cloacae <400> 8647 Ile Arg Ser Gln Val Phe Leu Thr Pro Ile Lys Tyr His Lys Arg Ile 1 5 1.0 Val Ser Met Ser Asn Asn Gly Ser Ser Pro Leu Val Leu Trp Tyr Asn 20 25 Gln Leu Gly Met Asn Asp Val Asp Arg Val Gly Gly Lys Asn Ala Ser 35 40 45 Leu Gly Glu Met Ile Thr Asn Leu Ser Gly Met Gly Val Ser Val Pro 50 55 60 Asn Gly Phe Ala Thr Thr Ala Asp Ala Phe Asn Leu Phe Leu Asp Gln 70 75 Ser Gly Val Asn Gln Arg Ile Tyr Asp Leu Leu Asp Lys Thr Asp Ile 8.5 90 Asp Asp Val Thr Glu Leu Ala Lys Ala Gly Ala Gln Ile Arg Gln Trp 100 105 110 Ile Ile Asp Thr Pro Phe Gln Pro Glu Leu Glu Lys Ala Ile His Asp 115 120 125 Ala Tyr Asn Gln Leu Ser Ala Asp Asp Ala Gln Ala Ser Phe Ala Val 130 135 140 Arg Ser Ser Ala Thr Ala Glu Asp Met Pro Asp Ala Ser Phe Ala Gly 145 150 155 160 Gln Gln Glu Thr Phe Leu Asn Val Gln Gly Tyr Glu Ala Val Leu Val 165 170 175 Ala Val Lys His Val Phe Ala Ser Leu Phe Asn Asp Arg Ala Ile Ser 180 185 190 Tyr Arg Val His Gln Gly Tyr Asp His Arg Gly Val Ala Leu Ser Ala 200 205 Gly Val Gln Arg Met Val Arg Ser Asp Val Gly Ser Ser Gly Val Met 210 215 220 Phe Ser Ile Asp Thr Glu Ser Gly Phe Asp Gln Val Val Phe Ile Thr 225 230 235 240 Ser Ala Trp Gly Leu Gly Glu Met Val Val Gln Gly Ala Val Asn Pro 245 250 Asp Glu Phe Tyr Val His Lys Pro Thr Leu Ala Ala Asn Arg Pro Ala 260 265 Val Val Arg Arg Thr Met Gly Ser Lys Lys Ile Arg Met Ile Tyr Ala 275 280 285 Pro Thr Gln Glu His Gly Lys Gln Val Thr Ile Glu Asp Val Pro Gln 295 300 Glu Gln Arg Asp Arg Phe Ser Leu Thr Asp Ala Glu Val Glu Glu Leu 305 310 315 Ala Lys Gln Ala Val Gln Ile Glu Lys His Tyr Gly Arg Pro Met Asp 325 330 Ile Glu Trp Ala Lys Asp Gly His Thr Gly Lys Leu Phe Ile Val Gln 340 345 Ala Arg Pro Glu Thr Val Arg Ser Arg Gly Gln Val Met Glu Arg Tyr 355 360 Thr Leu His Ala Gln Gly Lys Ile Val Ala Glu Gly Arg Ala Ile Gly 375 380

His Arg Ile Gly Ala Gly Pro Val Lys Val Ile His Asp Ile Ser Glu

395

```
Met Asn Arg Ile Gln Pro Gly Asp Val Leu Val Thr Asp Met Thr Asp
           405
                          410
Pro Asp Trp Glu Pro Ile Met Lys Lys Ala Ala Ala Ile Val Thr Asn
                       425
                                      430
Arg Gly Gly Arg Thr Cys His Ala Ala Ile Ile Ala Arg Glu Leu Gly
   435 440 445
Ile Pro Ala Val Val Gly Cys Gly Asp Ala Thr Glu Arg Met Lys Asp
 450 455 460
Asp Gln Asn Val Thr Val Ser Cys Ala Glu Gly Asp Thr Gly Tyr Val
465 470 475
Tyr Ala Asp Ile Leu Asp Phe Ser Val Lys Ser Ser Ser Val Asp Thr
       485 490 495
Met Pro Asp Leu Pro Leu Lys Ile Met Met Asn Val Gly Asn Pro Asp
   500 505 510
Arg Ala Phe Asp Phe Ala Cys Leu Pro Asn Glu Gly Val Gly Leu Ala
 515 520 525
Arg Leu Glu Phe Ile Ile Asn Arg Met Ile Gly Val His Pro Arg Ala
 530 535 540
Leu Leu Glu Phe Asp Asp Gln Asp Ala Lys Leu Gln Asn Glu Ile Arg
545 550 555
Glu Met Met Lys Gly Tyr Asp Ser Pro Arg Glu Phe Tyr Val Gly Arg
         565 570 575
Leu Thr Glu Gly Ile Ala Thr Leu Gly Ala Ala Phe Tyr Pro Lys Arg
        580 585 590
Val Ile Val Arg Leu Ser Asp Phe Lys Ser Asn Glu Tyr Ala Asn Leu
                    600 605
Val Gly Gly Glu Arg Tyr Glu Pro Glu Glu Glu Asn Pro Met Leu Gly
               615 620
Phe Arg Gly Ala Gly Arg Tyr Val Ser Glu Ser Phe Arg Asp Cys Phe
                  635
      630
Ala Leu Glu Cys Glu Ala Val Lys Arg Val Arg Asn Asp Met Gly Leu
           645 650 655
Thr Asn Val Glu Ile Met Ile Pro Phe Val Arg Thr Val Asp Gln Ala
        660 665 670
Lys Ala Val Val Asp Glu Leu Ala Arg Gln Gly Leu Lys Arg Gly Glu
                    680
                                 685
Asn Gly Leu Lys Ile Ile Met Met Cys Glu Ile Pro Ser Asn Ala Leu
                695
                                700
Leu Ala Glu Gln Phe Leu Glu His Phe Asp Gly Phe Ser Ile Gly Ser
              710
                             715
Asn Asp Met Thr Gln Leu Ala Leu Gly Leu Asp Arg Asp Ser Gly Val
           725
                          730
Val Ser Glu Leu Phe Asp Glu Arg Asn Glu Ala Val Lys Ala Leu Leu
        740
                      745 750
Ser Met Ala Ile Arg Ala Ala Lys Lys Gln Gly Lys Tyr Val Gly Ile
                    760
                                   765
Cys Gly Gln Gly Pro Ser Asp His Glu Asp Phe Ala Ala Trp Leu Met
                 775
                                780
Asp Glu Gly Ile Asp Ser Leu Ser Leu Asn Pro Asp Thr Val Val Gln
785 790 795
Thr Trp Leu Ser Leu Ala Glu Leu Asn Lys
           805
<210> 8648
<211> 495
<212> PRT
<213> Enterobacter cloacae
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<400> 8648

Tyr Leu Ser Leu Thr Ala Tyr Ile Arg Arg Asp Asp Ala Arg Leu Val 1 5 10 15

Glu Ile Arg Phe Asn Leu Ile Lys Arg Gln Ile Thr Met Thr Ile Ser 25 20 30 Ser Val Leu Arg Thr Lys Asp Lys Ile Gly Tyr Gly Leu Gly Asp Met Ala Ser Ala Leu Val Trp Gln Thr Ala Thr Leu Phe Leu Ala Tyr Phe 55 Tyr Thr Asp Val Phe Gly Leu Pro Ala Ala Ile Met Gly Thr Met Phe 70 Leu Val Val Arg Val Val Asp Ala Phe Val Asp Pro Cys Ile Gly Ala 90 85 Leu Val Asp Arg Thr Gln Thr Arg His Gly Arg Phe Arg Pro Trp Leu 100 105 110 Leu Trp Phe Ala Ile Pro Phe Gly Val Ser Cys Leu Ile Thr Phe Tyr \$115\$ \$120\$ \$125\$Val Pro Asp Ala Gly Gln Thr Ala Lys Ile Val Tyr Ala Cys Val Thr 130 135 140 Tyr Ala Ile Leu Ser Leu Ile Tyr Ser Ala Ile Asn Val Pro Tyr Cys 145 150 155 160 Ala Met Pro Gly Ala Leu Thr Leu Asp Pro Arg Glu Arg His Ser Leu 165 170 175 Gln Ser Trp Arg Phe Gly Leu Ser Phe Ile Gly Gly Leu Ile Val Thr 180 185 190 Val Ile Ala Leu Pro Leu Val Ser Leu Leu Gly Gln Gly Asn Val Gln 195 200 205 Lys Gly Tyr Phe Tyr Ala Met Ser Leu Met Gly Leu Leu Gly Ile Val 210 215 220 Leu Phe Phe Cys Cys Phe Phe Met Thr Arg Glu Arg Tyr Ser Pro Arg 225 230 235 240 Asn Asp Thr Ser Gly Ser Met Leu Thr Asp Leu Lys Leu Leu Ala Ala 245 250 255 Asn Ser Gln Trp Arg Ile Val Phe Leu Phe Asn Ile Leu Leu Leu Thr 260 265 270 Ala Val Val Thr Arg Gly Ser Ala Thr Met Tyr Tyr Val Asn Tyr Val 275 280 285 Leu Leu Arg Pro Glu Leu Val Phe Ala Phe Ile Val Ser Gly Met Val 290 295 300 Ala Ser Leu Ser Gly Ala Leu Leu Ser Glu Arg Leu Leu Gly Lys Phe 305 310 315 Asp Arg Val Arg Ala Tyr Gln Trp Thr Ile Ile Ser Phe Val Ile Phe 325 330 335 Gly Ala Leu Ile Phe Phe Ile Pro Pro Ser Gln Val Trp Leu Ile Phe 340 345 350 Gly Leu Asn Ile Val Phe Ser Phe Ile Gln Asn Leu Thr Thr Pro Leu 355 360 365 Gln Trp Thr Met Phe Ser Asp Val Val Asp Tyr Glu Glu His Arg Ser 370 375 380 Gly Arg Arg Leu Asp Gly Leu Val Phe Ser Thr Ala Leu Phe Ala Ile 385 \$390\$Lys Phe Gly Leu Ala Leu Gly Gly Ala Val Val Gly Trp Val Leu Gly 405 410 415 Met Val Asp Tyr Ala Pro Gly Gln Ala Asn Gln Ala Pro His Val Leu 420 425 430 Ala Thr Ile Asn Ala Leu Phe Thr Leu Ile Pro Cys Val Leu Phe Leu 435 440 445 Cys Met Val Ala Leu Leu Ala Ile Tyr Lys Leu Asn Ser Arg Leu Val 455 460 Asp Ser Ile Ala Arg Glu Leu Ala Ser Lys Arg Asp Ser Arg Asn Asp 465 470 475 Ala Gly Gln Leu Ser Pro Ala Thr Gln Ser Ala Leu Gln Glu 485 490

<210> 8649 <211> 793 <212> PRT <213> Enterobacter cloacae <400> 8649 Thr Met Thr Ala Ile Tyr Lys Asp Ala Gly Arg Pro Val His Glu Arg 10 Val Ala Asp Leu Leu Ala Arg Met Thr Pro Glu Glu Lys Phe Ala Gln 20 2.5 3.0 Met His Ala Tyr Trp Leu Ile Leu Asp Glu His Gly Asn His Arg Glu 35 4.0 Arg Ser Asp Leu Ser Asp Glu Phe Ala Gly Val Ser Glu Gln Ala Ser 50 55 - 60 Leu Asn Glu Arg Leu Lys Leu Gly Val Gly Gln Ile Thr Arg Pro Leu 65 70 75 Gly Thr His Ile Val Asn Ala Lys Thr Gly Val Cys Ala Ala Asn Arg 85 90 Leu Gln Arg Met Met Met Glu Glu Thr Arg Leu Gly Ile Pro Ala Leu 100 105 110 Phe His Glu Glu Cys Leu Val Gly Leu Leu Cys Lys Asp Ala Thr Leu 115 120 125 Phe Pro Ser Ser Leu Asn Tyr Gly Ser Thr Trp Asp Pro Ala Leu Val Gln Arg Ala Ala Glu Gln Ile Gly Lys Glu Ala Arg Ser Val Gly Cys 145 150 155 160 Gln Gln Gly Leu Ala Pro Val Leu Asp Val Ser Arg Asp Val Arg Trp \$165\$ \$170\$ \$175\$Gly Arg Thr Glu Glu Thr Phe Gly Glu Asp Pro Trp Leu Val Gly Val 180 185 190 Met Ala Thr Ala Tyr Val Lys Gly Leu Gln Gly Asp Lys Arg Asp Leu 195 200 205 Leu Ala Thr Leu Lys His Tyr Val Gly His Ser Phe Ser Glu Gly Ala 210 215 220 Arg Asn His Ala Pro Val His Leu Gly Phe Ser Glu Leu Asn Asp Thr 225 230 235 240 Phe Leu Leu Pro Phe Glu Met Ala Val Lys Leu Ala Asn Ala Gly Ser 245 250 255 Val Met Pro Ala Tyr His Asp Ile Asp Asn Gln Pro Gly His Ser Asp 265 **27**0 His Phe Leu Leu Thr Thr Val Leu Arg Glu Gln Trp Gly Phe Asp Gly 280 285 Ile Ile Val Ala Asp Tyr Gly Gly Val Ser Leu Leu His Gln His His 295 300 Gly Ile Ser His Asp Pro Ala Glu Ser Ala Ala Leu Ala Phe Asn Ala 310 315 Gly Leu Asp Val Glu Leu Pro Lys Asp Asp Cys Ala Arg His Leu Ala 325 330 335 Glu Ala Val Glu Arg Gly Leu Ile Ser Met Ala Lys Val Asp Glu Ile 340 345 350 Val Ala Arg Val Leu Ser Glu Lys Phe Arg Leu Gly Leu Phe Glu Lys 355 360 365 Pro Tyr Ala Ala Glu Asp Gly Ile Asp Leu Gln Asn Glu Ala Thr Arg 375 380 370 Gln Val Ala Arg Glu Val Ala Thr Lys Ser Ile Thr Leu Leu Glu Asn 390 395 Asn Gly Ile Leu Pro Leu Gly Gly Lys Pro Arg Val Ala Val Val Gly 405 410 415 Pro Thr Ala Asp Asp Pro Leu Ala Leu Leu Ser Gly Tyr Ser Phe Pro 420 425 430

Val His Leu Ile Ile Ser Asp Met Val Glu Glu Thr Ser Gln Val Thr

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Thr Pro Arg Ala Ala Leu Glu Gln Tyr Leu Gly Ala Ser Gln Val Arg
 450
           455
                         460
Tyr Ala Lys Gly Cys His Ile Ile Glu Lys Arg Met Ala Gly Ala Pro
   470
                   475
Val Phe Pro Gly Asp Ser Gly Gly Lys Pro Met Gln Gln Ser Pro Val
         485 490 495
Ser Gln Arg Met Asp Leu Ile Pro Asp Ala Val Ser Ala Ala Lys Glu
        500 505 510
Ser Asp Val Val Ile Ala Cys Val Gly Asp Leu Ala Gly Leu Phe Gln
     515 520 525
Ser Gly Thr Val Gly Glu Gly Ser Asp Thr Asp Ser Leu Asn Leu Pro
      535 540
Gly Val Gln Gln Leu Leu Glu Ala Leu Val Ala Thr Gly Lys Pro
545 550 555
Val Ile Val Val Met Thr Gly Gly Arg Pro Tyr Asn Leu Gln Gly Leu
         565 570 575
Glu Glu Lys Val Ala Ala Leu Met Met Val Trp Ala Pro Gly Gln Glu
        580 585 590
Gly Gly Trp Ala Ile Ala Asp Val Leu Thr Gly Arg Ala Glu Pro Gln
    595 600 605
Gly Arg Leu Val Val Ser Val Pro Lys Asn Ala Gly Ala Met Pro Tyr
610 615
                                620
Tyr Tyr Asn His Lys Leu Lys Ser Gly Gly Thr Pro Phe Ala Phe His
625 630 635
Phe Gly Ala Leu Tyr Pro Phe Gly Tyr Gly Leu Gly Trp Thr Gln Phe
         645
                           650
Arg Trp Gly Ala Ala Arg Leu Ala Glu Ser Arg Val Pro Ile Asp Gly
        660
                        665 670
Glu Val Ala Leu Ser Val Asp Ile Tnr Asn Thr Gly Glu Arg Ser Gly
     675 680
                         685
Ser Glu Val Val Gln Val Tyr Val Arg Asp Lys Val Ala Thr Gln Val
690 695 700
Arg Pro Leu Gln Glu Leu Lys Ala Phe Gln Arg Val Thr Leu Ser Pro 705 710 715 720
Gly Glu Thr Ala Thr Leu Thr Phe Thr Leu Pro Val Glu Met Phe Asn
           725 730
Phe Thr Arg Arg Asp Gly Lys Arg Ile Val Glu Pro Gly Glu Phe Glu
                     745
         740
Leu Gln Val Gly Ala Ser Ser Ala Asp Ile Arg Ala Val Val Asn Val
                    760 765
Gln Val Ser Gly Lys Thr Arg Val Leu Ala Gly Asp Trp Arg Met Leu
                                 780
Ser Arg Cys Asp Ile Thr Leu Ala
<210> 8650
<211> 760
<212> PRT
<213> Enterobacter cloacae
<400> 8650
Pro Val Ser Gly Ala Phe Thr Gly Val Val Val Gly Glu Val Val Glu
                           10
Cys Gly Gln His Pro Asn Ala Asp Lys Leu Arg Val Thr Lys Val Asn
      20
                                        3.0
Val Gly Gly Asp Arg Leu Leu Asp Ile Val Cys Gly Ala Pro Asn Cys
                     40
Arg Gln Gly Leu Lys Val Ala Val Ala Thr Val Gly Ala Val Leu Pro
Gly Asp Phe Lys Ile Lys Ala Ala Lys Leu Arg Gly Glu Pro Ser Glu
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Gly Met Leu Cys Ser Phe Ser Glu Leu Gly Ile Ser Asp Asp His Ser 8.5 90 Gly Ile Ile Glu Leu Pro Gln Asp Ala Pro Val Gly Thr Asp Ile Arg 100 105 110 Glu Tyr Leu Lys Leu Asp Asp Asp Thr Ile Glu Ile Ser Val Thr Pro 115 120 125 Asn Arg Ala Asp Cys Leu Gly Ile Ile Gly Val Ala Arg Asp Val Ala 130 135 140 Val Leu Asn Gln Thr Glu Leu Asn Val Pro Glu Ile Ala Pro Val Glu 145 150 155 Ala Thr Ile Ser Asp Val Leu Pro Ile Gln Val Asp Ala Pro Glu Ala 165 170 175 Cys Pro Arg Tyr Leu Gly Arg Val Val Lys Gly Ile Asn Val Lys Ala 180 185 190 Pro Thr Pro Leu Trp Met Lys Glu Lys Leu Arg Arg Cys Gly Ile Arg 195 200 205 Ser Ile Asp Ala Val Val Asp Val Thr Asn Tyr Val Leu Leu Glu Leu 210 215 220 Gly Gln Pro Met His Ala Phe Asp Lys Asp Arg Ile Glu Gly Gly Ile 225 230 235 240 Val Val Arg Met Ala Lys Glu Gly Glu Thr Leu Val Leu Leu Asp Gly 245 250 255 Ser Glu Ala Lys Leu Asn Ala Asp Thr Leu Val Ile Ala Asp His Asn 260 265 270 Lys Ala Leu Ala Met Gly Gly Ile Phe Gly Gly Glu His Ser Gly Val 275 280 285 Asn Asp Glu Thr Gln Asn Val Leu Leu Glu Cys Ala Phe Phe Ser Pro 290 295 300 Leu Ser Ile Thr Gly Arg Ala Arg Arg His Gly Leu His Thr Asp Ala 305 310 315 Ser His Arg Tyr Glu Arg Gly Val Asp Pro Ala Leu Gln Tyr Lys Ala 325 330 Met Glu Arg Ala Thr Arg Leu Leu Ile Asp Ile Cys Gly Gly Glu Ala 340 345 350 Gly Pro Val Ile Asp Val Thr Asr Glu Ala Thr Leu Pro Lys Arg Ala 355 360 365 Thr Ile Thr Leu Arg Arg Ser Lys Leu Asp Arg Leu Ile Gly His His 375 380 Val Ala Asp Ala Gln Val Thr Asp Ile Leu Thr Arg Leu Gly Cys Glu 385 390 395 Val Thr Glu Gly Gln Asp Glu Trp Lys Ala Val Ala Pro Ser Trp Arg 405 410 Phe Asp Met Glu Ile Glu Glu Asp Leu Val Glu Glu Val Ala Arg Val 420 425 Tyr Gly Tyr Asn Asn Ile Pro Asp Glu Pro Val Gln Ala Gly Leu Val 440 445 Met Gly Ser His Arg Glu Ala Asp Leu Ser Leu Lys Arg Val Lys Thr 450 455 460 Met Leu Asn Asp Lys Gly Tyr Gln Glu Val Ile Thr Tyr Ser Phe Val 465 470 475 Asp Pro Lys Leu Gln Gln Leu Ile His Pro Gly Gln Glu Ala Leu Ile 485 490 Leu Pro Ser Pro Ile Ser Ser Glu Met Ser Ala Met Arg Leu Ser Leu $500 \hspace{1.5cm} 505 \hspace{1.5cm} 510 \hspace{1.5cm}$ Trp Thr Gly Leu Leu Gly Thr Ile Val Tyr Asn Gln Asn Arg Gln Gln 515 520 Asn Arg Val Arg Ile Phe Glu Ser Gly Leu Arg Phe Val Pro Asp Thr 530 535 540 Gln Ala Asn Leu Gly Ile Arg Gln Asp Leu Met Leu Ala Gly Ala Ile 550 555

```
Ser Gly Asn Arg Tyr Glu Glu His Trp Asp Leu Ala Lys Gly Thr Val
       565
                           570
Asp Phe Tyr Asp Met Lys Gly Asp Leu Glu Ala Ile Leu Asp Leu Thr
         580
                         585
Gly Lys Leu Ser Glu Ile Glu Phe Arq Ala Glu Ala Ile Pro Ala Leu
     595 600
His Pro Gly Gln Ser Ala Ala Ile Tyr Leu Asp Gly Lys Arg Val Gly
                  615
                                   620
Phe Ile Gly Val Val His Pro Glu Leu Glu Arg Lys Leu Asp Leu Asn
    630
                               635
Gly Arg Thr Ile Val Phe Glu Leu Glu Trp Asn Pro Val Ala Asp Arg
           645
                           650 655
Val Ile Pro Gln Ala Gln Asp Val Ser Arg Phe Pro Ala Asn Arg Arg
        660 665
                              670
Asp Ile Ala Val Val Ala Glu Asn Val Pro Ala Ala Asp Ile Leu
 675 680 685
Ala Glu Cys Lys Lys Val Gly Val Asn Gln Val Val Gly Val Asn Leu
 690 695 700
Phe Asp Val Tyr Arg Gly Lys Gly Val Ala Glu Gly Phe Lys Ser Leu 705 710 715 720
Ala Ile Ser Leu Ile Leu Gln Asp Thr Ser Arg Thr Leu Glu Glu Glu
   725 730 735
Glu Ile Ala Ala Thr Val Ala Lys Cys Val Glu Ala Leu Lys Glu Arg
 740 745
Phe Gln Ala Ser Leu Arg Asp
<210> 8651
<211> 243
<212> PRT
<213> Enterobacter cloacae
<400> 8651
Cys Arg Thr Ser Ala Met Ile Ile Thr Leu Asp Asn Ala Tyr Gln Ser
                         10
Glu Leu Leu Leu Pro Ala Arg Asp Ser Ala Gly Leu Leu Lys Gly
                  25
Leu Glu Ile Leu Val Asn Phe Thr Gly Val Gly Ala Asp Val Arg Ile
               4.0
Pro Thr Glu Leu Val Ile Pro His Leu Ser Gln Glu Asp Glu Leu Ala
                  55
Leu Phe Gln Glu Lys Leu Gln Leu Leu Asp Thr Cys Lys Leu Phe Phe
                    75
             70
Ile Gln His Gln Leu Ile Ala Trp Ile Asn Ile Thr Pro Ala Ile Val
            85
                         90
Glu Phe Leu Leu Thr Asn Glu Asn Ala Val Ser Ile Leu Glu Arg Tyr
       100 105
                                       110
Pro Phe Leu Glu Phe Thr Val Asn Glu Asn Tyr Pro Gly Leu Asn Asn
  115
                     120 125
Gly Lys Asp Asp Pro Cys Leu Ala Arg Met Ala Ile His Phe Pro Leu
 130 135
                                   140
Val Leu Ala Asn Phe Gly Ala Gly Ala Ala Ser Leu Lys Pro Val Tyr
145 150
                               155
Asp Gly Leu Phe Lys Arg Val Val Leu Asp Lys Asn Phe Ile Gln Gln
            165 170 175
Arg Val Ser Ala Leu Ser Phe Glu Pro Phe Met Arg Ala Ile Leu Trp
180 185 190
Gln Ile Ala Pro His Cys Gln Ser Val Met Val Ser Gly Ile Asp Asp
      195 200
His Gly Ile Leu Gln Arg Val Leu Thr Phe Asn Phe Gly Ala Met Gln
   210
                   215
```

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Gly Ser Leu Trp Pro Ala Val Pro Ala Glu Arg Val Thr Thr Leu Val
225
                                      235
Gln Gln
<210> 8652
<211> 151
<212> PRT
<213> Enterobacter cloacae
<400> 8652
Arg Arg Pro Pro Ser Ile Ala Gly Phe Thr Gly Asp Tyr Arg Met Ile
                                  10
Trp Lys Arg Ala Val Thr Leu Glu Ala Leu Asn Ala Met Gly Ala Glu
                              25
                                                   30
Asn Met Val Gly Leu Leu Asp Ile Gln Phe Thr Arg Ile Gly Asp Asn
                          40
Glu Leu Glu Ala Thr Met Pro Val Asp Cys Arg Thr His Gln Pro Phe
                      55
                                          60
Gly Leu Leu His Gly Gly Ala Ser Val Val Leu Ala Glu Thr Leu Gly
                                      75
                  7.0
Ser Val Ala Gly Tyr Leu Cys Thr Glu Gly Glu Gln Lys Val Val Gly
               85
                                  90
Leu Glu Val Asn Ala Asn His Ile Arg Ser Val Arg Ser Gly Arg Val
           100
                              105
Arg Gly Val Cys Arg Ala Leu His Ala Gly Ser Arg His Gln Val Trp
                           120
Glm Ile Asp Ile Leu Asp Glu Glm Asp Arg Leu Cys Cys Ser Ser Arg
 130
Leu Thr Thr Ala Val Val
145
<210> 8653
<211> 104
<212> PRT
<213> Enterobacter cloacae
<400> 8653
Gly Ile Glu Pro Met Ala Leu Thr Lys Ala Glu Met Ser Glu Tyr Leu
                                   10
Phe Asp Lys Leu Gly Leu Ser Lys Arg Asp Ala Lys Glu Leu Val Glu
                               25
Leu Phe Phe Glu Glu Ile Arg Arg Ala Leu Glu Asn Gly Glu Gln Val
                           40
                                               4.5
Lys Leu Ser Gly Phe Gly Asn Phe Asp Leu Arg Asp Lys Asn Gln Arg
                       5.5
                                           60
Pro Gly Arg Asn Pro Lys Thr Gly Glu Asp Ile Pro Ile Thr Ala Arg
                   70
Arg Val Val Thr Phe Arg Pro Gly Gln Lys Leu Lys Ser Arg Val Glu
                                   90
               85
Asn Ala Thr Pro Lys Ala Glu
            100
<210> 8654
<211> 271
<212> PRT
<213> Enterobacter cloacae
<400> 8654
His Asp Ala Gly Arg Ser Tyr Arg Asp Gly Ile Asn Gln Ala Gly Ala
                                   10
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Gly Glu Ile Met Thr Leu Leu Met Gln Leu Thr Asp Val Ala Gly Lys
                        25
Gly Arg Leu Glu Pro Val Thr Ala Ala Val Asn Ala Gly Glu Ile Leu
                     4.0
His Leu Val Gly Pro Asn Gly Ala Gly Lys Ser Thr Leu Leu Ala Arg
                  55
Met Ala Gly Leu Thr Thr Gly Glu Gly Glu Ile Thr Phe Leu Gly Gln
Ser Leu Val Asp Trp Leu Pro Ala Thr Leu Ala Ser Arg Arg Gly Tyr
         85
                           90
Leu Val Gln Gln Gln Val Pro Pro Phe Ala Met Pro Val Trp His Tyr
    100 105 110
Leu Thr Leu His Leu Ser Asp Lys Asn Gln Val Gly Leu Leu Asn Glu
                     120 125
Val Ala Ala Ala Leu Gly Leu Asp Asp Lys Leu Thr Arg Gln Ala Asn
                  135 140
Gln Leu Ser Gly Gly Glu Trp Gln Arg Val Arg Leu Ala Ala Val Ile
   150 155
Leu Gln Ile His Pro Ala Gly Asn Pro His Gly Arg Met Leu Leu Leu
      165 170 175
Asp Glu Pro Met Ser Gly Leu Asp Val Ala Gln Gln Ala Ala Leu Asp
   180 185
                                       190
Thr Leu Leu Ser Ala Leu Cys Arg Lys Gly Ile Ala Ile Val Met Ser
195
                    200
                                    205
Ser His Asp Leu Asn His Thr Leu Arg His Ala His Arg Val Trp Leu
 210
                 215
                                  220
Leu Ala Arg Gly Lys Leu Ile Ala Ser Gly Thr Arg Asp Asn Val Leu
225
               230
                              235
Thr Ala Ala Asn Leu Ala Ser Ala Tyr His Met Ser Phe Arg Arg Leu
        245 250 255
Asp Ile Glu Gly His Lys Met Leu Ile Ser Thr Ala Gln Glu
                        265
```

<210> 8655 <211> 168 <212> PRT

<213> Enterobacter cloacae

<400> 8655

Ile Thr Glu Arg Thr Lys Lys Ala Glu Asp Ser Ser Glu Met Arg Phe 10 Trp Phe Leu Leu Val Ala Ala Leu Phe Leu Ala Gly Cys Ser Ser His 20 25 His Ala Pro Pro Pro Asn Pro Arg Leu Ser Asp Ser Ile Thr Val Ile 35 40 Ala Ser Leu Asn Asp Gln Leu Ser Asn Trp Arg Gly Thr Pro Tyr Arg 55 60 Tyr Gly Gly Met Ser Arg Gly Gly Val Asp Cys Ser Gly Phe Val Leu 70 75 65 80 Met Thr Phe Arg Asp Lys Phe Asp Leu Gln Leu Pro Arg Glu Thr Arg 85 90 Met Gln Ala Lys Ile Gly Thr Glu Ile Asp Lys Asp Glu Leu Leu Pro 100 105 Gly Asp Leu Val Phe Phe Lys Thr Gly Ser Gly Glu Ser Gly Leu His 115 120 125 Val Gly Ile Tyr Asp Thr Asp Asn Gln Phe Ile His Ala Ser Thr Ser 130 135 Arg Gly Val Met Arg Ser Ser Leu Asp Asn Val Tyr Trp Arg Lys Asn 150 155 Phe Trp Gln Ala Arg Arg Ile 165

13

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<210> 8656
<211> 528
<212> PRT
<213> Enterobacter cloacae
<400> 8656
His Ser Ile Leu Val Gln Cys Arg Glu Ala Cys Gly Leu Pro Ser Arg
                         10
Gln Ser Gly Ser Arg Leu Ser Tyr Ser Asn Asn Pro Phe Leu Arg Pro
 20 25
Cys Leu Arg Pro Gly Lys Pro Ser Thr Leu Lys Ala Gly Gly Leu Met
 35 40 45
Thr Leu Ser Phe Thr Ala His Trp His Asp Glu Leu Pro Gly Phe Tyr
50 55 60
Thr Ala Leu Lys Pro Thr Pro Leu Gln Asn Ala Arg Leu Ile Trp His
65 70 75
Asn Asp Ala Leu Ala Asp Ser Leu Gly Ile Pro Ser Thr Leu Phe Gln
      85 90 95
Pro Glu Lys Gly Ala Gly Val Trp Gly Gly Glu Thr Leu Leu Pro Gly
      100 105 110
Met Lys Pro Leu Ala Gln Val Tyr Ser Gly His Gln Phe Gly Val Trp
115 120 125
Ala Gly Gln Leu Gly Asp Gly Arg Gly Ile Leu Leu Gly Glu Gln Val
130 135 140
Leu Pro Asn Gly Glu Thr Leu Asp Trp His Leu Lys Gly Ala Gly Leu
145 150 155
Thr Pro Tyr Ser Arg Met Gly Asp Gly Arg Ala Val Leu Arg Ser Thr
165 170 175
Ile Arg Glu Gly Leu Ala Ser Glu Ala Met His Ala Leu Gly Ile Pro
      180 185 190
Thr Ser Arg Ala Leu Ser Ile Val Thr Ser Asp Thr Pro Val Ala Arg
 195 200 205
Glu Thr Met Glu Gln Gly Ala Met Leu Val Arg Val Ala Glu Ser His
 210 215 220
Leu Arg Phe Gly His Phe Glu His Phe Tyr Tyr Arg Arg Glu Pro Asp
225 230 235 240
Lys Val Arg Gln Leu Ala Asp Tyr Ala Leu Arg Arg His Trp Pro His
           245 250 255
Leu Gln Asn Glu Pro Asp Arg Tyr Val Leu Trp Phe Arg Asp Ile Ala
      260 265 270
Ala Arg Thr Ala Ala Met Ile Ala Arg Trp Gln Ala Val Gly Phe Ala
                   280
                                  285
His Gly Val Met Asn Thr Asp Asn Met Ser Leu Leu Gly Leu Thr Phe
 290 295 300
Asp Tyr Gly Pro Tyr Gly Phe Leu Asp Asp Tyr Gln Pro Gly Tyr Ile
305 310 315 320
Cys Asn His Ser Asp Tyr Gln Gly Arg Tyr Arg Phe Asp Asn Gln Pro
          325
              330 335
Ala Val Gly Leu Trp Asn Leu Gln Arg Leu Ala Gln Ser Leu Ser Pro
        340
            345 350
Phe Ile Asp Val Asp Ala Leu Asn Asp Ala Leu Asp Ser Tyr Gln Glu
     355
                   360
                                 365
Val Leu Leu Arg Glu Tyr Gly Val Leu Met Arg Thr Arg Leu Gly Leu
                375
                               380
Met Thr Gln Gln Lys Gly Asp Asn Ala Leu Leu Asn Gly Leu Phe Ala
385 390 395 400
Ile Met Ala Arg Glu Gly Ser Asp Tyr Thr Arg Thr Phe Arg Met Leu
          405
                        410 415
Ser Gln Thr Ala Gln Gln Ser Ala Ala Ser Pro Leu Arg Asp Glu Phe
                      425
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430

Val Asp Arg Gln Ala Phe Asp Asp Trp Phe Ala Ala Tyr Arg Ala Arg 435 440 Leu Gln Gln Glu Gln Ile Asp Asp Asp Thr Arg Gln Ala Arg Met Lys 455 460 Ala Val Asn Pro Ala Met Val Leu Arg Asn Trp Leu Ala Gln Arg Ala 470 475 Ile Glu Gln Ala Glu Gln Gly Asp Tyr Thr Glu Leu His Arg Leu His 485 490 Ile Ala Leu Arg Thr Pro Phe Ala Asp Arg Glu Asp Asp Tyr Val Ser 500 505 510 Arg Pro Pro Asp Trp Gly Lys Arg Leu Glu Val Ser Cys Ser Ser 520 525 <210> 8657 <211> 1043 <212> PRT <213> Enterobacter cloacae <400> 8657 Glu Lys Asn Val Ile Lys Leu Ser Arg His Asn Ala Asn Asp Phe Thr 10 Leu Phe Ser Leu Gly Ser Thr Ala Met Ile Pro Gln Ile Ser Gln Ala 20 25 Pro Gly Val Val Gln Leu Val Leu Asn Phe Leu Gln Ala Leu Glu Gln 40 Gln Gly Phe Thr Gly Asp Thr Ala Thr Asp Tyr Ala Asp Arg Leu Thr 50 55 Met Ala Thr Asp Asn Ser Ile Tyr Gln Leu Leu Pro Asp Ala Val Val 65 70 75 Phe Pro Arg Ser Thr Ala Asp Val Ala Leu Ile Ala Arg Leu Ala Ser 85 90 95 Gln Glu Arg Phe Ser Ser Leu Val Phe Thr Pro Arg Gly Gly Gly Thr 100 105 Gly Thr Asn Gly Gln Ala Leu Asn Gln Gly Ile Ile Ile Asp Met Ser 115 120 125 Arg Tyr Met Asn Arg Ile Ile Glu Ile Asn Pro Glu Glu Gly Trp Val 135 140 Arg Val Glu Ala Gly Val Ile Lys Asp Gln Leu Asn Gln Phe Leu Lys 145 150 155 160 Pro Tyr Gly Tyr Phe Phe Ala Pro Glu Leu Ser Thr Ser Asn Arg Ala 165 170 Thr Ile Gly Gly Met Ile Asn Thr Asp Ala Ser Gly Gln Gly Ser Leu 180 185 190 Val Tyr Gly Lys Thr Ser Asp His Val Met Gly Val Arg Ala Val Leu 195 200 205 Leu Gly Gly Asp Ile Leu Asp Thr Gln Pro Met Pro Ile Glu Leu Ala 215 220 210 Glu Thr Leu Ala Ala Glu Ser Thr Thr Ser Gly Arg Ile Tyr Arg Thr 230 235 Val Leu Glu Arg Cys Arg Glu Asn Arg Glu Leu Ile Leu Asp Lys Phe 245 250 255 Pro Lys Leu Asn Arg Phe Leu Thr Gly Tyr Asp Leu Arg His Val Phe 260 265 Asn Asp Asp Met Ser Gln Phe Asp Leu Thr Arg Val Leu Thr Gly Ser 275 280 285 Glu Gly Thr Leu Ala Phe Ile Thr Glu Ala Arg Leu Asp Ile Thr Arg 290 295 300 Leu Pro Lys Val Arg Arg Leu Val Asn Val Lys Tyr Asn Ser Phe Asp 310 315 Ser Ala Leu Arg Asn Ala Pro Phe Met Val Glu Ala Arg Ala Leu Ser

330

Val Glu Thr Val Asp Ser Lys Val Leu Asn Leu Ala Arq Glu Asp Ile 345 340 Val Trp His Ser Val Ser Glu Leu Ile Thr Asp Val Pro Asp Lys Glu 360 Met Leu Gly Leu Asn Ile Val Glu Phe Ala Gly Asp Asp Ala Glu Leu 375 380 Ile Glu Ser Gln Val Asn Thr Leu Cys Gln Arg Leu Asp Glu Leu Ile 395 390 Ala Gln Gly Glu Gly Gly Val Ile Gly Trp Gln Leu Cys Asn Asp Leu 405 410 415 Ser Gly Ile Glu Arg Ile Tyr Ala Met Arg Lys Lys Ala Val Gly Leu 420 425 430 Leu Gly Asn Ala Lys Gly Ala Ala Lys Pro Ile Pro Phe Ala Glu Asp 435 440 445 Thr Cys Val Pro Pro Glu His Leu Ala Asp Tyr Ile Val Glu Phe Arg 450 455 460 Ala Leu Leu Asp Ser His Gly Leu Ser Tyr Gly Met Phe Gly His Val 465 470 475 480 Asp Ala Gly Val Leu His Val Arg Pro Ala Leu Asp Met Cys Asp Pro 485 490 495 Gln Gln Glu Ile Leu Met Lys Ala Ile Ser Asp Glu Val Val Ala Leu 500 505 510 Thr Ala Lys Tyr Gly Gly Leu Leu Trp Gly Glu His Gly Lys Gly Phe 515 520 525 Arg Ala Glu Tyr Ser Pro Ala Phe Phe Gly Glu Gln Leu Tyr Ala Glu 530 535 540 Leu Arg Lys Val Lys Ala Ala Phe Asp Pro Asp Asn Arg Leu Asn Pro 545 550 555 Gly Lys Ile Cys Pro Pro Glu Gly Val Asp Ala Pro Met Leu Gln Val 565 570 575 Asp Ala Val Lys Arg Gly Thr Tyr Asp Arg Gln Ile Pro Ile Ala Ile 580 585 590 Arg Ala Ser Trp Arg Gly Ala Met Glu Cys Asn Gly Asn Gly Leu Cys 595 600 605 Phe Asn Phe Asp Val Lys Ser Pro Met Cys Pro Ser Met Lys Ile Thr 610 615 620 Ser Asn Arg Ile His Ser Pro Lys Gly Arg Ala Thr Leu Val Arg Glu 630 635 Trp Leu Arg Leu Leu Ala Asp Arg Gly Val Asp Pro Leu Lys Leu Glu 645 650 Gln Glu Leu Pro Glu Lys Arg Ala Ser Leu Arg Gly Leu Ile Glu Arg 660 665 670 Thr Arg Asn Ser Trp His Ala Asn Lys Gly Glu Tyr Asp Phe Ser His 680 Glu Val Lys Glu Ala Met Ser Gly Cys Leu Ala Cys Lys Ala Cys Ser 695 700 Thr Gln Cys Pro Ile Lys Ile Asp Val Pro Glu Phe Arg Ser Arg Phe 710 715 Leu Gln Leu Tyr His Thr Arg Tyr Leu Arg Pro Met Arg Asp His Leu 725 730 735 Val Ala Thr Val Glu Ser Tyr Ala Pro Leu Met Ala Arg Ala Pro Lys 740 745 750 Thr Phe Asn Phe Phe Ile Asn Gln Pro Leu Val Arg Lys Leu Ser Glu 755 760 765 Lys His Ile Gly Met Val Asp Leu Pro Leu Leu Ser Val Pro Ser Leu 775 780 Gln Arg Arg Leu Val Gly His Arg Ser Ala Asn Met Thr Leu Glu Gln 790 795 Leu Glu Ala Leu Ser Pro Glu Gln Lys Ala Lys Val Val Leu Val Val 805 810 Gln Asp Pro Phe Thr Ser Tyr Tyr Asp Ala Gln Val Val Ala Asp Phe

MILL .

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820
                          825
Val Arg Leu Ala Glu Lys Ile Gly Tyr Gln Pro Val Val Leu Pro Phe
    835
                      840
                                       845
Ser Pro Asn Gly Lys Ala Gln His Ile Lys Gly Phe Leu Thr Arg Phe
                 855
                                    860
Ala Lys Thr Ala Gln Lys Thr Ser Asp Phe Leu Asn Arg Val Ala Gln
       870
                     875
Leu Gly Met Pro Met Val Gly Val Asp Pro Ala Leu Val Leu Cys Tyr
          885 890 895
Arg Asp Glu Tyr Lys Gln Thr Leu Gly Asp Lys Arg Gly Asp Phe Gln
         900
               905 910
Val Leu Leu Val His Glu Trp Leu Pro Ala Val Leu Thr Gln Thr Pro
    915 920 925
Pro Gln Glu Val Ser Gly Glu Ser Trp Tyr Leu Phe Gly His Cys Thr
                   935
                                    940
Glu Val Thr Ala Leu Pro Thr Ala Pro Ala Gln Trp Ala Ser Ile Phe
945 950 955
Ser Arg Phe Gly Ala Lys Leu Glu Ser Val Asn Val Gly Cys Cys Gly
             965 970
Met Ala Gly Thr Tyr Gly His Glu Val Lys Asn His Ala Asn Ser Leu
        980 985 990
Gly Ile Tyr Glu Leu Ser Trp His Gln Ala Met Gln Arg Leu Pro Arg
    995
                       1000 1005
Asn Arg Cys Leu Ala Thr Gly Tyr Ser Cys Arg Ser Gln Val Lys Arg
1010 1015 1020
Val Glu Gly Asn Gly Val Arg His Pro Leu Gln Ala Leu Leu Glu Ile
               1030
                                 1035
Ile Gly
<210> 8658
<211> 77
<212> PRT
<213> Enterobacter cloacae
<400> 8658
Tyr Thr Gly His Val Leu Asn Ile Ser Glu Asp Ile Met Asp Thr Glu
                             1.0
Ile Thr Pro Ile Gln Leu Ala Ile Glu Tyr Leu Arg Arg Asp Lys Ser
                          25
Asn Leu Ser Pro Ala Gln Tyr Leu Lys Lys Leu Lys Gln Leu Glu Leu
                      40
                                      4.5
Glu Phe Thr Asp Leu Leu Ala Leu Ser Ser Asn Glu Leu Lys Glu Glu
                 55
Ile Tyr Phe Ala Trp Arg Leu Gly Val His Val His
                7.0
<210> 8659
<211> 182
<212> PRT
<213> Enterobacter cloacae
<400> 8659
Ser Asn Thr Gly Tyr Lys Ile Met Asn Lys Lys Leu Met Met Ala Met
                           10
Leu Ala Ala Gly Ser Val Leu Thr Met Thr Asn Ala Leu Ala Ala Ala
          20
                       25
                                          3.0
Gly Thr Val Asn Phe Asn Gly Asn Ile Leu Asp Ser Ala Cys Asp Val
    35
                    40
Asp Val Ala Ser Gln Asn Gln Val Val Val Leu Gly Asp Tyr Tyr Lys
                    55
```

Thr Glu Phe Pro Thr Thr Gly Ala Arg Thr Ala Ala Thr Gln Phe Asn Ile Ile Leu Lys Asn Cys Pro Val Thr Val Thr Asn Ala Lys Val Arq 8.5 90 Phe Asp Gly Thr Pro Asp Leu Thr Asn Ala Ser Leu Leu Ala Ile Asp 100 105 Thr Ser Val Ala Gly Ala Ala Thr Gly Val Ala Ile Asn Leu Met Thr 115 120 Ala Asp Lys Ala Asp Leu Pro Leu His Gly Ser Asn Ser Tyr Thr Tyr 135 140 Ala Leu Ser Ser Thr Ala Asp Asn Thr Leu Ser Phe Tyr Ala Gln Tyr 145 150 155 160 Ile Ser Thr Ala Ala Ser Val Thr Ala Gly Pro Ala Asn Ser Val Ala 165 170 175 Asn Phe Ser Val Val Tyr 180

<210> 8660 <211> 628 <212> PRT <213> Enterobacter cloacae

<400> 8660 Ser Phe Ile Gly Met Gly Ile Leu Gln Gly Met His Gln Asn Ser Ala 10 Ile Pro Ala Ile Arg Ser Arg Gln Glu Pro Gly Asn Ser Met Leu Lys 20 25 Arg Cys Leu Ser Pro Leu Thr Leu Val Asn Gln Leu Ala Leu Ile Val 40 Leu Leu Ser Thr Ala Ile Gly Val Thr Gly Met Ala Ile Ser Gly Trp 55 Leu Val Gln Gly Val Gln Gly Asn Ala His Ala Ile Asn Glu Ala Gly 65 70 7.5 Ser Leu Arg Met Gln Ser Tyr Arg Leu Leu Ala Ser Val Pro Leu Thr 8.5 90 Gln Ala Asp Gln Pro Leu Ile Asp Glu Met Glu Arg Thr Ala Phe Ser 100 105 110 Pro Glu Leu Glu Arg Ala Ala Ile Arg Asp Gly Gln Gln Ser Gln Leu 120 125 115 Lys Ala Leu Gln Gly Tyr Trp His Thr Gln Leu Glu Pro Gly Leu Lys 135 Arq Ala Glu Asp Arg Glu Thr Val Ala Gln Asp Val Ala Gly Phe Val 145 150 155 Ser Arg Ile Asp His Leu Val Ser Ser Phe Asp Arg Thr Thr Glu Leu 165 170 Arg Ile Asp Arg Val Val Met Val His Arg Ala Met Ala Leu Phe Met 180 185 Gly Leu Leu Ile Phe Thr Val Ile Trp Leu Arg Ala Arg Leu Leu 195 200 205 Asn Pro Trp Lys Gln Leu Leu Ala Met Ala Arg Ala Val Thr Gln Arg 215 220 Asp Phe Thr Gln Arg Thr His Ile Ser Gly Arg Asn Glu Met Ala Met 230 235 225 Leu Gly Glu Ala Leu Asn Thr Met Ser Ala Glu Leu Ser Glu Ser Tyr 245 250 Ala Val Leu Glu Gln Arg Val Gln Glu Lys Thr Ala Gly Leu Glu Gln 265 270 260 Lys Asn Glu Ile Leu Ser Phe Leu Trp Gln Ala Asn Arg Arg Leu His 280 285 Met Gln Val Pro Leu Cys Glu Arg Leu Ser Pro Val Leu Asn Gly Leu 290 295 300

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Gln Asn Leu Thr Leu Leu Arg Asp Leu Glu Leu Arg Val Tyr Asp Val
           310
                            315
Glu Asp Glu Glu Asn His Gln Glu Phe Thr Cys Gln Ser Asp Ile Ser
                                        335
           325
                         330
Cys Asp Asp Lys Gly Cys His Leu Cys Pro Arg Gly Leu Pro Pro Leu
                                  350
       340
                      345
Thr Thr Ser Gly Thr Thr Leu Lys Trp Arg Leu Met Asp Ser His Thr
                   360
                                  365
     355
Gln Tyr Gly Ile Leu Leu Ala Thr Leu Pro Ala Gly Arg His Leu Ser
 370 375
                               380
His Asp Gln Gln Gln Leu Val Asp Thr Leu Val Glu Gln Leu Thr Ala
385 390 395
Thr Leu Ala Leu Asp Arg His Gln Glu Lys Gln Gln Gln Leu Ile Val
      405 410 415
Met Glu Glu Arg Ala Thr Ile Ala Arg Glu Leu His Asp Ser Ile Ala
      420 425 430
Gln Ser Leu Ser Cys Met Lys Met Gln Val Ser Cys Leu Gln Met Gln
 435 440 445
Asp Glu Gly Met Pro Glu Ser Ser Lys Gln Leu Leu Ser Gln Ile Arg
 450 455 460
Asn Glu Leu Asn Thr Ser Trp Val Gln Leu Arg Glu Leu Leu Thr Thr
465 470 475 480
Phe Arg Leu Gln Leu Thr Glu Pro Gly Leu Arg Pro Ala Leu Glu Ser
          485 490 495
Ser Cys Gln Glu Phe Ser Ala Arg Leu Gly Phe Pro Val Lys Leu Asp
       500 505 510
Tyr Gln Leu Pro Pro Arg Phe Val Pro Ser His Gln Ala Ile His Leu
515 520 525
Leu Gln Ile Ala Arg Glu Ala Leu Ser Asn Val Leu Lys His Ala Glu
 530 535 540
Ala Thr Ala Val Thr Val Thr Val Ser Cys Gln Asp Asn Gln Val Lys
545 550 555
Leu Arg Val Gln Asp Asn Gly Arg Gly Val Pro Glu Asn Ala Glu Arg
           565 570 575
Thr Asn His Tyr Gly Leu Ile Ile Met Arg Asp Arg Ala Gln Ser Leu
        580 585 590
Arg Gly Asp Cys Gln Val Arg Arg Gly Glu Ser Gly Gly Thr Glu Val
   595 600 605
Val Val Thr Phe Ile Pro Glu Lys Pro Leu Ile Thr Ala Gln Gly Glu
 610
                615
Asn His Asp
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<210> 8661 <211> 226

<212> PRT <213> Enterobacter cloacae

<400> 8661

Arg Cys Asn Ala Ala Arg Phe Ser Ser Thr Arg Ala Leu Leu Ala Leu 10 His Ser Gly Ala Tyr Asn Leu Pro Cys Glu Gln Ser Gln Thr Phe Asp 20 25 Ala Pro Arg Ser His Cys Ser Ile Cys Thr Ser Arg Leu Met Pro Phe 35 40 45 Thr Ser Ala Pro Ser Cys Ala Ser Leu Pro Ser Cys Ser Ser Arg Asn 55 Ile Leu Ala Arg Trp Asn His Ser Val Ala Pro Gly Glu Leu Pro Ala 75 70 Thr Ile Val Ile Val Ser Leu Pro Asp Thr Tyr Ser Ser Val Arg Glu 90

275

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Ala Ile Phe Val Pro Phe Gln Arg Thr Gly Val Asn Met Gln Lys Ile
                           105
Val Ile Val Ala Asn Gly Ala Ala Tyr Gly Ser Glu Ser Leu Phe Asn
       115
                     120
Ser Leu Arg Leu Ala Ile Ala Leu Arg Asp Lys Glu Ser Glu Leu Glu
  130 135
                                     140
Leu Arg Leu Phe Leu Met Ser Asp Ala Val Thr Ala Gly Leu Lys Gly
                                  155
145
       150
Gln Lys Pro Ala Glu Gly Tyr Asn Ile Gln Gln Met Leu Glu Ile Leu
        165 170 175
Thr Ala Gln Asn Val Pro Val Lys Leu Cys Lys Thr Cys Thr Asp Gly
       180 185 190
Arg Gly Ile Thr Gly Leu Pro Leu Ile Asp Gly Val Glu Ile Gly Thr
  195 200 205
Leu Val Glu Leu Ala Glu Trp Thr Leu Ser Ala Asp Lys Val Leu Thr
          215
                            220
Phe
225
<210> 8662
<211> 377
<212> PRT
<213> Enterobacter cloacae
<400> 8662
Leu Gln Ala Pro Ala Leu Leu Glu Lys His Met Thr Ala Thr His Glu
                               10
Ala Val Lys Thr Arg His Lys Glu Thr Ser Leu Ile Phe Pro Val Leu
                          25
Ala Leu Ala Val Leu Leu Phe Trp Gly Ser Ser Gln Ser Leu Pro Val
    35
                      40
                                         45
Val Val Gly Ile Asn Ile Leu Ala Leu Val Gly Ile Leu Thr Ser Ala
 50
                    5.5
Phe Ser Val Val Arg His Ala Asp Val Leu Ala His Arg Leu Gly Glu
                70
                                  75
Pro Tyr Gly Ser Leu Ile Leu Ser Leu Ser Val Val Ile Leu Glu Val
                               90
             8.5
Ser Leu Ile Ser Ala Leu Met Ala Thr Gly Asp Ala Ala Pro Thr Leu
         100
                           105
                                          110
Met Arg Asp Thr Leu Tyr Ser Ile Ile Met Ile Val Thr Gly Gly Leu
      115
                       120
                                          125
Val Gly Phe Ser Leu Leu Gly Gly Arg Lys Phe Ala Thr Gln Tyr
                    135
                                      140
Met Asn Leu Phe Gly Ile Lys Gln Tyr Leu Ile Ala Leu Phe Pro Leu
                150
                                  155
                                                    160
Ala Ile Ile Val Leu Val Phe Pro Met Ala Leu Pro Gly Ala Asn Phe
              165
                              170
                                                 175
Thr Thr Gly Gln Ala Leu Leu Val Ala Leu Ile Ser Ala Ala Met Tyr
          180
                           185
                                             190
Gly Val Phe Leu Leu Ile Gln Thr Lys Thr His Gln Ser Leu Phe Val
       195
                        200
                                          205
Tyr Glu His Glu Asp Asp Gly Asp Asp Asp Pro His His Gly Lys
   210
                    215
Pro Ser Ala His Ser Ser Ala Trp His Thr Val Trp Leu Ile Val His
225 230
                                  235
                                                    240
Leu Ile Ala Val Ile Ala Val Thr Lys Met Asn Ala Asn Pro Leu Glu
              245
                               250
Ala Leu Leu Thr Glu Leu Asn Ala Pro Val Ala Phe Thr Gly Phe Leu
          260
                           265
                                             270
Val Ala Leu Leu Ile Leu Ser Pro Glu Gly Leu Gly Ala Leu Lys Ala
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280

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Val Leu Asn Asn Gln Val Gln Arg Ala Met Asn Leu Phe Phe Gly Ser
          295
Val Leu Ala Thr Ile Ser Leu Thr Val Pro Val Val Thr Leu Ile Ala
             310 315
Phe Met Thr Gly Asn Glu Leu Gln Phe Ala Leu Gly Ala Pro Glu Met
          325 330
                                335
Ile Val Met Val Ala Ser Leu Leu Cys Gln Ile Ser Phe Ser Thr
    340 345 350
Gly Arg Thr Asn Val Leu Asn Gly Ala Ala His Met Ala Leu Phe Ile
   355 360 365
Ala Tyr Leu Met Thr Ile Phe Ala
  370 375
<210> 8663
<211> 290
<212> PRT
<213> Enterobacter cloacae
<400> 8663
Met Met Thr His Trp Pro Phe Pro Ala Lys Leu Asn Leu Phe Leu Tyr
                     10
Ile Thr Gly Gln Arg Ala Asp Gly Tyr His Thr Leu Gln Thr Leu Phe
       20 25
Gln Phe Val Asp Tyr Gly Asp Thr Ile Ser Ile Glu Pro Arg Gln Asp
35 40
Gly Gln Ile His Leu Leu Thr Pro Val Asp Gly Val Ala His Glu Asp
                  55
Asn Leu Ile Val Arg Ala Ala Arg Leu Leu Met Lys Thr Ala Ser Ser 65 70 75 80
Ser Gly Arg Leu Pro Ala Gly Ser Gly Ala Asp Ile Arg Ile Asp Lys
                          90
Arg Leu Pro Met Gly Gly Gly Leu Gly Gly Gly Ser Ser Asn Ala Ala
 100 105 110
Thr Val Leu Val Ala Leu Asn His Leu Trp Asp Cys Gly Leu Thr Thr
   115 120
                                     125
Asp Glu Leu Ala Ala Leu Gly Leu Thr Leu Gly Ala Asp Val Pro Val
Phe Val Arg Gly His Ala Ala Phe Ala Glu Gly Val Gly Glu Ile Leu
145 150 155
Thr Pro Val Asp Pro Pro Glu Lys Trp Tyr Leu Ile Val His Pro Gly
           165 170 175
Val Ser Ile Pro Thr Pro Val Ile Phe Lys Asp Pro Asp Leu Lys Arg
        180 185 190
Asn Thr Pro Val Arg Ser Ile Lys Thr Leu Leu Asn Cys Glu Phe Ser
                     200 205
Asn Asp Cys Glu Asp Ile Ala Arg Lys Arg Phe Arg Glu Val Asp Ala
                      220
               215
Val Leu Ser Trp Leu Leu Glu Tyr Ala Pro Ser Arg Leu Thr Gly Thr
                              235
225 230
                                              240
Gly Ala Cys Val Phe Ala Glu Phe Asp Thr Glu Thr Ala Ala Arg Gln
            245
                           250
Val Leu Glu Gln Ala Pro Val Trp Leu His Gly Phe Val Ala Arg Gly
                        265
       260
Met Asn Ile Ser Pro Leu Gln Gln Thr Ile Leu Ala Gln Thr Glu Phe
    275
                     280
  290
<210> 8664
<211> 562
<212> PRT
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<213> Enterobacter cloacae

<400> 8664 Ile Ile Val Lys Lys Val Thr Ser Ser His Val Leu Pro Phe Arg Ala 10 Leu Ile Asp Ala Cys Trp Lys Glu Lys Tyr Thr Ser Ser Arg Phe Val 20 25 30 Arg Asp Leu Ile Ala Gly Ile Thr Val Gly Ile Ile Ala Ile Pro Leu 35 40 45 Ala Met Ala Leu Ala Ile Gly Ser Gly Val Ala Pro Gln Tyr Gly Leu 50 55 60 Tyr Thr Ser Ala Val Ala Gly Ile Val Ile Ala Leu Thr Gly Gly Ser 7.0 7.5 Arg Phe Ser Val Ser Gly Pro Thr Ala Ala Phe Val Val Ile Leu Tyr 85 90 Pro Val Ser Gln Gln Phe Gly Leu Ala Gly Leu Leu Val Ala Thr Leu 100 105 Met Ser Gly Ile Phe Leu Ile Leu Phe Gly Leu Ala Arg Phe Gly Arg 115 120 125 Leu Ile Glu Tyr Ile Pro Leu Ser Val Thr Leu Gly Phe Thr Ser Gly 130 135 140 Ile Gly Ile Thr Ile Gly Thr Met Gln Ile Lys Asp Phe Leu Gly Leu 145 150 155 Gln Met Ala His Val Pro Glu His Tyr Leu Gln Lys Val Gly Ala Leu 165 170 175 Phe Met Ala Leu Pro Thr Ala Asn Leu Gly Asp Ala Ala Ile Gly Ile 180 185 190 Val Thr Leu Gly Thr Leu Ile Val Trp Pro Arg Leu Gly Ile Arg Leu 195 200 205 Pro Gly His Leu Pro Ala Leu Leu Leu Gly Cys Ala Val Met Gly Val 210 215 Val Asn Leu Leu Gly Gly Gln Val Ala Thr Ile Gly Ser Gln Phe His 225 230 235 Tyr Val Leu Ala Asp Gly Ser Gln Gly Ser Gly Ile Pro Gln Leu Leu 245 250 Pro Gln Leu Val Leu Pro Trp Asp Met Pro Gly Ser Ser Phe Thr Leu 260 265 270 Ser Trp Asp Ser Leu Arg Ala Leu Leu Pro Ala Ala Phe Ser Met Ala 275 280 285 Met Leu Gly Ala Ile Glu Ser Leu Leu Cys Ala Val Val Leu Asp Gly 290 295 300 Met Thr Gly Thr Lys His Lys Ala Asn Ser Glu Leu Val Gly Gln Gly 310 315 Leu Gly Asn Ile Val Val Pro Phe Phe Gly Gly Ile Thr Ala Thr Ala 325 330 Ala Ile Ala Arg Ser Ala Ala Asn Val Arg Ala Gly Ala Thr Ser Pro 345 350 340 Val Ser Ala Val Ile His Ser Leu Leu Val Ile Met Ala Leu Leu Ile 355 360 365 Leu Ala Pro Leu Leu Ser Trp Leu Pro Leu Ser Ala Met Ala Ala Leu 375 380 Leu Leu Met Val Ala Trp Asn Met Ser Glu Ala His Lys Val Val Asn 390 395 Leu Leu Arg Arg Ala Pro Lys Asp Asp Ile Ile Val Met Leu Ile Cys 405 410 415 Met Ser Leu Thr Val Leu Phe Asp Met Val Ile Ala Ile Ser Val Gly 425 Ile Val Leu Ala Ser Leu Leu Phe Met Arg Arg Ile Ala Gln Met Thr 435 440 Arg Leu Ser Pro Val Asn Val Glu Val Pro Asp Asp Val Leu Val Leu 450 455 460

Arg Val Ile Gly Pro Leu Phe Phe Ala Ala Ala Glu Gly Leu Phe Ser 475 470 Asp Leu Glu Tyr Arg Ile Ala Gly Lys Arg Ile Val Val Leu Lys Trp 490 485 495 Asp Ala Val Pro Val Leu Asp Ala Gly Gly Leu Asp Ala Phe Gln Arg 500 505 Phe Val Ala Arg Leu Pro Glu Gly Cys Glu Leu Arg Ile Ser Asn Leu 515 520 525 Glu Phe Gln Pro Leu Arg Thr Met Ala Arg Ala Gly Val Gln Pro Ile 535 540 Pro Gly Arg Leu Ser Phe Tyr Pro Asn Arg Glu Ala Ala Leu Ala Asp 550 555 Leu

<211> 223 <212> PRT

<210> 8665

<213> Enterobacter cloacae

<400> 8665 Leu Leu Lys Glu Lys Thr Met Tnr Asn Gln Glu Pro Ala Ser Ile Leu 10 Leu Ile Asp Asp His Pro Met Leu Arg Thr Gly Val Lys Gln Leu Val 20 25 30 Ser Met Ala Pro Asp Ile Thr Val Val Gly Glu Ala Ser Asn Gly Glu 35 4.0 4.5 Gln Gly Ile Glu Leu Ala Glu Ser Leu Asp Pro Asp Leu Ile Leu Leu 55 Asp Leu Asn Met Pro Gly Met Asn Gly Leu Glu Thr Leu Asp Lys Leu 70 75 Arg Glu Lys Ser Leu Ser Gly Arg Val Val Val Phe Ser Val Ser Asn 8.5 90 His Glu Glu Asp Val Val Thr Ala Leu Lys Arg Gly Ala Asp Gly Tyr 100 105 Leu Leu Lys Asp Met Glu Pro Glu Asp Leu Leu Lys Ala Leu Gln Gln 120 125 115 Ala Ala Ala Gly Glu Met Val Leu Ser Glu Ala Leu Thr Pro Val Leu 135 Ala Ala Ser Leu Arg Ala Asn Arg Ala Thr Ser Asp Arg Asp Val Ser 150 155 Gln Leu Thr Pro Arg Glu Arg Asp Ile Leu Lys Leu Ile Ala Gln Gly 165 170 175 Leu Pro Asn Lys Met Ile Ala Arg Arg Leu Asp Ile Thr Glu Ser Thr 180 185 Val Lys Val His Val Lys His Met Leu Lys Lys Met Lys Leu Lys Ser 200 205 Arg Val Glu Ala Ala Val Trp Val His Gln Glu Arg Ile Phe 215

<210> 8666 <211> 82 <212> PRT <213> Enterobacter cloacae

<400> 8666 Ser Thr Ser Pro Val Trp Pro Arg Pro Ala Gln Ala Glu Thr Arg Ala 10 15 Gly Gly Arg Tyr Gly Val Gln Asn Trp Ser Pro Cys Arg Phe Ser Arg 20 30 Pro Ser Pro Gly Arg Glu Asn Gly Tyr Gly Gln Thr Gly Trp Cys Pro

Ser Pro Ala Ser Pro Gln Ile Pro Arg Pro Ala Gly Arg Pro Pro Glu 55 60 Pro Gly Thr Pro Arg Gly Cys Arg Glu Ala Thr Arg Gln Gly Trp Cys 70 Pro <210> 8667 <211> 633 <212> PRT <213> Enterobacter cloacae <400> 8667 Leu Phe Asn Asn Asn Pro Leu Lys Ile Leu Phe Ser Tyr Gly Arg Gly 10 Phe Ser Ile Lys Phe Thr Cys Thr Val Ala Asp Arg His Gly Asn Asn 20 25 Thr Ala Gly Ile Thr Leu Met Phe Arg Ser Ile Arg Ala Arg Ile Ile 35 40 Ala Ala Thr Thr Gly Cys Leu Val Val Ala Leu Leu Leu Asn Thr Ile 55 60 Ile Asn Phe Gln Val Thr Arg Gln Asp Asn Gln Gln Ser Gln Arg Asp 70 7.5 Ile Leu Thr Ser Thr Ser Ala Ser His Asn Met Ala Ile Ala Asp Trp 85 90 Val Asn Ser Lys Ile Thr Val Ile Thr Ser Ala Gln Ser Val Ala Leu 100 105 Ser Asp Asp Pro Val Pro Val Phe Lys Gln Leu Ala Leu Ala Gly Gly 120 125 Phe Thr Asn Val Tyr Val Gly Tyr Ala Ser Lys Thr Ala Lys Phe Ser 135 140 Asp Pro Thr Gly Val Pro Ala Asp Tyr Asp Pro Thr Leu Arg Pro Trp 150 155 Tyr Gln Gln Val Val Ser Ala Asp Gly Pro Val Val Thr Ala Pro Tyr 165 170 Val Asp Ala Gly Thr Gly Lys Leu Val Val Thr Phe Ala Val Pro Val 180 185 Lys Glu Gln Gly Ala Leu Lys Ala Val Val Ala Gly Asp Val Ala Met 200 205 Asp Ser Val Val Ala Asn Val Arg Gly Ile His Pro Thr Pro Ala Ser 215 220 Ser Gly Leu Leu Asp Ser Asn Gly Thr Val Ile Ala Gly Ser Asp 235 230 Pro Ala Leu Thr Leu Lys Pro Phe Thr Glu Thr Ile Lys Gly Thr Asp 245 250 Phe Ala Thr Leu Lys Ser Gly Asn Leu Val Asp Gly Thr Ser Asn Gly 265 270 Arg Glu Lys Thr Phe Leu Ala Thr Ala Val Pro Gly Thr His Trp Leu 275 280 285 Leu Val Val Ala Leu Asp Asn Gly Asp Ala Thr Ala Gly Met Arg Ser 290 295 300 Leu Leu Lys Ala Ser Ala Leu Ser Leu Ala Ile Leu Ala Leu Leu Ser 310 315 Gly Ala Leu Met His Leu Leu Ile Ala Arg Leu Leu Lys Arg Leu Phe 325 330 Gly Ile Arg Asp Ala Met Asn Asn Ile Ala Asn Gly Thr Asn Asp Leu 340 345 350 Ser Gln Arg Leu Pro Asp Lys Gly Gly Asp Glu Val Ala Gln Ile Ala

360

Gln Ala Phe Asn Ala Phe Ser Asp Lys Leu Ser Val Val Met Val Gln

365

```
Leu Arg Asp Ala Ser Ala Ser Val Lys Asn Ala Ala His Glu Ile Ala
             390
                    395
Ala Gly Asn Gln Asp Leu Ser Gly Arg Thr Glu Gln Ala Ala Ser Ser
        405
                 410 415
Leu Arg Glu Thr Ala Ser Ala Val Glu Glu Ile Thr Ala Ser Val Thr
     420
           425 430
Gln Ser Asn Glu Ser Ala Ala Glu Ala Asn Glu Gln Ala Ser Lys Ala
 435 440 445
Ser Ala Ala Ala Ser Arg Gly Gly Asp Val Val Ala Gln Ala Ile Ser
450 455 460
Thr Met Gln Ser Ile Glu Leu Ala Ser Ala Lys Ile Gly Asp Ile Thr
465 470 475
Ser Val Ile Asp Gly Ile Ala Phe Gln Thr Asn Ile Leu Ala Leu Asn
         485 490 495
Ala Ser Val Glu Ala Ala Arg Ala Gly Glu Gln Gly Arg Gly Phe Ala
      500 505 510
Val Val Ala Gly Glu Val Arg Asn Leu Ala Ser Arg Ser Ala Gln Ala
515 520 525
Ala Lys Glu Ile Lys Ser Leu Ile Asp Ser Thr Thr Glu Ser Val Ala
530 535 540
Thr Gly Ser Arg Phe Val His Leu Ala Gly Asp Ser Met Asp Glu Ile
545 550 555 560
Arg Ala Ser Val Gly Ser Val Ser Gly Ile Met Arg Glu Ile Ser Ile
     565 570 575
Ala Thr Arg Glu Gln Met Lys Gly Ile His Glu Ile Asn His Ala Val
      580 585 590
Thr His Leu Asp Arg Met Val Gln Gln Asn Ala Glu Leu Val Val Gln
595 600 605
Ser Ala Ala Ala Ser Ala Leu Gln Ser Gln Ala Gly Asp Leu Ala
610 615
Glu Thr Ala Gly His Phe Arg Ile
```

<210> 8668 <211> 174 <212> PRT

<213> Enterobacter cloacae

<400> 8668

Thr Val Ala Pro Phe Asn Ala Ser Ile Asn Ser Tyr Asn Cys Asn Val 1 5 10 Ser Gln Gly Phe Val Ile Ile Met Thr Arg Met Ile Arg Leu Leu Pro 2.5 30 Leu Ala Ala Leu Val Leu Thr Ala Cys Ser Val His Gln Pro Lys Gly 35 40 45 Pro Gly Lys Ser Pro Asp Ser Pro Gln Trp Arg Gln His Gln Gln Asp 55 60 Val Leu Lys Leu Ser Gln Tyr Gln Thr Arg Gly Ala Phe Ala Tyr Leu 70 75 Ser Asp Glu Gln Lys Val Tyr Ala Arg Phe Phe Trp Gln Gln Thr Gly 85 90 Gln Asp Asn Tyr Arg Leu Leu Leu Leu Asn Pro Leu Gly Ser Thr Glu 100 105 Leu Glu Leu Asn Ala Lys Pro Gly Glu Ala Gln Ile Thr Asp Asn Lys 115 120 Gly Gln His Tyr Thr Ala Thr Asp Ala Glu Glu Met Ile Gly Lys Leu 130 135 140 Asn Gly Met Pro Ile Pro Leu Asn Ser Leu His Gln Trp Ile Leu Gly 150 155 Leu Pro Gly Asp Ala Thr Asp Tyr Thr Leu Asp Asp Gln

13

FU

10

```
<210> 8669
<211> 196
<212> PRT
<213> Enterobacter cloacae
<400> 8669
Ile Val Thr Ile Lys Leu Ile Val Gly Leu Ala Asn Pro Gly Ala Glu
           5
Tyr Ala Ala Thr Arg His Asn Ala Gly Ala Trp Tyr Val Asp Leu Leu
                           25
       20
                                             3.0
Ala Glu Arg Leu Arg Ala Pro Leu Arg Glu Glu Pro Lys Phe Tyr Gly
 3.5
                  40
                                        4.5
Tyr Thr Ser Arg Ile Asn Leu Ala Gly Ala Asp Val Arg Leu Leu Val
              5.5
                                      60
Pro Thr Thr Phe Met Asn Leu Ser Gly Lys Ala Val Ala Ala Met Ala
                70
                                  75
Thr Phe Tyr Arg Ile Asn Pro Asp Glu Ile Leu Val Ala His Asp Glu
       85 90 95
Leu Asp Leu Pro Pro Gly Val Ala Lys Phe Lys Leu Gly Gly Gly His
      100 105 110
Gly Gly His Asn Gly Leu Lys Asp Ile Ile Ser Lys Leu Gly Asn Asn
 115 120
                                        125
Pro Asn Phe His Arg Leu Arg Val Gly Ile Gly His Pro Gly Asp Lys
130 135
                                     140
Asn Lys Val Val Gly Phe Val Leu Gly Lys Pro Pro Val Ser Glu Gln
                150 155
Lys Leu Ile Asp Glu Ala Val Asp Glu Ala Ala Arg Cys Thr Glu Ile
    165 170 175
Trp Leu Gln Asp Gly Leu Thr Lys Ala Thr Asn Arg Leu His Ala Phe
                           185
Lys Ala Gln
     195
<210> 8670
<211> 369
<212> PRT
<213> Enterobacter cloacae
<400> 8670
Gly Asp Leu Glu Met Gly Phe Lys Cys Gly Ile Val Gly Leu Pro Asn
Val Gly Lys Ser Thr Leu Phe Asn Ala Leu Thr Lys Ala Gly Ile Glu
                           25
                                            30
Ala Ala Asn Phe Pro Phe Cys Thr Ile Glu Pro Asn Thr Gly Val Val
      35
                       40
Pro Met Pro Asp Pro Arg Leu Asp Gln Leu Ala Glu Ile Val Lys Pro
                5.5
Glm Arg Ile Leu Pro Thr Thr Met Glu Phe Val Asp Ile Ala Gly Leu
             70
                                  75
Val Lys Gly Ala Ser Lys Gly Glu Gly Leu Gly Asn Gln Phe Leu Thr
                              90
             8.5
Asn Ile Arg Glu Thr Glu Ala Ile Gly His Val Val Arg Cys Phe Glu
          100
                           105
Asn Asp Asn Ile Ile His Val Asn Asn Lys Val Asp Pro Ala Asp Asp
      115
                        120
Ile Asp Val Ile Asn Thr Glu Leu Ala Leu Ser Asp Leu Asp Thr Cys
```

135

150

Glu Arg Ala Ile His Arg Val Gln Lys Lys Ala Lys Gly Gly Asp Lys

140

(2

```
Asp Ala Lys Ala Glu Leu Ala Ala Leu Glu Lys Cys Leu Pro Gln Leu
            165
                           170
Glu Asn Ala Gly Met Leu Arg Ala Leu Lys Asn Leu Thr Asp Glu Asp
         180
                        185
                                        190
Lys Ala Ala Ile Lys Tyr Leu Ser Phe Leu Thr Leu Lys Pro Thr Met
                     200
                                  205
Tyr Ile Ala Asn Val Asn Glu Asp Gly Phe Glu Asn Asn Pro Tyr Leu
                  215
                                  220
Asp Lys Val Arg Glu Ile Ala Ala Ala Glu Gly Ser Val Val Val Ala
              230
                               235
Val Cys Ala Ala Val Glu Ser Asp Ile Ala Glu Leu Asp Asp Ala Asp
         245 250 255
Arg Glu Glu Phe Met Ala Glu Leu Gly Leu Glu Glu Pro Gly Leu Asn
        260 265 270
Arg Val Ile Arg Ala Gly Tyr Glu Leu Leu Asn Leu Gln Thr Tyr Phe
  275 280 285
Thr Ala Gly Val Lys Glu Val Arg Ala Trp Thr Ile Pro Val Gly Ala
                 295
                                  300
Thr Ala Pro Gln Ala Ala Gly Lys Ile His Thr Asp Phe Glu Lys Gly
305 310
                              315
Phe Ile Arg Ala Gln Thr Ile Ala Phe Glu Asp Phe Ile Thr Tyr Lys
         325 330 335
Gly Glu Gln Gly Ala Lys Glu Ala Gly Lys Met Arg Ala Glu Gly Lys
        340 345 350
Asp Tyr Ile Val Lys Asp Gly Asp Val Met Asn Phe Leu Phe Asn Val
                     360
```

<211> 339 <212> PRT <213> Enterobacter cloacae

<210> 8671

<400> 8671

180

195

Arg Leu Leu Arg Pro Arg Ser Leu Arg Arg Thr Leu Ser Thr Thr Gly 10 Arg Met Pro Glu Val Leu Leu Val Pro Asp Met Lys Leu Phe Ala Gly 25 30 Asn Ala Thr Pro Glu Leu Ala Gln Arg Ile Ala Asn Arg Leu Tyr Thr 4.0 Ser Leu Gly Asp Ala Ala Val Gly Arg Phe Ser Asp Gly Glu Val Ser 55 60 Val Gln Ile Asn Glu Asn Val Arg Gly Gly Asp Ile Phe Ile Ile Gln 70 75 Ser Thr Cys Ala Pro Thr Asn Asp Asn Leu Met Glu Leu Val Val Met 90 8.5 Val Asp Ala Leu Arg Arg Ala Ser Ala Gly Arg Ile Thr Ala Val Ile 100 105 Pro Tyr Phe Gly Tyr Ala Arg Gln Asp Arg Arg Val Arg Ser Ala Arg 120 125 Val Pro Ile Thr Ala Lys Val Val Ala Asp Phe Leu Ser Ser Val Gly 135 140 Val Asp Arg Val Leu Thr Val Asp Leu His Ala Glu Gln Ile Gln Gly 150 155 Phe Phe Asp Val Pro Val Asp Asn Val Phe Gly Ser Pro Ile Leu Leu 165 170 Glu Asp Met Leu Gln Leu Asn Leu Asp Asn Pro Ile Val Val Ser Pro

185 Asp Ile Gly Gly Val Val Arg Ala Arg Ala Ile Ala Lys Leu Leu Asn

200

190

```
Asp Thr Asp Met Ala Ile Ile Asp Lys Arg Arg Pro Arg Ala Asn Val
 210
Ser Gln Val Met His Ile Ile Gly Asp Val Ala Gly Arg Asp Cys Val
                230
                                235
Leu Val Asp Asp Met Ile Asp Thr Gly Gly Thr Leu Cys Lys Ala Ala
            245
                         250
Glu Ala Leu Lys Glu Arg Gly Ala Lys Arg Val Phe Ala Tyr Ala Thr
         260
              265
His Pro Ile Phe Ser Gly Asn Ala Val Asn Asn Leu Arg Asn Ser Val
                    280 285
Ile Asp Glu Val Val Val Cys Asp Thr Ile Pro Leu Ser Asp Glu Ile
          295 300
  290
Lys Ala Leu Pro Asn Val Arg Thr Leu Thr Leu Ser Gly Met Leu Ala
305 310 315 320
Glu Ala Ile Arg Arg Ile Ser Asn Glu Glu Ser Ile Ser Ala Met Phe
            325
                   330
Glu His
```

<210> 8672

<211> 93

<212> PRT <213> Enterobacter cloacae

<400> 8672

His Met Lys Arg Lys Asn Ala Ser Met Leu Gly Asn Val Leu Met Gly 1 5 10 15 15 Leu Gly Leu Phe Val Met Val Ala Gly Val Gly Tyr Ser Ile Leu Asn 30 30 Gln Leu Pro Gln Leu Asp Leu Pro Gln Tyr Phe Ala His Gly Ala Val Leu Ser Ile Phe Leu Gly Ala Val Leu Trp Leu Ala Gly Ala Val Val Ser Ile Phe Leu Gly Ala Val Leu Trp Leu Ala Gly Ala Arg Val 50 50 60 55 60 60 For Gly His Glu Glu Val Cys Asp Lys Tyr Trp Trp Val Arg His Tyr 65 Asp Lys Arg Cys Arg Arg Asp Gln Arg Lys His Ser

85

<210> 8673 <211> 372

<212> PRT <213> Enterobacter cloacae

<400> 8673

Pro Ser Arg Asn Val Arg Leu Gln Ser Asn Asp Thr Gly Arg Thr Lys 1.0 Gly Ala Val Met Leu Ile Gln Val Gly Glu Leu Ala Lys Arg Ala Gly Ile Thr Val Arg Thr Leu His His Tyr Glu Gln Thr Gly Leu Leu 4.0 Pro Ser Ala Arg Ser Ala Ala Gly Tyr Arg Leu Tyr Asn Leu Ala Asp 5.5 Val Gln Arg Leu His Met Ile Gln Thr Leu Ala Lys Ala Gly Leu Glu 7.0 75 Leu Ala Glu Ile Arg Asp Phe Leu Lys Gln Arg Ser Leu Ser Leu Ala 8.5 90 Glu Leu Leu Asp Gly Gln Ile Thr Leu Leu Asp Lys Gln Leu Arg Ser 100 105 Ile His Thr Leu Arg Asn Arg Leu Val Glu Leu Arg Thr Gly Leu Thr 120 Asp Asp Ala Thr Pro Asp Leu Glu Ser Trp Leu Gln Thr Leu Glu Leu

```
135
Met Asn Met Tyr Asp Arg Trp Phe Ser Lys Glu Glu Leu Gln Gln Leu
             150
                    155
Pro Phe Ala Val Glu Lys Glu Ala Leu Ala Asp Ile Trp Ser Gly Leu
          165
               170
                               175
Val Arg Glu Val Lys His Leu Leu Glu Gln Asn Val Ser Val Thr Asp
       180 185 190
Ala Arg Ala Thr Asp Leu Ala Ser Arg Trp Met Glu Arg Leu Glu Gln
195 200 205
Asp Thr Ala Gly Lys Pro Glu Phe Leu Thr Arg Leu Asn Glu Met His
210 215 220
Ser Val Glu Pro Gln Met Gln Glu Gln Thr Gly Ile Thr Pro Glu Ile
225 230 235
Thr Asp Tyr Ile Thr Arg Ala Phe Ala Glu Ser Lys Leu Ser Ile Trp
        245 250 255
Glu Lys Tyr Leu Thr Ala Glu Glu Met Ala Phe Thr Arg Ala His Tyr
      260 265 270
Phe Asp Arg Met Met Glu Trp Pro Pro Leu Val Ala Lys Leu His Gln
275 280 285
Ala Gln Arg Asp Asn Leu Ser Pro Ala Ser Asp Asp Ala Gln Lys Leu
290 295 300
Ala Glu Lys Trp Leu Val Leu Phe Gln Ser Tyr Ala Gly Thr Asn Pro
305 310 315 320
Gln Thr Gln Gln Lys Phe Arg Leu Ala Met Gln Gln Glu Pro His Leu
          325 330 335
Met Lys Gly Thr Trp Met Thr Pro Ala Val Leu Glu Trp Leu Gln Gln
      340 345 350
Ala Ile Gly Val Met Met Gln Arg Arg Val Ser Ala Ser Asp Asp Ser
                   360
Gln Ile Arg
 370
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<211> 296 <212> PRT <213> Enterobacter cloacae

<210> 8674

<400> 8674 Ala Tyr Arg Ala Gly Ile Pro Gly Arg Pro Ala Gly Gly Thr Val Arg Ala Gly Leu Met Asp Phe Gln Arg Trp Leu Arg His Ala Ala Ser Glu 25 Leu Ser Ala Ser Glu Ser Pro Lys Arg Asp Ala Glu Ile Leu Leu Glu 35 4.0 4.5 His Val Thr Gly Lys Ala Arg Thr Tyr Leu Leu Ala Phe Gly Glu Thr 55 Ala Leu Thr Ala Glu Gln Gln Ser Gln Leu Glu Thr Leu Leu Ala Arg 70 75 Arg Lys Thr Gly Glu Pro Val Ala His Leu Val Gly Glu Arg Glu Phe 8.5 90 Trp Ser Leu Pro Leu Tyr Val Ser Ala Ala Thr Leu Ile Pro Arg Pro 100 105 Asp Thr Glu Cys Leu Val Glu Gln Ala Leu Ala Arg Leu Pro Ala Gln 120 Pro Cys Gln Ile Leu Asp Leu Gly Thr Gly Thr Gly Ala Ile Ala Leu 130 135 140 Ala Leu Ala Ser Glu Arg Pro Asp Cys Thr Val Thr Ala Val Asp Val 150 155 Met Pro Asp Ala Val Ala Leu Ala Arg Arg Asn Val Glu Arg Leu Gly 165 170 Leu Asn Asn Val Ser Val Leu Gin Ser Ser Trp Phe Ala Ala Leu Glu

```
180
                           185
Ser Arg Met Phe Glu Met Ile Val Ser Asn Pro Pro Tyr Ile Asp Glu
    195
                     200
                                 205
Asp Asp Pro His Leu Ala Gln Gly Asp Val Arg Phe Glu Pro Leu Thr
  210
             215
                            220
Ala Leu Val Ala Ala Asn Gln Gly Leu Ala Asp Leu Asp His Ile Val
       230
                     235
Thr Thr Ser Arg Gln His Leu Leu Pro Gly Gly Trp Leu Leu Val Glu
          245 250 255
His Gly Trp Thr Gln Gly Glu Ala Val Arg Ala Leu Phe Thr His Ala
         260
              265 270
Gly Tyr Ala Ala Val Glu Thr Cys Arg Asp Tyr Gly Gly Asn Glu Arg
     275 280
Leu Thr Leu Gly Gln Arg Ser
   290
<210> 8675
<211> 281
<212> PRT
<213> Enterobacter cloacae
<400> 8675
His Phe Arg Arg Leu Thr Cys Arg Cys Ile Ala Ser Gly Pro Arg Ile
                             10
Ala Tyr Arg Cys Ser Thr Ala Val Lys Met Asn Ser Thr Glu Cys Gln
                   25
                                           30
Glu Gly Glu Leu Gln Met Ser Gln Gly Ser Met Gln Trp Arg Arg Trp
                     40
Asn Val Leu Thr Arg Asp Phe Leu Met Lys Ala Asp Cys Lys Thr Ala
                 5.5
                                    60
Phe Gly Ala Ile Glu Glu Ser Leu Leu Trp Ser Ala Glu Gln Arg Ala
                70
                        75
Ala Ser Leu Ala Ala Thr Leu Ala Cys Arg Pro Asp Asp Gly Pro Val
          85
                             90
Trp Ile Phe Gly Tyr Gly Ser Leu Met Trp Asn Pro Ala Leu Glu Phe
              105
                                           110
Val Glu Ser Ala Thr Gly Thr Leu Pro Gly Trp His Arg Ala Phe Cys
                      120
                                       125
Leu Arg Leu Thr Ala Gly Arg Gly Ser Ala Cys Gln Pro Gly Arg Met
                   135
                                     140
Leu Ala Leu Lys Glu Gly Gly Arg Thr Thr Gly Val Ala Tyr Arg Leu
                150
                                  155
Pro Asp Thr Thr Leu Glu Asp Glu Leu Thr Leu Leu Trp Lys Arg Glu
             165
                              170
                                              175
Met Ile Thr Gly Cys Tyr Met Pro Ser Trp Cys Lys Leu Glu Leu Asp
         180
                          185
                                   190
Asp Gly Arg Thr Val Asn Ala Leu Val Phe Ile Met Asp Pro Arg His
                       200
                                        205
Pro Leu Tyr Glu Ala Asp Thr Arg Thr Gln Val Ile Ala Pro Leu Ile
                   215
                                     220
Ala Ala Ala Ser Gly Pro Leu Gly Thr Asn Ala Gln Tyr Leu Phe Ser
                230
                                 235
Leu Asp Gln Glu Leu Thr Arg Leu Gly Met Gln Asp Asp Cys Leu Ser
             245
                              250
Glu Leu Val Val Lys Val Lys Ala Leu Leu Glu Gly Asn Pro Leu Ser
         260
                265
Asn Thr Leu Arg Pro Gly Phe Ala
                       280
<210> 8676
```

<211> 455

<212> PRT <213> Enterobacter cloacae

Ile His Arg Lys Gly Ala

<400> 8676 Gln Ile Asn His Phe Arg Arg Cys Ala Asn Gly Gly Ala Cys Val Phe 1.0 Arg Ile Lys Ala Ser Ser Gly Ala Ser Ala Pro Ser Gly Ala Phe Phe 20 25 Cys Leu Phe Ser Gly Ala Ile Met Ala Asp Leu Ser Arg Arg Arg Leu Leu Glm Ala Ser Met Leu Ala Ser Gly Ala Met Leu Leu Pro Gly Val 55 60 Met Gln Ala Ala Trp Ala Ala Gly Ser Asp Lys Pro Glu Gln Asp Thr 70 75 Val Arg Ile Gly Phe Ile Pro Leu Thr Asp Cys Ala Pro Val Val Ile 90 8.5 95 Ala Ala Leu Lys Gly Phe Asp Lys Lys His Gly Ile Thr Ile Val Pro 100 105 110 Thr Lys Glu Ala Ser Trp Ala Ala Val Arg Asp Lys Leu Val Ala Gly 115 120 125 Glu Leu Asp Ala Ala His Ile Leu Tyr Gly Leu Leu Tyr Gly Leu Glu 130 135 140 Leu Gly Ile Ala Gly Lys Pro Gln Gln Met Ala Asn Leu Met Thr Leu 145 150 155 160 Asn Gln Asn Gly Gln Ala Ile Thr Leu Ser Ser Asp Leu Ala Glu Lys 165 170 175 Gly Val Arg His Leu Asp Gly Leu Lys Lys Leu Ile Ala Gln Gln Ala 180 185 190 Pro Gly Thr Tyr Thr Phe Ala His Thr Phe Pro Thr Gly Thr His Ala 195 200 205 Met Trp Leu Tyr Tyr Trp Leu Ala Ser Ala Gly Ile Asn Pro Phe Asp 210 215 220 Asp Val Arg Thr Val Val Val Pro Pro Pro Gln Met Val Met Asn Met 225 230 235 240 Arg Ile Gly Asn Met Val Gly Phe Cys Val Gly Glu Pro Trp Asn Ala 245 250 255 Arg Ala Ile Asn Asp Arg Ile Gly Phe Thr Ala Ala Thr Ser Gln Ser 260 265 270 Ile Trp Ala Asp His Pro Glu Lys Ile Leu Gly Thr Arg Arg Asp Trp 280 Val Ala Lys Asn Pro His Thr Ala Arg Ala Leu Val Ser Ala Val Met 295 300 Glu Ala Ala Arg Trp Ile Glu Ala Ser Ala Glu Asn Lys Arg Glu Thr 315 310 Ala Gln Ile Leu Ser Arg Arg Ala Trp Leu Asn Cys Lys Glu Gln Tyr 325 330 335 Leu Thr Gly Arg Met Leu Gly Glu Tyr Asp Asn Gly Val Gly Gln Arg 350 340 345 Trp Gln Asp Ala His Pro Ile Arg Phe Phe Asn Glu Gly Ala Val Ser 360 365 Tyr Pro Tyr Leu Ser Asp Gly Met Trp Phe Leu Thr Gln Phe Arg Arg 370 375 380 Trp Gly Leu Leu Asn Ala Ala Pro Asp Tyr Ala Gly Ile Ala Gln Arg 390 395 400 Ile Asn Gln Thr Ala Val Trp Gln Asp Ala Ala Thr Ala Val Gly Gly 405 410 415 Met Ser Thr Pro Ser Ser Pro Tyr Arg Ser Ser Thr Leu Met Asp Gly 420 425 430 Thr Val Trp Asn Gly Thr Asp Pro Glu Gly Tyr Ala Asn Arg Phe Ala 435 440

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<210> 8677
<211> 480
<212> PRT
<213> Enterobacter cloacae
<400> 8677
Ser Pro Asn Val Cys Ser Ile Ile Arg Glu Ser Glu Val Ser Met Ser
                           1.0
His Ser Ser Ala Pro Glu Arg Glu Thr Gly Ala Val Ile Thr Asp Trp
        20
                        2.5
Arg Pro Glu Asp Pro Ala Phe Trp Gln Gln Arg Gly His Arg Val Ala
 35
                   40
                           4.5
Ser Arg Asn Leu Trp Ile Ser Val Pro Cys Leu Leu Leu Ala Phe Cys
 50 55
                               60
Val Trp Met Leu Phe Ser Ala Val Ala Val Asn Leu Pro Lys Val Gly
   70 75
Phe Thr Phe Thr Thr Asp Gln Leu Phe Met Leu Thr Ala Leu Pro Ser
         85 90 95
Leu Ser Gly Ala Leu Leu Arg Val Pro Tyr Ala Phe Met Val Pro Val
 100 105 110
Phe Gly Gly Arg Arg Trp Thr Ala Phe Ser Thr Gly Ile Met Ile Ile
115 120 125
Pro Cys Val Trp Leu Gly Phe Ala Val Gln Asp Thr Ser Thr Pro Phe
130 135 140
Ser Val Phe Val Ile Ile Ser Leu Leu Cys Gly Phe Ala Gly Ala Asn
145 150 155
Phe Ala Ser Ser Met Ala Asn Ile Ser Phe Phe Phe Pro Lys Ala Lys
     165 170
Gln Gly Gly Ala Leu Gly Ile Asn Gly Gly Leu Gly Asn Met Gly Val
        180 185 190
Ser Val Met Gln Leu Ile Ala Pro Leu Ala Ile Ser Val Ser Ile Phe
195 200 205
Ala Ala Phe Gly Gly Gly Val Thr Gln Pro Asp Gly Ser Val Leu
                 215 220
Phe Leu Gln Asn Ala Ser Trp Ile Trp Val Pro Phe Leu Val Val Phe 225 230 235 240
Thr Leu Ala Ala Cys Phe Phe Met Asn Asp Leu Ser Ala Ser Lys Ala
           245
                          250
Ser Leu Ser Glu Gln Leu Pro Val Leu Lys Arg Gly His Leu Trp Val
                        265
Met Ala Leu Leu Tyr Leu Ala Thr Phe Gly Ser Phe Ile Gly Phe Ser
                    280
                                    285
Ala Gly Phe Ala Met Leu Ser Lys Thr Gln Phe Pro Asp Val Gln Ile
                 295
                                 300
Leu Gln Phe Ala Phe Phe Gly Pro Phe Ile Gly Ala Leu Ala Arg Ser 305 310 315 320
Leu Gly Gly Met Ile Ser Asp Arg Leu Gly Gly Thr Arg Val Thr Leu
            325
                           330
Val Asn Phe Val Val Met Ala Ile Phe Cys Ala Leu Leu Phe Leu Thr
        340
                        345
                                       350
Leu Pro Ala Gly Gly Glu Gly Gly Asn Phe Phe Ala Phe Phe Gly Val
 355
                     360
                                    365
Phe Met Val Leu Phe Leu Thr Ala Gly Leu Gly Ser Ala Ser Thr Phe
                  375
                                 380
Gln Met Ile Ser Val Ile Phe Arg Lys Leu Thr Met Asp Arg Val Lys
              390
                            395
Ala Gln Gly Gly Ser Asp Glu Gln Ala Met Arg Glu Ala Ala Thr Asp
           405
                          410
```

Thr Ala Ala Ala Leu Gly Phe Ile Ser Ala Ile Gly Ala Ile Gly Gly

425 Phe Phe Ile Pro Lys Ala Phe Gly Ile Ser Leu Asp Leu Thr Gly Ser 440 445 Pro Ala Gly Ala Met Lys Val Phe Leu Val Phe Tyr Ile Ala Cys Val 450 455 460 Val Ile Thr Trp Leu Val Tyr Gly Arg Asn Thr Lys Lys Asn Lys <210> 8678 <211> 388 <212> PRT <213> Enterobacter cloacae <400> 8678 Thr Pro Asp Asn Ser Ala Gln Gln Pro Arg Ala Gly Ile Ala Pro Tyr 10 Thr His Phe Leu Arg Gln Gly Ala Phe Thr Pro Met Lys Pro Ser Ile 20 2.5 Val Ala Lys Leu Glu Ala Leu His Glu Arg His Glu Glu Val Gln Ala 35 40 45 Leu Leu Gly Asp Ala Gly Thr Ile Ala Asp Gln Glu Arg Phe Arg Ala 50 55 60 Leu Ser Arg Glu Tyr Ala Gln Leu Ser Asp Val Ser Lys Cys Phe Thr 75 7.0 Asp Trp Arg Gln Val Gln Glu Asp Ile Glu Thr Ala Gln Met Met Leu 85 90 Asp Asp Pro Glu Met Arg Glu Met Ala Gln Glu Glu Leu Gln Asp Ala 100 105 Lys Ala Arg Ser Glu Glu Met Glu Gln Gln Leu Gln Val Leu Leu Leu 120 125 Pro Lys Asp Pro Asp Asp Glu Arg Asn Ala Phe Val Glu Val Arg Ala 130 135 140 Gly Thr Gly Gly Asp Glu Ala Ala Leu Phe Ala Gly Asp Leu Phe Arg 145 150 155 160 Ser Ala Asn Glu Gly Glu His Gly Gly Tyr Lys Glu Val Ile Ala Lys 185 190 Ile Ser Gly Asp Gly Val Tyr Gly Arg Leu Lys Phe Glu Ser Gly Gly 200 205 His Arg Val Gln Arg Val Pro Ala Thr Glu Ser Gln Gly Arg Ile His 210 215 220 Thr Ser Ala Cys Thr Val Ala Val Met Pro Glu Leu Pro Glu Ala Glu 230 235 Leu Pro Asp Ile Asn Pro Ala Asp Leu Arg Ile Asp Thr Phe Arg Ser 245 250 255 Ser Gly Ala Gly Gly Gln His Val Tyr Thr Thr Asp Ser Ala Ile Arg 260 265 270 Ile Thr His Leu Pro Thr Gly Ile Val Val Glu Cys Gln Asp Glu Arg 280 285 Ser Gln His Lys Asn Lys Ala Lys Ala Leu Ser Val Leu Gly Ala Arg 290 295 300 Ile His Ala Ala Glu Met Ala Lys Arg Gln Gln Ala Glu Ala Ser Thr 310 315 Arg Arg Asn Leu Leu Gly Ser Gly Asp Arg Ser Asp Arg Asn Arg Thr 325 330 Tyr Asn Phe Pro Gln Gly Arg Val Thr Asp His Arg Ile Asn Leu Thr 340 345 350 Leu Tyr Arg Leu Asp Glu Ala Met Glu Gly Lys Leu Asp Met Leu Ile 355 360 365 Glu Pro Ile Val Gln Glu Tyr Gln Ala Asp Gln Leu Ala Ala Leu Ser

```
375
   370
                                   380
Glu Gln Asp
385
<210> 8679
<211> 83
<212> PRT
<213> Enterobacter cloacae
<400> 8679
Pro Lys Glu Arg Leu Thr Met Pro Tyr Lys Ser Lys Ser Glu Leu Pro
       5
Asp Asn Val Gln Asn Val Leu Pro Ala His Ala Gln Asp Ile Tyr Lys
 20
                   25
Glu Ala Phe Asn Ser Ala Trp Asp Gln Tyr Lys Asp Lys Lys Asp Arg
 35
                    40
                                      4.5
Arg Asp Asp Ala Ser Arg Glu Glu Thr Ala His Lys Val Ala Trp Ala
 50 55
                       60
Ala Val Lys Asn Asp Tyr Glu Lys Gly Asp Asp Asp Lys Trp His Lys
               70
Lys Lys
<210> 8680
<211> 409
<212> PRT
<213> Enterobacter cloacae
<400> 8680
Lys Gly Thr Asn Ile Ala Ser Arg Thr Glu Glu Tyr Val Ser Gly Arg
                            10
Glu Thr Met Thr Ile Val Ala Gly Ser Ser Pro Gly Ala Thr Glu Trp
                   2.5
Phe Gln Arg Ala Arg Met Leu Arg Glu Glu Gln Leu Gly Arg Leu Ala
35
                    40
Gln Leu Gly Ala Leu Val Asn Gly Ile Ser Arg Leu Val His Met Leu
                  5.5
Gln Cys Glu Arg Gly Ala Ser Asn Val Trp Leu Cys Ser Gln Gly Lys
              70 75
Leu Tyr Ala Pro Glu Cys Lys Ala Ser Arg Ala Leu Val Asp Glu Asn
            8.5
Leu Ala Ala Leu His Leu Gln Pne Asn Glu Pro Leu Pro Gly Ser Ala
         100 105 110
Leu Cys Glu Arg Ile Ala Ser Ala Leu His Gly Leu Glu Thr Leu Thr
     115 120 125
Ala Leu Arg Asp Gly Val Thr Gly Gln Cys Val Thr Ala Pro Gln Ala
                135
                                 140
Met Glu His Tyr Ser Arg Ile Leu Arg His Leu Leu Ser Ile Val Pro
          150 155 160
Gln Leu Ser Asp Ser Ile Asp Asp Pro His Ile Ala Gly Arg Phe Val
            165
                170
                                             175
Ala Leu Tyr Ser Leu Met Gin Gly Lys Glu Leu Val Gly Gln Glu Arg
         180
                         185
                                         190
Ala Leu Gly Ala Ile Gly Phe Thr Gln Gly Phe Phe Asp Asp Glu Thr
     195 200 205
Arg Gln Arg Leu Val Asp Arg Ile Asp Gly Gln Gln Ala Cys Phe Glu
                  215 220
Val Phe Ile Ser His Cys Thr Pro Asp Val Gln Glu Ser Phe Thr Leu
               230
                                235
                                                240
Asn Cys Leu Pro Gly Leu Glu Thr Glu Lys Leu Arg Arg Glu Ala Cys
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250

Thr Arg Gln Pro Pro Ala Asp Asn Gly Asp Thr Ala Leu Lys Trp Phe 265 260 Ala Leu Gln Thr Ala Arg Leu Glu His Leu Arg Thr Leu Glu Glu Val 280 Ala Ile Ala Asp Leu Met Thr Ala Val Glu Glu Arg Arg Tyr Ser Glu 295 300 Asn Leu His Ala Asp Asp Glu His Asp Asp Ile Leu Ala Arg Phe Pro 305 310 315 Asp Lys Pro Leu Leu Pro Leu Val Arg Gln Gln Ala Arg Glu Ile Glu 325 330 Gln Leu Ser Arg Gln Leu Ala Ser Leu Arg Asp Thr Leu Glu Glu Arg 340 345 350 Lys Thr Ile Asp Lys Ala Lys Ser Val Leu Met Thr His Gln Asn Met 355 360 365 Ser Glu Glu Gln Ala Trp Thr Ala Leu Arg Lys Met Ala Met Asp Lys 370 375 380 Asn Gln Arg Met Val Asp Ile Ala Arg Ala Leu Leu Thr Val Lys Asn 385 390 395 Leu Trp Lys Ile Pro Pro Gly Glu 405

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Tyr Thr Met Gly Ile Asn Gln Ser Ser Thr Gly Ser Asp Lys Cys Asn 275 280 Ala Ile Ile Asn Val His Leu Ala Ser Gly Lys Phe Asn Arg Pro Gly 295 300 Cys Gly Pro Phe Ser Leu Thr Gly Gln Pro Asn Ala Met Gly Gly Arg 310 315 Glu Val Gly Gly Leu Ala Asn Gln Leu Ala Ala His Met Asn Phe Glu 325 330 335 Pro Asp Asp Leu Ser Arg Val Ala Arg Phe Trp Gly Thr Glu Arg Leu 340 345 350 Ala Gln Thr Pro Gly Leu Met Ala Val Glu Leu Phe Asp Ala Ile Ala 355 360 365 Arg Gly Glu Val Lys Ala Val Trp Ile Met Gly Thr Asn Pro Ala Val 370 375 380 Ser Leu Pro Asp Ser His Ala Val Cys Gln Ala Leu Ala Ala Cys Pro 385 390395395 Leu Val Val Ser Glu Val Met Gln Glu Thr Asp Thr Ser Arg Phe 405 410 415 Ala His Ile Arg Phe Pro Ala Leu Gly Trp Gly Glu Lys Asn Gly Thr 420 425 430 Val Thr Asn Ser Glu Arg Arg Ile Ser Arg Gln Arg Ala Phe Leu Pro 435 440 445 Ala Pro Gly Glu Ala Arg Pro Asp Trp Trp Ile Ile Ala Arg Met Ala 455 460 Asp Gln Leu Gly Tyr Gly Asp Ala Phe Ala Trp Lys His Pro Gln Glu 465 470 475Ile Phe Cys Glu His Ala Ala Leu Thr Ala Phe Glu Asn Asn Gly Glu 485 490 495 Arg Ala Leu Asn Leu Arg Glu Leu Ala Ser Leu Ser Arg Glu Ala Trp 500 505 510 Asp Ala Leu Ala Pro Tyr Gln Trp His Ala Gly Asp Phe Pro Gln Arg 515 520 525 Asn Leu Val Pro Val Asp Pro Ser Ser His Gly Ala Gly Val Asp Glu 530 535 540 Leu Tyr Pro Leu Ile Leu Asn Thr Gly Arg Ile Arg Asp Gln Trp His 545 550 555 Thr Met Thr Arg Thr Gly Tyr Val Pro Arg Leu Met Gln His Ile Asp 565 570 Glu Pro Phe Val Glu Met Asn Ala Thr Asp Ala Ala Arg Ala Gly Leu 580 585 590 Thr Asp Gly Gln Leu Ala Arg Val Ser Ser Pro Arg Gly Val Met Val 595 600 605 Ala Arg Val Arg Ile Ser Thr Ala Gln Arg Ala Gly Glu Leu Phe Thr 610 615 620 Pro Met His Trp Asn Ala Gln Phe Ala Arg Gln Gly Lys Val Asn Ala 625 630 635 Leu Val Glu Gly Arg Val Asp Ala Gly Ser Gly Gln Pro Glu Ser Lys 645 650 Gln Thr Ala Val Lys Ile Leu Pro Trp Leu Pro Ala Trp Gln Gly Glu 665 670 Leu Tyr Ala Arg Asp Leu Pro Ala Leu Pro Pro Ser Val Cys Trp Trp 680 Arg Lys Ala Ser Arg Leu Thr Val Ala Gly Glu Gln Pro Leu Leu Ser 690 695 700 Trp Val Met Ala Tyr Ala Ser Gly Arg Gly Trp Gln Leu Gln Val Ala 710 715 Gln Thr Gly Glu Arg Asn Ser Val Leu Ala Trp His His Gly Glu Leu 725 730 Met Leu Gly Tyr Trp Glu Gly His Thr Leu Pro Ala Leu Ala His Ala 745 740 Phe Ile Glu Glu Ala Phe Ala Ala Ala Pro Val Gln Leu Ala Glu Arg

760 765 His Ala Leu Leu His Gly Gln Arg Pro Gly Glu Asp Ala Asp His Gly 775 780 Arg Ile Ile Cys Ser Cys Phe Ser Val Gly Glu Asn Thr Ile Arg Lys 790 795 Ala Ile Ala Gly Gly Cys Asp Ser Ala Val Ala Leu Gly Val Lys Leu 805 810 815 Arg Cys Gly Thr Asn Cys Gly Ser Cys Val Pro Glu Leu Lys Ala Leu Leu Gly 835 <210> 8682 <211> 473 <212> PRT <213> Enterobacter cloacae <400> 8682 Leu Thr Thr Leu Lys Ala Val Ser Ser Arg Ile Arg Phe Leu Leu Leu 10 Leu Pro Leu Phe Thr Ala Gly Ala Val His Gly Ala Pro Lys Ser Phe 20 2.5 30 Val Gln Gln Ala Gln Asn Pro Phe Asp Asn Asn Gly Asp Ser Leu Pro 35 40 Asp Leu Gly Met Ala Gln Pro Thr Thr Glu Gly Glu Lys His Leu Ala 55 60 Glu Met Ala Lys Ala Phe Gly Glu Ala Ser Met Thr Asp Asn Gly Leu 70 75 8.0 Thr Ala Gly Gln Gln Ala Arg Gln Phe Ala Phe Gly Lys Val Arg Asp 8.5 90 Ala Val Ser Gly Glu Val Asn Glu Gln Ile Glu Ser Trp Leu Ser Pro 100 105 110 Trp Gly Asn Ala Ser Val Asn Val Leu Val Asp Asp Asp Gly Asn Phe 115 120 125 Asn Gly Ser Ser Gly Ser Trp Phe Ile Pro Trp Asn Asp Asn Thr Arg 135 140 Tyr Leu Ser Trp Ser Gln Leu Gly Leu Thr Gln Gln Thr Asp Gly Leu 150 155 Val Ser Asn Val Gly Ile Gly Gln Arg Trp Val Ala Gly Asn Trp Leu 165 170 175 Leu Gly Tyr Asn Thr Phe Tyr Asp Asn Leu Leu Glu Asp Asn Leu Gln 185 190 Arg Ala Gly Leu Gly Ala Glu Ala Trp Gly Glu Asn Leu Arg Leu Ser 200 205 Ala Asn Tyr Tyr Gln Pro Phe Ala Gly Trp Gln Pro Arg Ser Asp Ile 215 Arg Glu Gln Arg Met Ala Arg Gly Tyr Asp Val Thr Ala Lys Ala Trp 230 235 Leu Pro Trp Phe His His Leu Asn Thr Ser Val Ser Phe Glu Gln Tyr 245 250 Phe Gly Asp Asn Val Asp Leu Phe Asn Ser Gly Thr Gly Tyr His Asn 260 265 Pro Val Ala Val Asn Leu Gly Leu Asn Tyr Thr Pro Val Pro Leu Val 280 285 Thr Leu Thr Ala Ala His Lys Gln Gly Glu Ser Gly Val Ser Gln Asn 295 300 Asn Leu Gly Leu Lys Leu Asn Tyr Arg Phe Gly Val Pro Leu Ala Lys 310 315 Gln Leu Ser Ala Gly Glu Val Ala Ala Thr Arg Ser Leu Arg Gly Ser 325 330

Arg Tyr Asp Ser Pro Asp Arg Asp Asn Leu Pro Val Met Glu Phe Arg

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340
                          345
Gln Arg Lys Thr Leu Ser Val Tyr Leu Ala Thr Pro Pro Trp Asp Leu
                       360
                                      365
Lys Pro Gly Glu Thr Val Met Leu Lys Leu Gln Ile Arg Ser Thr His
                   375
                                   380
Gly Ile Arg Gln Ile His Trp Leu Gly Asp Thr Gln Ala Leu Ser Leu
             390
                       395
Thr Ser Pro Ala Asn Gly Asn Ser Ser Asp Gly Trp Ser Val Ile Met
        405 410 415
Pro Ala Trp Asp Asp Ser Glu Gly Ala Lys Asn Thr Trp Arg Leu Thr
        420 425 430
Ala Val Val Glu Asp Lys Asp Gly Gln Arg Val Ser Ser Asn Glu Ile
 435 440
                           445
Thr Leu Ser Val Val Gln Pro Leu Val Ala Met Pro Ala Asp Asp Pro
 450 455
Arg Trp Lys Leu Leu Pro Asp Glu
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<212> PRT
<213> Enterobacter cloacae
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Thr Leu Leu Ala Leu Gly Ile Asn His Lys Thr Ala Pro Val Ser Leu
                         25
Arg Glu Arg Val Thr Phe Ser Pro Asp Thr Leu Asp Leu Ala Leu Asp
             40
Ser Leu Leu Ala Gln Pro Met Val Gln Gly Gly Val Val Leu Ser Thr
 50 55
                                 60
Cys Asn Arg Thr Glu Leu Tyr Leu Ser Val Glu Glu Gln Asp Asn Leu
               7.0
                       75
His Glu Ala Leu Ile Arg Trp Leu Cys Asp Tyr His Asn Leu Asn Glu
           85
                          90
Glu Glu Leu Arg Asn Ser Leu Tyr Trp His Gln Asp Asn Asp Ala Val
         100 105 110
Ser His Leu Met Arg Val Ala Ser Gly Leu Asp Ser Leu Val Leu Gly
   115
                      120 125
Glu Pro Gln Ile Leu Gly Gln Val Lys Lys Ala Phe Ala Asp Ser Gln
  130 135
                                   140
Lys Gly His Leu Lys Ala Ser Glu Leu Glu Arg Met Phe Gln Lys Ser
        150
                                155
                                                160
Phe Ser Val Ala Lys Arg Val Arg Thr Glu Thr Asp Ile Gly Ala Ser
            165
                             170
Ala Val Ser Val Ala Phe Ala Ala Cys Thr Leu Ala Arg Gln Ile Phe
         180
                         185
                                          190
Glu Ser Leu Ser Thr Val Thr Val Leu Leu Val Gly Ala Gly Glu Thr
     195
                      200
Ile Glu Leu Val Ala Arg His Leu Arg Glu His Lys Val Lys Lys Met
  210
                   215
                                   220
Ile Ile Ala Asn Arg Thr Arg Glu Arg Ala Gln Val Leu Ala Asp Glu
               230
Val Gly Ala Glu Val Ile Ala Leu Ser Asp Ile Asp Glu Arg Leu Lys
            245
                             250
                                             255
Glu Ala Asp Ile Ile Ile Ser Ser Thr Ala Ser Pro Leu Pro Ile Ile
         260
                          265
                                   270
Gly Lys Gly Met Val Glu Arg Ala Leu Lys Ser Arg Arg Asn Gln Pro
      275
                      280
Met Leu Leu Val Asp Ile Ala Val Pro Arg Asp Val Glu Pro Glu Val
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295
Gly Lys Leu Ala Asn Ala Tyr Leu Tyr Ser Val Asp Asp Leu Gln Ser
           310
                                 315
Ile Ile Ser His Asn Leu Ala Gln Arg Lys Ala Ala Ala Val Gln Ala
             325
                               330
Glu Thr Ile Val Glu Gln Glu Thr Ser Glu Phe Met Ala Trp Leu Arg
         340
                           345
Ala Gln Ser Val Ser Glu Thr Ile Arg Glu Tyr Arg Gly Gln Ala Glu
             360
    355
                                        365
Gln Val Arg Asp Asp Leu Thr Ala Lys Ala Leu Ala Ala Leu Glu Gln
                  375
                        380
Gly Gly Asp Ala Gln Ala Ile Met Gln Asp Leu Ala Trp Lys Leu Thr
          390
                        395
Asn Arg Leu Ile His Ala Pro Thr Lys Ser Leu Gln Gln Ala Ala Arg
          405 410 415
Asp Gly Asp Asp Glu Arg Leu Thr Ile Leu Arg Asn Ser Leu Gly Leu
          420 425
Glu
<210> 8684
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<212> PRT
<213> Enterobacter cloacae
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 20
Arg Tyr Trp Trp Arg Tyr Asn Asn Asn Pro Leu Ile Asn Ala Arg Trp
    35
                  40
Val Arg Ile Ala Pro His Cys Ile Asp Thr Val Leu Phe Leu Ser Gly
 50 55
Ala Gly Leu Met Trp Lys Thr Gly Tyr Leu Pro Phe Thr Asp Lys Gly
65 70
                            75
Ala Trp Leu Thr Glu Lys Leu Phe Gly Val Ile Ile Tyr Ile Val Leu
          85
                             90
Gly Phe Ile Ala Leu Gly Arg His Arg Pro Arg Ser Gln Gln Thr Gly
         100
                                            110
Phe Ile Ala Phe Leu Leu Gly Leu Val Val Leu Tyr Ile Ile Ile Lys
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Leu Ala Thr Thr Arg Ile Pro Leu Leu Gly
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Asp Gly Met Ile Leu Ile Ser Glu Met Ile Arg Asp Asp Phe Thr Ser
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                           25
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Gln Tyr Val Tyr Ala Glu Leu Glu Asn Lei Val Ser Leu Ala Arg Glu
     35
                       4 ∩
Glu Ile Asn Gln Ala Arg Pro Gln Asp Trp Gln Leu Glu Lys Leu Ile
                    55
Glu Leu Phe Tyr Gly Glu Trp Gly Phe Cys Asp Thr Arq Gly Val Tyr
                                  75
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Arg Leu Ser Asp Ala Leu Trp Leu Asp Gln Val Leu Lys Asn Arg Gln
            85
Gly Ser Ala Val Ala Leu Gly Ala Ile Leu Leu Trp Val Ala His Glu
                        105
                                       110
Leu Glu Ile Pro Leu Val Pro Val Ile Phe Pro Thr Gln Met Ile Leu
     115 120
                                    125
Arg Ala Glu Trp Leu Asp Gly Glu Met Trp Leu Ile Asn Pro Phe Asn
                     140
       135
Gly Asp Thr Leu Asp Glu His Thr Leu Asp Val Trp Leu Lys Gly Asn
   150 155 160
Ile Ser Pro Ile Ala Glu Leu Phe Asn Glu Asp Leu Asp Glu Ala Asp
       165 170 175
Asn Ala Glu Val Ile Arg Lys Leu Leu Asp Thr Leu Lys Ser Ala Leu
       180 185 190
Met Glu Glu Arg Gln Met Glu Leu Ala Leu Arg Ala Ser Glu Val Leu
    195 200 205
Leu Gln Phe Asn Pro Glu Asp Pro Tyr Glu Ile Arg Asp Arg Gly Leu
 210 215 220
Ile Tyr Ala Gln Leu Asp Cys Glu His Val Ala Leu Asn Asp Leu Asn
225 230 235 240
Tyr Phe Val Glu Gln Cys Pro Glu Asp Pro Ile Ser Glu Met Ile Arg
  245 250 255
Ala Gln Ile Asn Ala Ile Ala His Lys His Ile Thr Leu His
        260
              265
<210> 8686
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<212> PRT
<213> Enterobacter cloacae
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Gly Asp Pro Met Lys Gln Lys Val Val Ser Ile Gly Asp Ile Asn Val
                         10
Ala Asn Asp Leu Pro Phe Val Leu Phe Gly Gly Met Asn Val Leu Glu
Ser Arg Asp Leu Ala Met Arg Ile Cys Glu His Tyr Val Thr Val Thr
35 40
Gln Lys Leu Gly Ile Pro Tyr Val Phe Lys Ala Ser Phe Asp Lys Ala
               55
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Asn Arg Ser Ser Ile His Ser Tyr Arg Gly Pro Gly Leu Glu Glu Gly 70 75 80 Met Lys Ile Phe Gln Glu Leu Lys Gln Thr Phe Gly Val Lys Val Ile 85 90 Thr Asp Val His Glu Ala Ser Gln Ala Gln Pro Val Ala Asp Val Val 100 105 110 Asp Val Ile Gln Leu Pro Ala Phe Leu Ala Arg Gln Thr Asp Leu Val 115 120 125 Glu Ala Met Ala Lys Thr Gly Ala Val Ile Asn Val Lys Lys Pro Gln 135 140 Phe Val Ser Pro Gly Gln Met Gly Asn Ile Val Asp Lys Phe Ile Glu 145 150 155 Gly Gly Asn Asp Gln Val Ile Leu Cys Asp Arg Gly Ser Asn Phe Gly 165 170 Tyr Asp Asn Leu Val Val Asp Met Leu Gly Phe Ser Val Met Lys Asn 180 185 190 Val Ser Asn Glm Ser Pro Val Ile Phe Asp Val Thr His Ser Leu Glm 195 200 205 Cys Arg Asp Pro Phe Gly Ala Ala Ser Gly Gly Arg Arg Ala Gln Val 210 215 Thr Glu Leu Ala Arg Ala Gly Met Ala Thr Gly Leu Ala Gly Leu Phe 230 235 240

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Ile Glu Ala His Pro Asp Pro Ala Asn Ala Lys Cys Asp Gly Pro Ser
            245
                   250
Ala Leu Pro Leu Asp Lys Leu Glu Pro Phe Leu Lys Gln Ile Lys Ala
              265
Ile Asp Asp Leu Val Lys Ser Phe Asp Glu Leu Asp Thr Ser Asn
     275 280
<210> 8687
<211> 297
<212> PRT
<213> Enterobacter cloacae
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                      10
Ser Glu Ser Gly Glu Val Ile Val Leu Pro Pro Leu Gln Val Arg Arg
      20
                   25
Arg Ala Pro Ala Phe Thr Arg Arg Met Asn Asp Phe Leu Gln Arg Val
35
                    40
                         45
Ile Pro Ala Leu Leu Gly Leu Gly Leu Leu Val Val Leu Trp Gln Leu
                 55
Ala Ala Ile Asn Ser Lys Gly Phe Pro Thr Pro Leu Ser Thr Leu Asp
65 70 75
Ser Ala Met Thr Leu Phe Ala Asp Pro Phe Tyr Arg Asp Gly Pro Asn
          85 90 95
Asp Met Gly Ile Gly Trp Asn Val Leu Ala Ser Leu Gln Arg Val Ala
       100 105 110
Ile Gly Phe Gly Leu Ala Ala Leu Ala Gly Ile Pro Leu Gly Phe Leu
   115 120 125
Ile Gly Arg Phe Thr Phe Phe Ser Arg Met Phe Asn Pro Leu Ile Ala
130 135 140
Leu Leu Arg Pro Val Ser Pro Leu Ala Trp Leu Pro Ile Gly Leu Leu
145 150 155
Leu Phe Gln Lys Ala Glu Pro Ala Ser Ser Trp Thr Ile Phe Ile Cys
          165 170 175
Ser Ile Trp Pro Met Val Ile Asn Thr Ala Glu Gly Val Arg Cys Ile
       180 185 190
Pro Gln Asp Tyr Leu Asn Val Ala Arg Val Leu Gln Leu Ser Glu Trp
195 200 205
Thr Ile Met Arg Arg Ile Leu Phe Pro Ala Val Leu Pro Ala Val Leu
210 215 220
Thr Gly Val Arg Leu Ser Ile Gly lle Ala Trp Leu Val Ile Val Ala
225
    230
                              235
Ala Glu Met Leu Thr Gly Gly Leu Gly Ile Gly Phe Trp Ile Trp Asn
           245
                           250
Glu Trp Asn Asn Leu Asn Val Glu Asn Ile Leu Ile Ala Ile Val Ile
       260 265
Ile Gly Val Val Gly Leu Leu Glu Gln Gly Leu Met Leu Ile Ala
   275 280
Arg Arg Phe Ser Trp Gln Glu Lys
<210> 8688
<211> 266
<212> PRT
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Gly Val Lys Met Lys Pro Leu Ile Gln Val Gln Ala Val Ser Gln Arg
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Phe Ser Thr Ala Ser Gly Glu Phe Leu Ala Leu Gln Asn Val Ser Phe
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Asp Ile His Glu Gly Glu Thr Val Ser Leu Ile Gly His Ser Gly Cys 40 Gly Lys Ser Thr Leu Leu Asn Leu Ile Ala Gly Ile Thr Leu Pro Thr 55 Glu Gly Gly Leu Ile Cys Asp Asn Arg Glu Ile Ala Gly Pro Gly Pro 70 75 Glu Arg Ala Val Val Phe Gln Asn His Ser Leu Leu Pro Trp Leu Thr 85 90 Cys Phe Asp Asn Val Ala Leu Ala Val Asp Gln Val Phe Arg His Thr 100 105 110 Met Ser Lys Ala Glu Arg Lys Ala Trp Ile Glu His Asn Leu Asp Arg 115 120 125 Val Gln Met Gly His Ala Leu His Lys His Pro Gly Glu Ile Ser Gly 130 135 140 Gly Met Lys Gln Arg Val Gly Ile Ala Arg Ala Leu Ala Met Lys Pro 150 155 160 Lys Val Leu Leu Met Asp Glu Pro Phe Gly Ala Leu Asp Ala Leu Thr 165 170 175 Arg Ala His Leu Gln Asp Ser Val Met Gln Ile Gln Gln Ala Leu Asn 185 190 Thr Thr Ile Val Leu Ile Thr His Asp Val Asp Glu Ala Val Leu Leu 195 200 Ser Asp Arg Val Leu Met Met Thr Asn Gly Pro Ala Ala Thr Val Gly 215 220 Glu Ile Leu Arg Val Asp Leu Pro Arg Pro Arg Asn Arg Val Gln Leu 225 230 235 Ala Asp Asp Ser Arg Tyr His His Met Arg Gln Gln Ile Leu His Phe 245 Leu Tyr Glu Lys Gln Pro Lys Ala Ala 260

<210> 8689 <211> 1332 <212> PRT

<213> Enterobacter cloacae

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185 Leu Ala Ala Arg Gly Val Ser Cys Glu Leu Ala Ser Gly Ile Thr Ala 195 200 205 Ile Ala Asp Asp Ala Val Thr Ser Leu Asp Gly Arg Arg Ile Ala Ala 215 220 Thr Arg Val Val Leu Ala Thr Gly Val Gln Pro Asn Val Ala Leu Ala 230 235 Asn Ala Ser Gly Ile Arg Cys Ala Arg Gly Ile Val Val Asp Gln Gln 245 250 Met Gln Thr Ser Val Pro Gly Ile Tyr Ala Ile Gly Glu Cys Cys Glu 260 265 270 Ile Asp Gly Gln Thr Phe Gly Leu Val Ala Pro Cys Leu Ala Gln Ala 275 280 285 Asp Ile Leu Ala Ala Arg Leu Ala Gly Glu Val Thr Ala Pro Phe Thr 290 295 300 Leu Thr Asp Asn Gly Val Arg Leu Lys Val Thr Gly Val Glu Leu Phe 305 310 315 320 Ser Leu Gly Arg Ala Thr Ala Gln Ala Asp Asp Val Val Trp Ser Ser 325 330 335 Trp Asp Pro Leu Thr Arg His Tyr Arg Arg Leu Leu Ile His Gln Gly 340 345 350 Ala Leu Ala Gly Val Leu Leu Gly Asp Cys Arg Ser Ala Ala Thr 355 360 365 Phe Thr Asp Leu Leu Ala Thr Ala Ala Pro Ala His Ala Asp Trp Leu 370 375 380 Phe Asp Arg Phe Thr Thr Gln Pro Gln Val Ala Gly Gln Asn Ala Met 385 390 395 Thr Lys Pro Thr Leu Val Val Val Gly His Gly Met Val Gly His His 405 410 415 Phe Leu Glu Asp Cys Val Asn Arg Asn Leu His Gln Gln Tyr Gln Ile 420 425 430 Ile Val Phe Gly Glu Glu Arg Tyr Ala Ala Tyr Asp Arg Val His Leu 435 440 445 Ser Glu Tyr Phe Gly Gly Arg Ser Ala Asp Ser Leu Ser Leu Val Ala 455 460 Gly Glu Phe Phe Ala Asp Asn Gly Ile Glu Leu Arg Leu Ser Gln Gln 465 470 475 480 Ile Val Ala Ile Asp Arg Asp Ala His Val Val Arg Thr Ala Ser Gly 485 490 495 His Glu Thr His Trp Asp Lys Leu Val Leu Ala Thr Gly Ser Tyr Pro 500 505 510 Phe Val Pro Pro Val Pro Gly Asn Asp Leu Pro Gly Cys Phe Val Tyr 515 520 525 Arg Thr Leu Asp Asp Leu Asp Asn Ile Thr Ala His Ala Ala Gly Ser 530 535 540 Arg Arg Gly Val Val Ile Gly Gly Gly Leu Leu Gly Leu Glu Ala Ala 545 550 555 560 Asn Ala Leu Lys Gln Leu Gly Leu Glu Thr His Val Val Glu Phe Ala 565 570 Pro Asn Leu Met Ala Val Gln Leu Asp Ser Asp Gly Ala Ala Met Leu 585 Arg Lys Lys Ile Glu Ala Leu Gly Val Gly Val His Thr Ser Lys Ser 595 600 605 Thr Thr Glu Ile Ala Thr Ala Asp Asp Gly Leu Val Leu Arg Phe Ala 615 620 Asp Gly Glu Gln Leu Glu Thr Asp Met Val Val Phe Ser Ala Gly Ile 625 630 635 Arg Pro Gln Asp Ala Leu Ala Arg Ser Ser Gly Leu Val Ile Gly Glu 655 645 650 Arg Gly Gly Ile Cys Ile Asp Asp Gly Cys Arg Thr Ser Asp Pro Asp 665

Val Leu Ala Ile Gly Glu Cys Ala Leu Trp Glu Gly Lys Ile Phe Gly 675 680 Leu Val Ala Pro Gly Tyr Gln Met Ala Arg Val Ala Ala Ala Val Leu 695 700 Ala Gly Glu Glu Lys Arg Phe Thr Gly Ala Asp Met Ser Thr Lys Leu 710 715 Lys Leu Leu Gly Val Asp Val Ala Ser Phe Gly Asp Ala His Gly Arg 725 730 Thr Pro Gly Ala Leu Ser Tyr Gln Trp Thr His Gly Pro Gln Gln Ile 740 745 750 Tyr Lys Lys Ile Val Val Ser His Asp Ser Lys Thr Leu Leu Gly Gly 755 760 765 Val Leu Val Gly Asp Ala Ser Glu Tyr Ala Thr Leu Val Gln Met Met 775 780 Leu Asn Gly Ile Ser Leu Pro Lys Glu Pro Glu Thr Leu Ile Leu Pro 790 795 800 785 Val Ser Ser Gly Ser Ala Pro Lys Ala Leu Gly Val Ala Ala Leu Pro 805 810 Glu Ser Ala Gln Ile Cys Ser Cys His Asn Val Ser Lys Gly Asp Ile 820 825 Cys Gln Ala Val Ser Ala Gly Ala Thr Asp Ile Gly Ala Ile Lys Gln 835 840 845 Cys Thr Lys Ala Ala Thr Gly Cys Gly Gly Cys Ser Ala Leu Val Lys 850 855 860 Gln Val Met Glu Phe Gln Leu Ala Glu Gln Gly Val Glu Val Lys Lys 865 870 875 Asp Ile Cys Glu His Phe Pro Tyr Ser Arg Gln Glu Ile Tyr His Leu 885 890 Val Arg Val Asn His Ile Arg Thr Phe Asp Gln Leu Ile Ser Arg Tyr 900 905 Gly Gln Gly His Gly Cys Glu Ile Cys Lys Pro Leu Val Gly Ser Val 915 920 925 Leu Ala Ser Cys Trp Asn Glu Tyr Leu Leu Lys Pro Ala His Leu Pro 930 935 Leu Gln Asp Thr Asn Asp Arg Phe Phe Ala Asn Ile Gln Lys Asp Gly 945 950 955 Thr Tyr Ser Ile Val Pro Arg Met Pro Ala Gly Glu Val Thr Ala Asp 965 970 Gly Leu Ile Ala Ile Gly Gln Ile Ala Lys Arg Tyr Ser Leu Tyr Ser 985 Lys Ile Thr Gly Gly Gln Arg Ile Asp Leu Phe Gly Ala Thr Leu Glu 1000 1005 Gln Leu Pro Glu Ile Trp Gln Ala Leu Val Glu Ala Gly Phe Glu Thr 1010 1015 1020 Gly His Ala Tyr Gly Lys Ser Leu Arg Thr Val Lys Ser Cys Val Gly 1030 1035 Ser Thr Trp Cys Arg Tyr Gly Val Gln Asp Ser Thr Gly Leu Ala Val 1045 1050 1055 1050 1055 Arg Leu Glu His Arg Tyr Lys Gly Leu Arg Ala Pro His Lys Ile Lys 1060 1065 1070 Met Ala Val Ser Gly Cys Thr Arg Glu Cys Ala Glu Ala Gln Ser Lys 1075 1080 1085 Asp Val Gly Val Ile Ala Thr Asp Lys Gly Trp Asn Leu Tyr Leu Cys 1095 1100 Gly Asn Gly Gly Met Lys Pro Arg His Ala Asp Leu Phe Ala Ser Asp 1110 1115 1120 Leu Asp Asp Glu Thr Leu Ile Arg Thr Ile Asp Arg Phe Leu Met Phe 1125 1130 1135 Tyr Ile Arg Thr Ala Asp Arg Leu Gln Arg Thr Ser Thr Trp Met Asp 1140 1145 Asn Leu Glu Gly Gly Leu Asp Tyr Leu Arg Glu Val Ile Leu Asn Asp

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1155
                    1160
Ser Leu Gly Ile Ala His Glu Leu Glu Gln Glu Met Ala Arg Val Met
  1170 1175
                       1180
Glu Thr Tyr Gln Cys Glu Trp Gln Thr Thr Leu Asn Asp Pro Asp Arg
                    1195 1200
      1190
Leu Ala Leu Phe Arg Thr Ala Val Asn Val Pro Ala Ala Glu Glu Asn
      1205 1210
Lys Arg Trp Gln Glu Ile Cys Asn Ile Asp Glu Ile Pro Glu Gln Ala
        1220 1225 1230
Gly Ile Gly Ala His Leu Gly Arg Lys Pro Ile Ala Leu Phe Arg Phe
     1235 1240 1245
Gly Lys Asn Val Tyr Ala Leu Asp Asp Arg Glu Pro Gly Ser Arg Ala
 1250 1255 1260
Asn Val Leu Ser Arg Gly Ile Leu Gly Asp Ala Ala Gly Glu Pro Val
    1270 1275 1280
Val Ile Ser Pro Leu Tyr Lys Glr. Arg Ile Arg Leu Arg Asp Gly Cys
        1285 1290 1295
Gln Val Glu Asn Gly Glu Pro Val Val Arg Ala Trp Pro Val Lys Ile
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Glu Asn Gly Lys Val Trp Val Gly Asn Glu Glu Leu Val Met Arg Ala
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            1320
Glu Ala Ser
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<212> PRT
<213> Enterobacter cloacae
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                    25
                                     30
Val Arg Arg Ile Ala Thr Glu Ala Gly Val Ala Thr Gly Gln Leu His
 35 40 45
His His Phe Ala Ser Ala Gly Glu Leu Lys Ser Leu Ala Phe Val Arg
 50 55
                     60
Leu Ile Arg Asp Leu Leu Asp Ala Glu Ile Val Gly Glu Asn Ala Gly
         70
                           75
Trp Arg Glu Arg Leu His Ala Met Leu Gly Ser Asp Asp Gly Gly Phe
          85
                         90 95
Glu Pro Tyr Ile Arg Leu Trp Arg Glu Ala Gln Ile Leu Ala Ser Arg
      100 105
                                     110
Asp Ser Asp Ile Lys Gly Ala Tyr Val Leu Thr Met Glu Met Trp His
   115 120 125
Gln Glu Thr Val Ala Ile Ile Arg Ala Gly Ala Glu Ala Asn Ala Phe
 130 135
                               140
Thr Leu Ala Asp Gln Pro Glu Asn Ile Ala Trp Arg Leu Ile Gly Leu
145 150
                            155
Val Cys Gly Leu Asp Gly Ile Tyr Val Leu Asn Met Pro Glu Met Asp
        165 170 175
Asp Ala Ala Phe Asn Lys His Leu Asp Lys Leu Ile Ser Leu Glu Leu
        180
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<210> 8691

<211> 306 <212> PRT

<213> Enterobacter cloacae

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Asp Pro His Gln Pro Pro Arg Asn Gly Thr Arg Arg Phe Pro Gly Glu
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Lys Arg Leu Arg Leu His Leu Arg Arg Arg Leu Ser Arg Leu Arg His
      35
                      40
                                     45
Lys Ile Gln Pro Leu Gln Gln Gln Pro His Arg Arg Asp Gln His His
                  5.5
                                  60
Arg Ser Ala Arg Ser Arg Gly Gly Arg Val Met Gln Ile Leu Lys Ile
                               75
               7.0
Ile Ala Leu Leu Ile Glu Tyr Pro Asp Glu Leu Leu Trp Glu Asn Arg
          85
                            90 95
Asp Glu Ala Leu Ser Leu Val Glu Gln Asp Ala Pro Met Leu Leu Pro
        100 105 110
Phe Ala Gln Gln His Leu Ser Ala Pro Leu Leu Asp Lys Gln Ala Glu
 115 120 125
Trp Cys Glu Val Phe Glu Arg Gly Arg Ala Thr Ser Leu Leu Leu Phe
 130 135 140
Glu His Val His Ala Glu Ser Arg Asp Arg Gly Gln Ala Met Val Asp
               150 155
Leu Met Ser Gln Tyr Glu Lys Ala Gly Leu Glu Leu Asp Cys Arg Glu
      165 170
Leu Pro Asp Tyr Leu Pro Leu Tyr Leu Glu Tyr Leu Ser Ile Val Ser
         180 185
                                         190
Asp Asp Glu Ala Arg Glu Gly Leu Gln Asn Val Ala Pro Ile Leu Ala
 195 200 205
Leu Ile Gly Gly Arg Leu Lys Gln Arg Glu Val Ala His Tyr Gln Leu
 210 215 220
Phe Asp Ala Leu Leu Ser Leu Ala Glu Thr Arg Leu Ser Ser Asp Ser
225 230
                               235
Val Ala Lys Gln Val Ser Gly Glu Lys Arg Asp Asp Thr Arg Gln Ala
         245
                            250
Leu Asp Ala Val Trp Glu Glu Glu Gln Val Lys Phe Ile Glu Asp Asn
         260
                        265
                                         270
Ala Thr Ser Cys Asp Ser Ser Pro Met Gln Gln Tyr Gln Arg Arg Phe
   275 280
                                     285
Ser Gln Asp Val Ala Pro Gln Tyr Val Asp Val Ser Ala Gly Gly Pro
                  295
Lys
305
<210> 8692
<211> 255
<212> PRT
<213> Enterobacter cloacae
<400> 8692
Met Gln Pro Pro Gln Gly Ile Asp Ile Asn Leu Tyr Gly Leu Leu Pro
                            10
Ala Arg Ala Gly Lys Ile Ser Thr Gln Lys Trp Gly His Asp Leu Leu
                                         30
Gln Glu Val Ile Ser Pro Val Tyr Lys Leu Phe Ser Leu Leu His Met
```

35 40 45 Arg Lys Ser Ala Phe Ser Ser Tyr Ser Ser Cys Thr Arg Gly Asp Pro

Met Ser His Phe Arg Pro Val Glu Leu Arg His Ala Ser Arg Leu Leu

Asn His Gly Pro Thr Val Leu Ile Thr Ser Arg Asp Glu Thr Ile Asp

7.5

8.0

```
Arg Arg Asn Val Met Ala Ala Ala Trp Ser Met Pro Val Glu Phe Glu
  100
                       105
Pro Pro Arg Ile Ala Ile Val Val Asp Lys Ser Ala Trp Ser Arg Glu
   115
                       120
Leu Ile Glu Arg Ser Gly Lys Phe Gly Ile Val Ile Pro Gly Val Ala
                   135
                                     140
Ala Ala Asn Trp Thr Trp Ala Val Gly Ser Val Ser Gly Arg Asp Glu
145
                 150
                               155
Asp Lys Phe Asn Cys Tyr Gly Ile Pro Val Ile Tyr Gly Pro Glu Leu
          165
                             170
                                            175
Asp Leu Pro Val Ile Glu Glu Lys Cys Leu Ala Trp Met Glu Cys Arg
              185 190
     180
Leu Leu Pro Val Thr Ser Ala Ala Glu Lys Tyr Asp Thr Leu Phe Gly
     195 200 205
Glu Val Val Ser Ala Ala Ala Asp Glu Arg Ala Phe Val Ala Gly Arg
 210 215 220
Trp Gln Phe Asp Gly Asp Lys Leu Asn Thr Leu His His Met Gly Ala
225 230 235
Gly Thr Phe Val Ala Ser Gly Lys Met Val Lys Ala Leu Glu
    245 250
<210> 8693
<211> 95
<212> PRT
<213> Enterobacter cloacae
<400> 8693
Gly Ala Pro Val Ala Ser Val Ser Ile Ser Cys Pro Ser Cys Ser Ala
Thr Asp Gly Val Val Arg Asn Gly Lys Ser Thr Ala Gly His Gln Arg
         20
                   25
Tyr Leu Cys Ser His Cys Arg Lys Thr Trp Gln Leu Gln Phe Thr Tyr
 35 40 45
Thr Ala Ser Gln Pro Gly Thr His Gln Lys Ile Ile Asp Met Ala Met
50 55
Asn Gly Val Gly Cys Arg Ala Thr Ala Arg Ile Met Gly Val Gly Leu
          70
                           7.5
Asn Thr Ile Phe Arg His Leu Lys Asn Ser Gly Arg Ser Arg
<210> 8694
<211> 73
<212> PRT
<213> Enterobacter cloacae
<400> 8694
Phe Arg Gly Leu Leu Ala Ala Gly Arg Asp Ile Cys Ser Tyr Gly
                             10
Asp Gln Asp Leu Val Glu Tyr Val Asp Val Gly Ala Ser Tyr Tyr Phe
                          25
                                        30
Asn Lys Asn Met Ser Thr Tyr Val Asp Tyr Lys Ile Asn Leu Val Asp
                      4.0
Asp Ser Gln Phe Thr Lys Asp Ala Lys Val Ala Thr Asp Asn Ile Val
                   55
Ala Val Gly Leu Thr Tyr Gln Phe
<210> 8695
<211> 491
<212> PRT
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<213> Enterobacter cloacae

<400> 8695 His Pro Ile Ile Pro Thr Ser His Arg Lys Val Ser Phe Cys Phe Tyr Leu Ile Phe Ser Leu His Leu Gly Lys Gln Glu Gly Asp Met Ser His 20 Gln Ser Glu Lys Ser Asn Gln His Leu Leu Ser Asn Trp Lys Pro Glu 40 Asn Ala Gln Phe Trp Glu Asn Lys Gly Lys His Ile Ala Arg Arg Asn 55 Leu Trp Ile Ser Val Ala Cys Leu Leu Leu Ala Phe Cys Val Trp Met 70 75 Leu Phe Ser Ala Ile Ala Val Asn Leu Asn Lys Val Gly Phe Asn Phe 85 90 Ser Thr Asp Gln Leu Phe Met Leu Thr Ala Leu Pro Ser Leu Ser Gly 100 105 110 Ala Ile Leu Arg Val Pro Tyr Ser Phe Met Val Pro Ile Phe Gly Gly 115 120 125 Arg Tyr Trp Thr Val Leu Ser Thr Val Ile Leu Val Val Pro Cys Val 130 135 140 Trp Leu Gly Ile Ala Ile Gln Asn Thr Ala Thr Pro Tyr Trp Val Phe 145 150 155 160 Ile Ile Ile Ala Leu Leu Cys Gly Phe Ala Gly Ala Asn Phe Ala Ser 165 170 175 Ser Met Gly Asn Ile Ser Phe Phe Phe Pro Lys Ala Arg Gln Gly Ser 180 185 190 Ala Leu Gly Ile Asn Gly Gly Leu Gly Asn Leu Gly Val Ser Val Met 195 200 205 Gln Leu Val Ala Pro Leu Val Ile Phe Leu Pro Met Phe Thr Phe Leu 210 215 220 Gly Val His Gly Val Pro Gln Glu Asp Gly Ser Thr Met Trp Leu Ala 225 230 235 Asn Ala Ala Trp Ile Trp Ala Pro Leu Leu Ile Leu Ala Thr Leu Ala 245 250 255 Ala Phe Phe Gly Met Asn Asp Ile Ala Ser Ser Lys Ala Ser Ile Ala 260 265 270 Ser Gln Leu Pro Val Leu Lys Arg Phe His Leu Trp Leu Leu Ser Leu 275 280 Leu Tyr Leu Ala Thr Phe Gly Ser Phe Ile Gly Phe Ser Ala Gly Phe 290 295 300 Ala Met Leu Ser Lys Thr Gln Phe Pro Asp Val Asn Ile Leu His Leu 305 310 315 Ala Phe Phe Gly Pro Leu Ile Gly Ala Leu Ala Arg Ser Ala Gly Gly 330 Met Ile Ser Asp Arg Leu Gly Gly Val Arg Val Thr Leu Ile Asn Phe 340 345 350 Val Phe Met Ala Ile Phe Ser Ala Leu Ile Phe Leu Thr Leu Pro Gly 360 365 Ser Gly Ser Gly Ser Phe Ile Ala Phe Tyr Leu Val Phe Met Gly Leu 375 380 Phe Leu Thr Ala Gly Leu Gly Ser Gly Ser Thr Phe Gln Met Ile Ala 390 395 Ile Ile Phe Arg Gln Ile Thr Leu Asp Arg Val Lys Lys Gln Gly Gly 405 410 415 Ser Asp Glu Gln Ala Gln His Glu Ala Val Thr Glu Thr Ala Ala Ala 425 Leu Gly Phe Ile Ser Ala Ile Gly Ala Val Gly Gly Phe Phe Ile Pro 435 440 Lys Ala Phe Gly Thr Ser Leu Ala Met Thr Gly Ser Pro Val Gly Ala 450 455 460 Met Lys Val Phe Leu Val Phe Tyr Ile Val Cys Val Leu Val Thr Trp

4434 470 Leu Val Tyr Gly Arg Lys Ser Ser Gln Lys 485 <210> 8696 <211> 530 <212> PRT <213> Enterobacter cloacae <400> 8696 Leu Ala Gly Arg Arg Arg Ser Gly Ser Gly Thr Gly Gly Glu Lys Met 10 Lys Ile Arg Ser Gln Val Gly Met Val Leu Asn Leu Asp Lys Cys Ile 20 25 Gly Cys His Thr Cys Ser Val Thr Cys Lys Asn Val Trp Thr Gly Arg 35 40 Glu Gly Met Glu Tyr Ala Trp Phe Asn Asn Val Glu Thr Lys Pro Gly 50 55 Ile Gly Tyr Pro Lys Asn Trp Glu Asp Gln Asp Glu Trp Gln Gly Gly 70 75 Trp Ile Arg Gly Ile His Gly Lys Leu Thr Pro Arg Leu Gly Gly Lys 85 90 Met Gly Val Leu Ser Lys Ile Phe Ala Asn Pro Val Leu Pro Gln Ile 100 105 110 Asp Asp Tyr Tyr Glu Pro Phe Thr Phe Asp Tyr Gln Asp Leu His Arg 115 120 125 Ala Pro Glu Gly Asp His Leu Pro Thr Ala Arg Pro Arg Ser Leu Ile 135 140 Asp Gly Lys Arg Met Asp Lys Ile Val Trp Gly Pro Asn Trp Glu Glu 145 150 155 160 Leu Leu Gly Gly Glu Phe Glu Lys Arg Ala Arg Asp Arg Asn Phe Gln 165 170 175 Lys Ile Gln Lys Glu Met Tyr Gly Gln Pne Glu Asn Thr Phe Met Met 180 185 190 Tyr Leu Pro Arg Leu Cys Glu His Cys Leu Asn Pro Ser Cys Val Ala 195 200 205 Thr Cys Pro Ser Gly Ala Ile Tyr Lys Arg Glu Glu Asp Gly Ile Val 210 215 220 Leu Ile Asp Gln Asp Lys Cys Arg Gly Trp Arg Leu Cys Ile Ser Gly 225 230 235 Cys Pro Tyr Lys Lys Ile Tyr Phe Asn Trp Lys Ser Gly Lys Ser Glu 245 250 255 250 255 Lys Cys Ile Phe Cys Tyr Pro Arg Ile Glu Ser Gly Gln Pro Thr Val 265 270 Cys Ser Glu Thr Cys Val Gly Arg Ile Arg Tyr Leu Gly Val Leu Leu 280 285 Tyr Asp Ala Asp Arg Ile Glu Glu Ala Ala Ser Thr Glu His Glu Thr 295 300 Asp Leu Tyr Glu Arg Gln Cys Asp Val Phe Leu Asn Pro Asn Asp Pro 310 315 Ala Val Ile Glu Glu Ala Leu Lys Gln Gly Ile Pro Gln Asn Val Ile 325 330 335 Asp Ala Ala Gln Arg Ser Pro Val Tyr Lys Met Ala Met Asp Trp Lys 340 350 345 Leu Ala Leu Pro Leu His Pro Glu Tyr Arg Thr Leu Pro Met Val Trp 355 360 365 Tyr Val Pro Pro Leu Ser Pro Ile Gln Ser Tyr Ala Asp Ala Gly Gly 375 380 Leu Pro Gln Ser Asp Gly Val Leu Pro Ala Val Glu Ser Leu Arg Ile

395

Pro Val Gln Tyr Leu Ala Asn Met Leu Ser Ala Gly Asp Thr Gly Pro

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405
                                 410
Val Leu Arg Ala Leu Lys Arg Met Met Ala Met Arg His Tyr Lys Arg
           420
                         425
Ser Gln Thr Val Glu Gly Val Thr Asp Thr Arg Ala Ile Glu Glu Val
       435
                     440
                                           445
Gly Leu Thr Glu Ala Gln Val Glu Glu Met Tyr Arg Tyr Leu Ala Ile
           455
                                        460
Ala Asn Tyr Glu Asp Arg Phe Val Ile Pro Thr Ser His Arg Glu Met
               470
                         475
Ala Arg Asp Ala Phe Pro Glu Lys Asn Gly Cys Gly Phe Thr Phe Gly
            485 490
Asp Gly Cys His Gly Ser Asp Thr Lys Phe Asn Leu Phe Asn Ser Ser
          500 505 510
Arg Ile Asp Ala Ile Asn Ile Thr Glu Val Arg Asp His Gly Glu Gly
             520
  530
<210> 8697
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 8697
Cys Cys Gln Leu Thr Asp Leu Val Tyr Asp Gly Val Phe Glu Val Leu
                                10
Gln Trp Leu Leu Phe Leu Ser Ala Val Pro Pro Val Gln Leu Leu Thr
       20
                  25
Gly Trp Cys Val Thr Ala Lys Ala Leu Pro Asp Ile Ser Ala Ile Ser
     35
                         40
                                         4.5
Ala Leu Thr Ala Val Lys His Gly Asn Cys Ser Ser Leu Thr Pro Leu
                   55
Leu Asn Pro Val Arg Thr Arg Lys Ser Leu Ile Trp Pro
                  7.0
<210> 8698
<211> 115
<212> PRT
<213> Enterobacter cloacae
<400> 8698
Pro Ile Val Asp Ile Ala Gln Ser His Ala Arg Arg Arg Lys Thr Met
                              10
Ile Pro Asn His Pro Glu Pro Glu Gln Ile Val Leu Glu Asn Val Leu
                            25
                                               30
Phe Ala Leu Gly Asn Pro Leu Arg Leu Ala Ile Ile Arg Arg Leu Ala
                        40
Asp Gly Ser Glu Leu Ser Cys Asn Ala Leu Arg Pro Glu Glu Val Val
                     55
Lys Ser Thr Met Thr His His Trp Arg Val Leu Arg Asp Ser Gly Val
                  70
                                    75
Ile Trp Gln Arg Pro Gln Gly Arg Glu Asn Met Ile Ser Leu Arg Arg
                                90
              85
Glu Asp Leu Asp Thr Arg Phe Pro Gly Leu Leu Ala Ile Leu Leu Gln
          100
                             105
Ala Lys
<210> 8699
<211> 299
<212> PRT
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<213> Enterobacter cloacae

```
<400> 8699
Ala Ala Met Leu Lys Asp Asn Phe Asn Asp Leu Leu Ser Phe Met Val
Val Ala Arg Glu Arg Ser Phe Thr Arg Ala Ala Ala Gln Leu Gly Val
Ser Gln Ser Ala Leu Ser His Ala Met Arg Asn Leu Glu Ala Arg Leu
Glu Val Arg Leu Leu Thr Arg Thr Thr Arg Ser Val Ala Pro Thr Glu
                  55
                                  60
Ala Gly Glu Gln Leu Phe Met Arg Leu Ser Pro His Leu Leu Glu Ile
               70
                               7.5
Glu Gln Glu Leu Thr Ala Leu Arg Asp Thr Arg Asp Arg Pro Ala Gly
            8.5
                            90
Asn Ile Arg Leu Asn Ala Gly Glu His Ala Met Ser Thr Val Leu Trp
         100
             105
Pro Val Leu Lys Pro Phe Met Ala Gln Tyr Pro Asp Ile Asn Val Glu
    115 120
                                125
Val Thr Val Asp Asn Gly Leu Thr Asp Ile Val Asp Gly Arg Phe Asp
       135
                           140
Ala Gly Val Arg Leu Gly Glu Gln Val Ala Lys Asp Met Ile Ala Val
      150 155
Arg Ile Ala Pro Asp Met Arg Met Ala Val Val Gly Ser Ala Glu Tyr
         165 170
Leu Gln Arg Phe Gly Ile Pro Lys Thr Pro Glu Gln Leu Asp Gln His
              185 190
        180
Arg Cys Ile Asn Met Arg Leu Pro Thr Arg Gly Gly Leu Tyr Ala Trp
   195 200
Glu Phe Glu Arg Asp Gly Arg Glu Leu Arg Val Arg Val Asp Gly Gln
 210 215 220
Leu Ile Leu Asn Ser Leu Pro Gln Arg Ile Asp Ala Ala Glu Asn Gly
225 230 235
Leu Gly Leu Ala Tyr Val Pro Gin Asp Ala Val Gin Asp Ala Leu Ala
          245 250
Lys Gly Arg Leu Val Gly Val Leu Glu Ala Trp Cys Pro Ala Phe Thr
         260 265 270
Gly Tyr His Leu Tyr Tyr Pro Ser Arg Arg Gln His Thr Thr Ala Phe
         280
Ala Leu Leu Ile Ala Ala Leu Arg His Thr
  290
```

<210> 8700 <211> 533 <212> PRT <213> Enterobacter cloacae

<400> 8700 Leu Glu Arg Gln His Val Ser Ala Gln Lys Gln Ser Phe Val Ser Ala 10 Ser Ala Arg Gln Asp Tyr His Val Asn Gly Ser Asp Arg Gln Thr Gly 25 30 Asn Ser Met Lys Thr Ser Asn Lys Ser Ala Ala Asp His His Ala Ala 35 4.0 Lys Arg Arg Trp Leu Asn Ser His Glu Glu Gly Tyr His Lys Ala Met 55 Gly Asn Arg Gln Val Gln Met Ile Ala Ile Gly Gly Ala Ile Gly Thr 75 7.0 Gly Leu Phe Leu Gly Ala Gly Ala Arg Leu Gln Met Ala Gly Pro Ala 90 Leu Ala Leu Val Tyr Leu Val Cys Gly Ile Phe Ser Phe Phe Ile Leu

```
100
                       105
Arg Ala Leu Gly Glu Leu Val Leu His Arg Pro Ser Ser Gly Ser Phe
                   120
Val Ser Tyr Ala Arg Glu Phe Leu Gly Glu Lys Ala Ala Tyr Val Ala
         135
                               140
Gly Trp Met Tyr Phe Val Asn Trp Ala Met Thr Gly Ile Val Asp Ile
         150 155
Thr Ala Val Ala Leu Tyr Met His Tyr Trp Gly Ala Phe Gly Asp Val
      165
               170 175
Pro Gln Trp Val Phe Ala Leu Gly Ala Leu Ala Ile Val Gly Thr Met
       180
            185 190
Asn Met Ile Gly Val Lys Trp Phe Ala Glu Met Glu Phe Trp Phe Ala
     195 200 205
Leu Val Lys Val Leu Ala Ile Val Ile Phe Leu Val Val Gly Thr Val
      215 220
Phe Leu Gly Thr Gly Lys Pro Leu Asp Gly Asn Ala Thr Gly Phe His
225 230 235 240
Leu Ile Thr Asp Asn Gly Gly Phe Phe Pro His Gly Leu Leu Pro Ala
      245 250 255
Leu Val Leu Val Gln Gly Val Val Phe Ala Phe Ala Ser Ile Glu Leu
 260 265 270
Val Gly Thr Ala Ala Gly Glu Cys Lys Asp Pro Gln Thr Met Val Pro
275 280 285
Lys Ala Ile Asn Ser Val Ile Trp Arg Ile Gly Leu Phe Tyr Val Gly
290 295 300
Ser Val Val Leu Leu Leu Leu Pro Trp Asn Ala Tyr Gln Ala
305 310 315 320
Gly Gln Ser Pro Phe Val Thr Phe Phe Ser Lys Leu Gly Val Pro Tyr
         325 330
Val Gly Ser Ile Met Asn Ile Val Val Leu Thr Ala Ala Leu Ser Ser
  340 345
                          350
Leu Asn Ser Gly Leu Tyr Ser Thr Gly Arg Ile Leu Arg Ser Met Ser
355 360 365
Met Gly Gly Ser Ala Pro Lys Phe Met Ser Lys Met Ser Lys Gln Gln
370 375 380
Val Pro Tyr Ala Gly Ile Leu Ala Thr Leu Val Val Tyr Ile Phe Gly
385 390 395 400
Val Phe Leu Asn Tyr Leu Val Pro Ser Gln Val Phe Glu Ile Val Leu
      405 410
Asn Val Ala Ala Leu Gly Ile Ile Ala Ser Trp Ala Phe Ile Val Val
                      425 430
Cys Gln Met Arg Leu Arg Lys Ala Ile Lys Glu Gly Lys Ala Ala Asp
                 440
                                 445
Val Ser Phe Lys Leu Pro Gly Ala Pro Val Thr Ser Trp Leu Thr Leu
  450 455
                               460
Leu Phe Leu Leu Ser Val Leu Val Leu Met Ala Phe Asp Tyr Pro Asn
465 470
                            475
Gly Thr Tyr Thr Ile Ala Thr Ile Pro Leu Leu Ala Val Leu Leu Ile
           485 490 495
Ala Gly Trp Phe Gly Val Arg Lys Arg Val Asn Glu Ile His Ser Thr
            505
Ala Pro Val His Pro Gly Asp Asp Lys Gln Asp Gly Pro Leu Val Glu
  515 520
Glu Thr Ser Arg
  530
```

<210> 8701

<211> 332 <212> PRT

<213> Enterobacter cloacae

```
<400> 8701
Pro Val Tyr Ser Met Lys Ile Ile Thr Ala Arg Lys Ala Ser Leu Pro
Leu Leu Phe Ala Pro Val Ile Phe Gly Pro Leu Ser Ala Met Ala Ala
Asp Glu Gln Thr Leu Ile Val Ser Ala Thr Pro Gln Thr Val Ser Glu
                     40
Leu Asp Thr Pro Ala Ala Val Ser Val Val Ser Gly Glu Asp Met Arg
                 55
His Ala Thr Pro Arg Ile Asn Leu Ser Glu Ser Leu Gly Ser Val Pro
              70
                            75
Gly Leu Gln Ile Gln Asn Arg Gln Asn Tyr Ala Gln Asp Leu Gln Leu
           85
                    90
Ser Val Arg Gly Phe Gly Ala Arg Ser Thr Phe Gly Val Arg Gly Ile
        100
            105 110
Arg Met Tyr Val Asp Gly Ile Pro Ala Thr Met Pro Asp Gly Gln Gly
     115
          120 125
Gln Thr Ser Asn Ile Asp Leu Asn Ser Ile Glu Ser Val Asp Val Leu
      135 140
Arg Gly Pro Phe Ser Ala Leu Tyr Gly Asn Ala Ser Gly Gly Val Ile
     150 155
Asn Ile Asn Thr Gln Thr Gly Gln Gln Pro Ala Thr Ile Glu Ala Ser
         165 170
Ser Tyr Tyr Gly Ser Tyr Gly Tnr Trp Arg Tyr Gly Met Lys Ala Thr
        180 185
Gly Ala Val Gly Asp Gly Thr Gln Ala Gly Asp Val Asp Tyr Ala Val
195 200 205
Ser Thr Thr Arg Phe Thr Thr His Gly Tyr Arg Asp His Ser Gly Ala
210 215
                                 220
Arg Lys Asn Leu Ala Asn Ala Lys Leu Gly Val Arg Ile Asp Asp Val
225 230 235
Ser Lys Leu Thr Leu Ile Phe Asn Ser Val Asp Met Lys Ala Asn Asp
        245 250
Pro Gly Gly Leu Ser Tyr Gln Glu Trp Gln Asn Asn Pro Arg Gln Ser
       260 265 270
Pro Arg Gly Asp Gln Tyr Asn Thr Arg Lys Thr Ile Lys Gln Thr Gln
     275 280 285
Ala Gly Ile Arg Tyr Asp Cys Gln Leu Ser Glu Gln Asp Asp Leu Ser
 290 295 300
Val Met Met Tyr Ala Gly Glu Arg Glu Met Thr Gln Tyr Gln Ser Ile
305 310 315
Pro Asp Thr Ala Gln Thr Glu Asn Pro Ala His
```

<210> 8702 <211> 1261 <212> PRT

<213> Enterobacter cloacae

9.0 Pro Asp Leu Pro Asn His Glu Pro Arg Gly Cys Pro Arg Gly Ala Ser 105 100 Tyr Ser Trp Tyr Leu Tyr Ser Ala Asn Arg Leu Lys Tyr Pro Leu Val 115 120 125 Arg Arg Arg Leu Ile Glu Leu Trp Arg Glu Ala Leu Ala Gln His Thr 140 130 135 Asp Pro Val Leu Ala Trp Asp Ala Ile Gln Asn Asp Lys Gln Lys Ala 145 150 155 160 Gln Ser Tyr Arg Lys Ala Arg Gly Lys Gly Gly Phe Ile Arg Ser Asn 165 . \$170Trp Lys Glu Leu Asn Gln Leu Ile Ala Ala Ala Asn Val Trp Thr Ile 180 185 190 Lys Asn Tyr Gly Pro Asp Arg Val Ala Gly Phe Ser Pro Ile Pro Ala 195 200 205 Met Ser Met Val Ser Tyr Ala Ala Gly Thr Arg Tyr Leu Ser Leu Leu 210 215 220 Gly Gly Thr Cys Leu Ser Phe Tyr Asp Trp Tyr Cys Asp Leu Pro 225 230 235 Ala Ser Pro Met Thr Trp Gly Glu Gln Thr Asp Val Pro Glu Ser Ala 245 250 255 Asp Trp Tyr Asn Ser Ser Tyr Ile Ile Ala Trp Gly Ser Asn Val Pro 260 265 270 Gln Thr Arg Thr Pro Asp Ala His Phe Phe Thr Glu Val Arg Tyr Lys 275 280 285 Gly Thr Lys Thr Val Ala Ile Thr Pro Asp Phe Ser Glu Val Ala Lys 290 295 300 Leu Ser Asp Gln Trp Leu Ala Pro Lys Gln Gly Thr Asp Ser Ala Leu 305 310 315 320 Ala Met Ala Met Gly His Val Ile Leu Lys Glu Phe His Leu Asp Asn 325 330 335Pro Ser Asp Tyr Phe Leu Asn Tyr Cys Arg Arg Tyr Thr Asp Met Pro 340 345 350 Met Leu Val Leu Leu Asp Glu Gln Ala Asp Gly Arg Val Val Pro Gly 355 360 365 Arg Met Leu Arg Ala Ser Asp Leu Ala Asp Gly Leu Gly Glu Thr Asn 370 375 380 Asn Pro Glu Trp Lys Thr Ile Ala Phe Asp Val Ala Gly Asn Leu Val 385 390 395 400 Ala Pro Asn Gly Ser Ile Gly Phe Arg Trp Gly Glu Lys Gly Lys Trp 405 410 415 Asn Leu Glu Ser Leu Ala Ala Gly Gln Glu Thr Glu Leu Thr Leu Ser 420 425 430 Leu Leu Ile Thr His Asp Ser Val Ala Asp Val Ala Phe Pro Tyr Tyr 435 440 445 Gly Gly Asn Glu Asn Pro His Phe Arg Ser Val Lys Gln Glu Pro Val 450 455 460 Leu Thr Arg Arg Val Pro Ser Lys Thr Leu Thr Leu Ala Asp Gly Ser 465 470 475 Gln Arg Arg Val Val Ser Val Tyr Asp Leu Val Leu Ala Asn Tyr Gly 485 490 495 Leu Asp Arg Gly Leu Glu Asp Ser Asn Ala Ala Thr Asn Tyr Ala Glu 500 505 510 Ile Lys Ala Tyr Thr Pro Ala Trp Gly Glu Gln Ile Thr Gly Val Pro 515 520 525 Ala Tyr Leu Ile Glu Lys Ile Ala Arg Glu Phe Ala Asp Thr Ala His 530 535 540 Lys Thr His Gly Arg Ser Met Ile Ile Leu Gly Ala Gly Val Asn His 545 550 555 560 Trp Tyr His Met Asp Met Asn Tyr Arg Gly Met Ile Asn Met Leu Val 565 570

Phe Cys Gly Cys Val Gly Gln Ser Gly Gly Gly Trp Ser His Tyr Val 585 580 Gly Gln Glu Lys Leu Arg Pro Gln Thr Gly Trp Leu Pro Leu Ala Phe 595 600 Ala Leu Asp Trp Asn Arg Pro Pro Arg Gln Met Asn Ser Thr Ser Tyr 615 Phe Tyr Asn His Ala Ser Gln Trp Arg Tyr Glu Lys Leu Thr Ala Arg 630 635 Glu Leu Leu Ser Pro Leu Ala Asp Ala Ser Lys Phe Thr Gly His Leu 650 645 Ile Asp Phe Asn Val Arg Ala Glu Arg Met Gly Trp Leu Pro Ser Ala 660 665 670 Pro Gln Leu Asn Leu Asn Pro Leu His Val Lys Ala Arg Ala Asn Ala 675 680 685 Ala Gly Met Ser Pro Gln Asp Tyr Thr Val Gln Ala Leu Lys Ser Gly 690 695 700 Asp Ile Arg Phe Ala Cys Glu Gln Pro Asp Asn Gly Lys Asn His Pro 705 710 715 Arg Asn Leu Phe Val Trp Arg Ser Asn Leu Leu Gly Ser Ser Gly Lys 725 730 735 Gly His Glu Tyr Met Leu Lys Tyr Leu Leu Gly Thr Glu Ser Gly Ile 740 745 750 Gln Gly Glu Asp Leu Gly Ser Thr Asp Asp Val Lys Pro Glu Glu Val 755 760 765 Glu Trp Gln Thr Ala Ala Ile Glu Gly Lys Leu Asp Leu Leu Val Thr 770 775 . 780 Leu Asp Phe Arg Met Ser Ser Thr Cys Leu Phe Ser Asp Ile Val Leu 785 790 795 800 Pro Thr Ala Thr Trp Tyr Glu Lys Asp Asp Met Asn Thr Ser Asp Met 805 810 815 His Pro Phe Ile His Pro Leu Ser Ala Ala Val Asp Pro Ala Trp Glu 820 825 Ser Arg Ser Asp Trp Glu Ile Tyr Lys Gly Ile Ala Lys Val Phe Ser 840 845 Glu Val Cys Val Gly His Leu Gly Thr Glu Thr Asp Val Val Leu Gln 850 855 860 Pro Leu Gln His Asp Ser Pro Gly Glu Leu Ser Gln Pro Phe Asp Ile 865 870 875 Leu Asp Trp Arg Lys Gly Glu Cys Asp Leu Ile Pro Gly Lys Thr Ala 885 890 895 Pro Asn Ile Ala Val Val Glu Arg Asn Tyr Pro Glu Thr Tyr Glu Arg 900 905 910 Phe Thr Ala Leu Gly Pro Leu Leu Asp Thr Leu Gly Asn Gly Gly Lys 915 920 Gly Ile Ser Trp Asn Thr Gln Asn Glu Val Asp Phe Leu Gly Lys Leu 930 935 940 Asn Tyr Val Lys Leu Asp Gly Pro Ala Lys Gly Arg Pro Arg Ile Glu 945 950 955 Thr Ala Ile Asp Ala Ser Glu Val Ile Leu Ala Leu Ala Pro Glu Thr 965 970 Asn Gly Gln Val Ala Val Lys Ala Trp Glu Ala Leu Gly Glu Leu Thr 980 985 Gly Arg Asp His Thr His Leu Ala Leu Asn Lys Glu Asp Glu Lys Ile 1000 1005 Arg Phe Arg Asp Ile Gln Ala Gln Pro Arg Lys Ile Ile Ser Ser Pro 1010 1015 1020 Thr Trp Ser Gly Leu Glu Ser Glu His Val Ser Tyr Asn Ala Gly Tyr 1025 1030 1035 Thr Asn Val His Glu Leu Ile Pro Trp Arg Thr Ile Ser Gly Arg Gln 1045 1050 Gln Leu Tyr Gln Asp His Ala Trp Met Arg Ala Phe Gly Glu Ser Leu

```
1065
        1060
Val Ala Tyr Arg Pro Pro Ile Asp Thr Arg Ser Val Thr His Met Arg 1075 1080 1085
Glu Ile Pro Pro Asn Gly Tyr Pro Glu Lys Ala Leu Asn Phe Leu Thr
  1090 1095 1100
Pro His Gln Lys Trp Gly Ile His Ser Thr Tyr Ser Glu Asn Leu Leu
1105 1110 1115 1120
Met Gln Thr Leu Ser Arg Gly Gly Pro Ile Val Trp Ile Ser Glu Thr
       1125 1130 1135
Asp Ala Arg Glu Leu Gly Ile Glu Asp Asn Asp Trp Ile Glu Ala Phe
     1140 1145 1150
Asn Ala Asn Gly Ala Leu Thr Ala Arg Ala Val Val Ser Gln Arg Val
1155 1160 1165
Pro Pro Gly Met Thr Met Met Tyr His Ala Gln Glu Arg Ile Leu Asn
 1170 1175 1180
Ile Pro Gly Ser Glu Val Thr Gly Arg Arg Gly Gly Ile His Asn Ser
1185 1190 1195 1200
Val Thr Arg Val Cys Pro Lys Pro Thr His Met Ile Gly Gly Tyr Ala
         1205 1210 1215
Gln Leu Ala Tyr Ser Phe Asn Tyr Tyr Gly Thr Val Gly Ser Asn Arg $1220$ $1225$ $1230
Asp Glu Phe Ile Met Ile Arg Lys Met Lys Asn Ile Asn Trp Leu Asp
1235 1240 1245
Gly Glu Gly Arg Asp Gln Val Gln Glu Ala Lys Lys
        1255
<210> 8703
<211> 243
<212> PRT
<213> Enterobacter cloacae
<400> 8703
Pro Gly Arg Arg Ala Ala Val Arg Gly Arg Gln Arg Arg Pro Lys
         5 10
Met Thr His Tyr Leu Asn Val Phe Phe Tyr Asp Ile Tyr Pro Tyr Ile
20 25
Cys Ala Thr Val Phe Phe Leu Gly Ser Trp Leu Arg Tyr Asp Tyr Gly
 35 40 45
Gln Tyr Thr Trp Arg Ala Ser Ser Ser Gln Met Leu Ser Lys Arg Gly
 50 55 60
Met Asn Trp Ala Ser Asn Leu Phe His Ile Gly Ile Leu Gly Ile Phe
       70 75
Phe Gly His Leu Phe Gly Met Leu Thr Pro His Trp Met Tyr Ala Trp
          8.5
                          90
Phe Leu Pro Ile Ala Val Lys Gln Gln Leu Ala Met Ile Ala Gly Gly
        100 105 110
Ile Cys Gly Val Leu Thr Leu Ile Gly Gly Ser Met Leu Leu Ile Arg
     115 120 125
Arg Leu Phe Asn Gln Arg Val Arg Ala Thr Ser Thr Thr Pro Asp Ile
 130 135
                                140
Ile Ile Met Ser Ile Leu Leu Leu Gln Cys Ile Leu Gly Leu Ser Thr
145 150 155 160
Ile Pro Phe Ser Ala Gln Tyr Pro Asp Gly Ser Glu Met Met Lys Leu
     165
                         170 175
Val Gly Trp Ala Gln Gly Ile Val Thr Phe Lys Gly Gly Ser Ser Glu
       180
                     185
                                      190
Met Leu Ser Gly Val Ala Pro Ile Pne Arg Val His Leu Val Leu Gly
  195 200
                                  205
Met Thr Ile Phe Leu Ile Phe Pro Phe Thr Arg Leu Val His Val Trp
 210 215
Ser Ala Pro Phe Glu Tyr Phe Thr Arg Arg Tyr Gln Val Val Arg Ser
```

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<210> 8704
<211> 175
<212> PRT
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<213> Enterobacter cloacae

<400> 8704

15

1.3

ru

M

111

17

1,3

14 4

14

14

1.0

Tyr Gly His Glu Trp Arg Trp Met Pro Gly Asn Arg Pro His Tyr Gly 10 Arg Trp Pro Gln His Asp Phe Pro Pro Phe Lys Lys Leu Arg Pro Gln 20 25 Ser Val Thr Ser Arg Ile Gln Pro Gly Ser Asp Val Ile Val Cys Ala 40 Glu Met Asp Glu Gln Trp Gly Tyr Val Gly Ala Lys Ser Arg Gln Arg 55 Trp Leu Phe Tyr Ala Tyr Asp Arg Leu Arg Lys Thr Val Val Ala His 70 Val Phe Gly Glu Arg Thr Met Ala Thr Leu Gly Arg Leu Met Ser Leu 8.5 90 95 Leu Ser Pro Phe Asp Val Val Ile Trp Met Thr Asp Gly Trp Pro Leu 105 100 110 Tyr Glu Ser Arg Leu Lys Gly Lys Leu His Val Ile Ser Lys Arg Tyr 115 120 125

Thr Gln Arg Ile Glu Arg His Asn Leu Asn Leu Arg Gln His Leu Ala 135 140

Arg Leu Gly Arg Lys Ser Leu Ser Phe Ser Lys Ser Val Glu Leu His 150 155 Asp Lys Val Ile Gly His Tyr Leu Asn Ile Lys His Tyr Gln 165 170

<210> 8705 <211> 179 <212> PRT

<213> Enterobacter cloacae

<400> 8705

Leu Thr Leu His Thr Leu Arg Asn Asp Leu Phe Arg His Ile Pro Arg 15 10 Ser Phe Arg Lys Met Met Glu Phe His Arg Ile Arg Arg Ala Pro Leu 20 25 Gly His Arg Ala Gln Arg Gly Gly Ile Thr Lys His Leu Ser Gln Arg 35 4.0 Asp Val Ser Ala Asn Asn Leu Ala Ala Val Leu Leu Cys His Pro Leu 55 60 His Gln Ala Ala Thr Gly Gly Glu Ile Ala His Asn Val Pro Gly Ile 70 75 Leu Phe Arg Arg Phe His Leu Asn Val His Asp Arg Leu Lys Asn Asn 90 85 Arg Val Arg Pro Pro Cys Ala Leu Phe Glu Ala Glu Asp Arg Arg His 100 105 Ala Glu Gly His Leu Arg Gly Val Asn Val Met Val Arg Thr Lys Arg 115 120 Gln Gly Arg Phe His Ile His His Arg Ile Ala Arg Gln His Thr Arg Ile His Gly Phe Ser Gln Pro Phe Phe His Arg Arg Asp Val Leu Pro

150 155 Arg His His Pro Ala Phe Gly Gly Ile Phe Lys His Lys Thr Thr Pro 165 170

Gly Cys

<210> 8706 <211> 90 <212> PRT <213> Enterobacter cloacae

<400> 8706

Arg Leu Lys Ala Gln Asp His Met Thr Val Leu Pro Phe Pro Ala Gly 10 10 15 15 16 16 19 16 18

Arg Arg Ile Phe Arg Arg Gln Ala Leu 85

<210> 8707

<211> 318 <212> PRT

<213> Enterobacter cloacae

<400> 8707

Ser Asp Pro His Phe Leu Leu Ile Gly Leu Gly Phe Arg Leu Asn Arg 10 Gln Arg Asn Asn Arg Ile Arg Glu Leu His Pro Phe Lys Gly Asp His 25 Arg Ile Arg Val Gly Gln Arg Val Thr Gly Gly Asp Val Phe Gln Pro 40 4.5 Asp Thr Gly Cys Asp Ile Pro Cys Ala Gln Leu Val His Leu Met Ala 55 60 Ile Val Gly Met His Gln His Asp Ala Pro Asp Thr Leu Phe Leu Ala 75 70 Leu His Arg Val Val His Arg Val Ala Phe Thr Gln Tyr Ala Gly Ile 85 90 Asp Ala Asp Glu Gly Gln Leu Ala Asp Val Arg Ile Ala His Gln Leu 100 105 110 Glu Gly Gln Arg Arg Glu Arg Phe Ile Ile Ala Trp Val Ala Leu Gly 115 120 125 Val Leu Ser Val Phe Val Tyr Pro Ile Asn Ser Gly His Val Gln Trp 130 135 140 Arg Arg His Gln Phe Asn His Arg Val Glu His Ala Leu His Ala Leu 150 155 Val Leu Glu Ser Ala Ala Ala Gln His Gly Leu Tyr Phe Thr Gly Asp 165 170 175 Ser Pro Asp Pro Gln Ser Phe Asp Asp Phe Arg Phe Ile Gln Phe Ala 180 185 190 Arg Leu Lys Val Leu Ile His Lys Leu Ile Ala Gly Phe Cys Arg Arg 195 200 Arg Asp His Phe Phe Ser Pro Arg Leu Gly Gly Thr Gln Gln Ile Val 215 Arg His Arg Arg Val Ala Lys Cys His Ala Leu Arg Arg Ile Val Pro 230 235 240 Gln Asn Gly Ala His Leu Asp Glu Ile His His Ala Gly Glu Val Phe 245 250

Phe Cys Pro His Gly Asp His Asn Arg Asp Arg Ile Gly Phe Gln Pro

260 265 Leu Leu His His Pro His His Ala Glu Glu Ile Cys Ala Arg Ala Val 280 285 His Phe Val Asp Glu Cys Gln Thr Arg Asn Met Val Phe Ile Arg Leu 290 295 300 Thr Pro Asp Gly Phe Arg Leu Arg Leu His Ala Thr Asp 310 <210> 8708 <211> 134 <212> PRT <213> Enterobacter cloacae <400> 8708 Ile Met Lys Ile Ile Arg Ser Gly Ser Leu Pro Ser Val Gln Gly Pro 10 Glu Ala Trp Phe Thr Gly Ser Val Arg Ile Asp Ala Pro Phe Gln Ala 20 2.5 3.0 Thr Glu Pro Ala Lys Val Gly Gly Ala Thr Val Thr Phe Glu Pro Gly 35 40 Ala Arg Thr Ala Trp His Thr His Pro Leu Gly Gln Thr Leu Ile Val 5.0 55 Thr Gln Gly Arg Gly Trp Leu Gin Glu Trp Gly Lys Glu Ala Glu Pro 70 75 Leu Asn Gln Gly Asp Ile Ala Trp Ile Pro Pro Gly Val Lys His Trp 85 90 His Gly Ala Ser Ala Gln Thr Ala Met Thr His Ile Ala Ile Ala Glu 100 105 Ala Val Glu Gly Ser Pro Val Ala Trp Leu Glu Lys Val Thr Asp Glu 115 120 Gln Tyr Pro Asn Glu 130 <210> 8709 <211> 340 <212> PRT <213> Enterobacter cloacae <400> 8709 Val Lys Arg Glu Arg Asn Met Ser Trp Arg Ile Ser Ile Leu Asp Lys 1.0 Ser Pro Val Ala Glu His Glu Thr Ala Ala Asp Ala Leu Ala Arg Thr 20 25 Leu Ala Leu Ala Gln Gln Ala Glu Thr Leu Gly Tyr His Arg Phe Trp 40 Ile Ala Glu His His Asn Thr Pro Gln Leu Ala Ser Pro Ser Pro Glu 50 55 Leu Leu Ile Ala Trp Ile Leu Gly Gln Thr Lys Arg Ile Arg Val Gly 7.0 7.5 80 Ser Gly Gly Val Met Leu Gln His Tyr Ser Pro Tyr Lys Val Ala Glu 85 90 Asn Phe Asn Val Leu Ala Ala Ile Ala Pro Gly Arg Val Asp Leu Gly 100 110 Val Gly Lys Ala Pro Gly Gly Leu Pro Leu Ser Thr Arg Ala Leu Gln 115 120 125 Tyr Gly Leu Asn Pro Gln Glu Lys Gly Ser Phe Ala Asp Gln Leu Thr 130 135 140 Gln Leu Asp Arg Trp Ile Arg Pro Glu Asn Gln Ser Ala Glu Glu Asp 150 155 Val Arg Ala Thr Pro Leu Pro Pro Ala Pro Ala Arg Gly Phe Leu Leu

170

Gly Ala Ser Thr Glu Ser Val Leu Leu Ala Ala Ser Leu Asp Trp His 180 185 Phe Val Phe Ala Ala His Leu Asn Gly Asp Pro Glu Leu Leu Arg Asp 200 Val Val Thr Ala Trp Arg Gln His Ser Val Arg Glu Val Ile Val Ala 215 210 220 Val Gln Ala Ile Val Ala Pro Thr Gln Ala Glu Ala Asp Ala Leu Ala 230 235 Gln Lys Val Glu Val Trp Gly Val Glu Leu Ala Asn Gly Gln Arg Val 250 255 245 Thr Val Ala Ser Glu Glu Gln Ala Tyr Ala Phe Ala Arg Gln Ala Gly 260 265 270 Ser Glu Pro Val Arg Ile Ala Arg Arg Ala Gln Ser Leu Leu Ala Gly 275 280 285 Thr Ala Ala Ser Val His Glu Gln Leu Asn Ala Leu His Gln Gln Trp 290 295 300 Gly Ile Asp Glu Phe Ile Ile Asp Thr Pro Val Ala Asp Gly Ala Thr 305 310 315 320 Arg Val Gln Ser Leu Arg Leu Leu Ala Glu Ala Arg Leu Asn Arg Glu 325 330 Val Thr Val

340

3

<210> 8710 <211> 443

<212> PRT <213> Enterobacter cloacae

<400> 8710 Phe Glu Val Asn Met Thr Ala His Arg Gln Leu Arg Leu Gly Thr Ile 10 Leu His Gly Ala Ser Gly Asn Met Ser Ala Trp Arg His Pro Ala Ala 20 25 Val Ala Asp Ala Ser Ile Asn Phe Asp Phe Val Lys Glu Thr Ala Leu 4.0 Lys Ala Glu Glu Gly Lys Leu Asp Phe Ile Phe Val Ala Asp Gly Leu 55 60 Tyr Ile Asn Glu Lys Ser Ile Pro His Phe Leu Asn Arg Phe Glu Pro 65 70 75 Leu Thr Val Leu Ser Ala Leu Ala Ser Ile Thr Ser Arg Leu Gly Leu 85 90 Val Gly Thr Leu Ser Thr Ser Tyr Ser Glu Pro Phe Thr Val Ala Arg 105 110 Gln Phe Ala Ser Leu Asp His Leu Ser Asn Gly Arg Ala Gly Trp Asn 115 120 125 Val Val Thr Ser Pro Leu Glu Gly Ser Ala Arg Asn Phe Ser Arg Glu 135 140 Lys His Pro Glu His Ala Leu Arg Tyr Arg Ile Ala Asp Glu Tyr Leu 150 155 160 Asp Val Val Lys Gly Leu Trp Asp Ser Trp Glu Gly Asp Ala Phe Ile 165 170 175 Arg Asn Lys Glu Ser Gly Gln Phe Phe Asp Ala Ser Lys Leu His Thr 185 180 190 Leu Asp His His Gly Asp Phe Phe Gln Val Ser Gly Pro Leu Asn Ile 195 200 205 Gly Arg Thr Pro Gln Gly Arg Pro Ile Val Phe Gln Ala Gly Ala Ser 210 215 Asp Asp Gly Lys Lys Leu Ala Ala Lys His Ala Asp Ala Ile Phe Thr 230 235 His His Asp Thr Arg Glu Glu Ala Gln Ala Phe Tyr Arg Asp Val Lys 245 250

Gln Gln Leu Glu Ser His Gly Arg Arg Ala Gly Asp Leu His Ile Phe 260 265 Gln Gly Val Ser Val Ile Val Gly Asn Asp Ala Asp Asp Val Glu Asn 275 280 285 Gln Tyr Gln Thr Thr Ala Ala Leu Val Ser Ile Asn Asp Ala Leu Asn 290 295 300 Tyr Leu Gly Arg Tyr Phe Glu His His Asp Phe Ser Gln Tyr Pro Leu 310 315 320 Asp Ala Pro Phe Pro Asp Ile Gly Asp Leu Gly Lys Asn Ser Phe Arg 325 330 335 Ser Thr Thr Asp Glu Ile Lys Arg Asn Ala Arg Glu Arg Asn Leu Thr 340 345 350 Leu Arg Gln Val Ala Leu Glu Ala Ala Ser Pro Arg Pro Arg Phe Ser 355 360 Gly Thr Pro Glu Gln Val Ala Asp Gly Leu Gln Ala Trp Phe Glu Glu 370 375 380 Lys Ala Ala Asp Gly Phe Ile Ile Gln Gly Gly Thr Pro Asp Thr Phe 385 390 395 Pro Arg Phe Val Asp Gln Val Val Pro Val Leu Gln Ala Arg Gly Leu 405 410 415 Phe Arg Thr Asp Tyr Pro Gly Thr Thr Leu Arg Glu Ser Leu Gly Leu 420 425 Asp Glu Pro Lys Asn Gln Phe Thr Gln Gln

440

<210> 8711 <211> 279 <212> PRT

<213> Enterobacter cloacae

<400> 8711 Thr Arg Thr Gly Arg Arg Val Ala Arg Val Arg Ser Pro Leu Arg Gln 1.0 His Arg Ser Leu Phe Met Gln Ala Ser Pro Glu Gly His Ile Ser Ile 25 30 Thr Gly Val Ser Lys Phe Phe Gly Arg His Lys Ala Leu Asp Asn Val 4.0 Thr Leu Glu Ile Pro Pro Gly Ser Val Thr Val Ile Leu Gly Pro Ser 50 55 Gly Ser Gly Lys Ser Thr Leu Leu Arg Ala Ile Asn His Leu Glu Arg 65 70 7.5 Val Asp Glu Gly Phe Ile Gln Ile Asp Gly Asp Tyr Ile Gly Tyr Arg 90 Arg Gln Gly Asp Lys Leu Tyr Glo Leu Lys Glu Arg Glu Ile Leu Lys 105 Gln Arg Val Asn Val Gly Tyr Val Phe Gln Asn Phe Asn Leu Phe Pro 125 120 His Leu Thr Val Leu Glu Asn Leu Ile Glu Ala Pro Ile Ala His Lys 135 140 Lys Phe Ser Lys Lys Glu Ala Val Glu Asn Ala Tyr Ser Leu Leu Asp 150 155 Val Val Gly Leu Arg Asp Lys Ala Asp Ala Trp Ser Arg His Leu Ser 165 170 175 Gly Gly Gln Gln Arg Ile Ala Ile Ala Arg Ala Leu Ala Leu Arg 180 185 190 Pro Arg Val Met Leu Phe Asp Glu Pro Thr Ser Ala Leu Asp Pro Glu 205 200 Leu Val Gly Glu Val Leu Asp Val Ile Lys Lys Leu Ala Arg Ser Gly 215 220 Thr Thr Leu Val Val Val Thr His Glu Ile Gly Phe Ala Arg Glu Val 230 235 240

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Ala Asp Gln Val Val Phe Met Val Asp Gly Lys Ile Val Glu Gln Gly
                250
            245
Ser Ser Asp Asp Val Leu Asn Arg Pro Ser His Pro Arg Thr Arg Gln
         260
               265
Phe Leu Ser Lys Val Leu
    275
<210> 8712
<211> 299
<212> PRT
<213> Enterobacter cloacae
<400> 8712
Gly Ala Gln Met Lys Tyr Gly Leu Leu Ala Gly Leu Val Phe Thr Thr
                          10
Ala Ser His Ala Ser Ile Asp Leu Lys Ala Asn Glu Gln Pro Leu Pro
        20
                      25
                                  3.0
Val Thr Val Asp Gln Gln Ala Val Ala Lys Ile Pro Ala Asn Tyr Lys
    35
                40
                               4.5
Phe Val Glu Pro Gly Thr Leu Thr Val Ala Ile Ser Ala Leu Asn Ser
50
                55
Pro Pro Leu Ala Leu Leu Ala Ser Asp Asn Arg Thr Arg Ile Gly Ser
            70 75
Asp Pro Asp Ile Ala Arg Leu Leu Ala Gly Ser Leu Gly Leu Lys Leu
         85 90
Lys Leu Val Pro Thr Ala Trp Glu Asp Trp Pro Leu Gly Ile Thr Ser
   100 105 110
Gly Arg Tyr Asp Val Ala Leu Val Asn Ile Ala Val Thr Glu Gln Arg
      115 120 125
Lys Glu Lys Phe Asp Phe Ala Thr Tyr Arg Val Asp Ser Leu Ala Phe
 130 135
                                  140
Ser Val Lys Ser Thr Ser Asn Val Gln Ser Ile Thr Ser Ala Lys Asp
145 150 155
Leu Ala Gly Lys Lys Val Ile Val Gly Ser Gly Thr Asn Gln Glu Arg
           165 170 175
Ile Leu Leu Gly Trp Asn Glu Glu Asn Lys Lys Ala Gly Arg Glu Pro
        180 185 190
Ala Leu Pro Val Tyr Leu Thr Asp Asp Ala Ser Gly Asn Leu Tyr Ile
    195 200
Gln Ser Gly Arg Ala Asp Val Phe Phe Gly Pro Gln Ser Val Ser Ala
  210 215
Tyr Lys Ala Ala Leu Thr Gly Lys Thr Arg Val Val Gly Leu Gly Pro
225 230
                               235
Lys Lys Ala Tyr Val Ala Thr Tnr Thr Lys Lys Gly Asn Gly Leu Val
            245 250
Tyr Ala Leu Gln Ala Ala Leu Asp Gly Ala Ile Lys Arg Gly Glu Tyr
        260 265
                                        270
Gln Lys Val Leu Ala Arg Trp Gly Glu Ala Gly Glu Ala Val Thr Ser
     275 280
Ser Asp Val Asn Pro Pro Gly Ile Thr Tyr
                  295
<210> 8713
<211> 91
<212> PRT
<213> Enterobacter cloacae
<400> 8713
Ser Asp Asn Val Glu Arg Ser Pro Ile Lys Gly Ala Leu Pro Met Pro
                            10
His Val Asp Ile Lys Cys Phe Pro Arg Asp Leu Thr Asp Glu Gln Lys
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Thr Ala Leu Ala Ala Asp Ile Ala Glu Ala Ile Ala Arg His Leu Asn 40 Ser Lys Asp Arg Ser Ile Ser Val Ala Leu Gln Glu Val Gln Glu Ala 55 Asp Trp Lys Ala Gln Val Trp Asp Thr Glu Ile Gly Pro Lys Leu Asp 70 Glu Leu Ile Lys Lys Pro Gly Tyr Ser Met 85

<210> 8714 <211> 339

<212> PRT <213> Enterobacter cloacae

<400> 8714 Lys Asp Asn Phe Ser Met Thr Lys Leu Pro Gln Phe Ser Leu Ala Phe 10 Ile His Pro Arg Tyr Trp Leu Ser Trp Ala Gly Ile Ala Ala Leu Trp 20 25 Cys Thr Val Gln Leu Pro Tyr Pro Leu Leu Leu Lys Thr Gly His Arg 35 4.0 Leu Gly Arg Leu Ala Met Arg Leu Leu Pro Arg Arg Val Glu Ile Ala 50 55 60 Arg Arg Asn Leu Glu Leu Cys Phe Pro Asp Met Lys Glu Asp Glu Arg 70 75 Glu Arg Leu Leu Glu Arg Asn Phe Glu Ser Val Gly Met Gly Val Ile 85 90 Glu Thr Gly Ile Ala Trp Phe Trp Pro Asn Trp Arg Val Arg Arg His 100 105 110 Phe Ser Val Thr Gly Tyr Glu His Met Glu Gln Ala Arg Ala Gln Gly 115 120 125 Arg Gly Val Val Leu Ile Gly Met His Phe Leu Thr Leu Glu Leu Gly 130 135 140 Ala Arg Ile Phe Gly Met Leu Asn Ala Gly Ile Gly Val Tyr Arg Pro 145 150 155 Asn Asn Asn Ala Leu Leu Asp Trp Leu Gln Thr Arg Gly Arg Leu Arg 165 170 175 Ser Asn Lys Thr Met Leu Asp Arg Tyr Asp Leu Lys Gly Met Ile Arg 180 185 190 Ala Leu Lys Gln Asn Glu Ile Leu Trp Tyr Ala Pro Asp His Asp Tyr 195 200 205 Gly Lys Thr Asn Ser Val Phe Val Pro Phe Phe Ala Val Pro Asp Ala 215 220 Ala Thr Thr Ala Gly Ser Tyr Met Leu Val Lys Ser Ala Arg Pro Ala 225 230 235 Val Ile Pro Phe Val Pro Arg Arg Lys Ala Asp Gly Thr Gly Tyr Glu 245 250 Leu Leu Ile Leu Glu Asp Ile Ser Asp Thr Leu Gln Gly Gly Asp Lys 265 270 Ala Ser Val Ala Thr Gln Met Asn Arg Ala Ile Glu Arg Ala Val Met 280 285 Met Ala Pro Glu Gln Tyr Met Trp Leu His Arg Arg Phe Lys Thr Arg 295 300 Pro Glu Gly Gln Pro Asp Arg Tyr Lys Arg Lys Lys Gln Val Ala Ser 310 315 Thr Ala Arg Thr Leu Ser Ala Ser Asp Ile Ser Asp Arg Ser Ser Ile 325 330 Gln Gln

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<210> 8715
<211> 294
<212> PRT
<213> Enterobacter cloacae
<400> 8715
Phe Ile Asn Arg Gly Tyr His Leu Leu Glu Gln Ile Met Ser Pro Phe
                            10
Leu Ser Ala Tyr Phe Ala Arg Thr Gly Trp Gln Gln Pro Val Gln Val
                          25
                                         3.0
Asn Ile Asp Thr Leu Arg Gly Leu His Leu His His Asn Cys Ala Ile
                      4.0
                                      4.5
Pro Phe Glu Asn Ile Asp Val Val Leu Pro Arg Glu Ile His Leu Asp
 50
                  5.5
                                   60
Asp Gly Cys Leu Val Asp Lys Leu Val Thr Ala Arg Arg Gly Gly Tyr
               70
                             75
Cys Phe Glu Gln Asn Gly Leu Phe Glu Arg Val Leu Arg Glu Val Gly
          85
                  90
Phe Thr Val Arg Ser Val Leu Gly Arg Val Val Leu Ala Asn Pro Ser
       100 105
Gln Met Pro Pro Arg Thr His Arg Leu Leu Leu Val Glu Leu Asn Gly
 115 120 125
Glu Arg Trp Ile Ala Asp Val Gly Phe Gly Gly Gln Thr Leu Thr Ala
 130
                  135 140
Pro Ile Arg Leu Ile Ala Asn Glu Glu Glu Glu Thr Pro His Gly Arg
               150 155
Tyr Arg Leu Leu Ser Glu Gly Asn Asp Trp Ile Leu Gln Phe Arg His
     165 170 175
His Asp His Trp Gln Ser Met Tyr His Phe Asp Leu Ala Thr Gln Tyr
        180 185
                                          190
Phe Asn Asp Tyr Val Met Gly Asn Phe Trp Ser Ala His Trp Pro Gln
195 200
                                      205
Ser His Phe Arg His His Leu Leu Met Cys Arg His Leu Pro Asp Gly
210 215
                                   220
Gly Lys Leu Thr Leu Thr Asn Pne Asn Phe Thr His Trp Gln Asn Gly
225 230 235
His Val Glu Glu Gln Ile His Leu Pro Asp Ala Glu Ala Leu Tyr Gln
       245
                            250 255
Leu Met Gln Ala Arg Phe Gly Leu Gly Val Asp Asp Pro Lys His Gly
         260 265 270
Phe Thr Leu Ala Glu Leu Thr Ala Val Met Ala Gly Phe Asp Thr His
 275
                     280
Pro Gln Ala Gly Glu
  290
<210> 8716
<211> 704
<212> PRT
<213> Enterobacter cloacae
<400> 8716
Gly Asn Ile Met Pro Arg Pro Ile Pro Leu Glu Arg Tyr Arg Asn Ile
                            10
Gly Ile Ser Ala His Ile Asp Ala Gly Lys Thr Thr Thr Thr Glu Arg
         20
                         25
Ile Leu Phe Tyr Thr Gly Met Ser His Lys Leu Gly Glu Val His Asp
                      40
Gly Ala Ala Thr Thr Asp Trp Met Ala Gln Glu Gln Glu Arg Gly Ile
                55
Thr Ile Thr Ser Ala Ala Val Ser Cys Phe Trp Pro Gly Met Asp Arg
               70
                               75
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Gly Phe Glu Pro His Arg Ile Asn Ile Ile Asp Thr Pro Gly His Val 85 Asp Phe Thr Ile Glu Val Glu Arg Ser Met Arg Val Leu Asp Gly Ala 105 Val Met Val Tyr Asp Ser Val Gly Gly Val Gln Pro Gln Ser Glu Thr 115 120 125 Val Trp Arg Gln Ala Asn Lys Tyr His Val Pro Arg Leu Ala Phe Val 140 135 Asn Lys Met Asp Arg Pro Gly Ala Asp Phe Phe Arg Val Val Arg Met 150 155 Met Gln Glu Arg Leu Lys Ala Asn Pro Val Pro Ile Val Ile Pro Val 165 170 Gly Ala Glu Glu His Phe Thr Gly Val Val Asp Leu Ile Lys Met Arg 180 185 190 Thr Ile Leu Trp Asp Asp Ala Thr Gln Gly Met Ala Phe Ser Tyr Ala 195 200 205 Pro Val Pro Asp Asp Leu Leu Ser Thr Ala Gln Thr Trp Arg Glu Lys 210 215 220 Met Val Ser Ser Ala Ala Glu Ala Ser Asp Glu Leu Met Asp Lys Tyr 230 235 Leu Glu Thr Gly Glu Leu Asp Glu Ala Glu Ile Ile Lys Gly Leu Arg 245 250 255 Ile Arg Thr Ile Ser Gly Glu Ile Gln Pro Met Leu Cys Gly Ser Ala 260 265 270 Phe Lys Asn Lys Gly Val Gln Arg Met Leu Asp Ala Val Ile Glu Leu 275 280 Met Pro Ser Pro Leu Asp Val Pro Ala Ile Asp Gly Val Asp Glu Asp 290 295 300 Gly Gln His Ala Glu Arg His Pro Ser Asp Asp Glu Pro Phe Ser Ala 305 310 315 Leu Ala Phe Lys Leu Met Ser Asp Pro Tyr Val Gly Gln Leu Thr Phe 325 330 335 Ile Arg Val Tyr Ser Gly Ile Leu Arg Lys Gly Asp Ala Val Tyr Asn 340 345 350 Pro Val Lys Gly Lys Lys Glu Arg Ile Gly Arg Ile Val Leu Met His 355 360 365 Ala Asn Asp Arg His Glu Val Asp Glu Leu Arg Ala Gly Asp Ile Ala 375 380 Ala Cys Val Gly Leu Lys Asp Val Thr Thr Gly Asp Thr Leu Thr Asp 395 390 Pro Asn Ala Val Ile Thr Leu Glu Arg Met Glu Phe Pro Asp Pro Val 405 410 Ile Ser Leu Ala Ile Glu Pro Lys Thr Lys Ala Asp Gln Glu Lys Met 425 430 Gly Ile Ala Leu Gln Arg Leu Ala Ala Glu Asp Pro Ser Phe Arg Leu 440 445 His Thr Asp Glu Glu Ser Gly Gln Thr Ile Ile Ser Gly Met Gly Glu 455 460 Leu His Leu Glu Ile Ile Val Asp Arg Met Lys Arg Glu Phe Gly Val 470 475 Glu Ala Asn Ile Gly Arg Pro Gln Val Thr Tyr Arg Glu Thr Leu Arg 485 490 Lys Ala Val Lys Asp Ile Glu Gly Lys Phe Val Arg Gln Ser Gly Gly 500 505 Lys Gly Gln Tyr Gly His Val Val Leu Ser Leu Glu Pro Leu Ala Ala 520 525 Gly Ser Gly Phe Val Phe Glu Asp Ala Thr Lys Gly Gly Val Val Pro 535 540 Arg Glu Tyr Ile Pro Ser Val Glu Lys Gly Leu Arg Glu Ala Met Asn 550 555 Thr Gly Val Leu Ala Gly Tyr Pro Val Val Asp Val Lys Ala Thr Leu

570 565 Thr Phe Gly Ser Tyr His Asp Val Asp Ser Ser Glu Met Ala Phe Arg 585 580 590 Met Ala Ala Ile Leu Gly Phe Lys Glu Gly Ala Arg Arg Ala Asp Pro 595 600 Val Ile Leu Glu Pro Val Met His Val Glu Val Glu Thr Pro Glu Glu 615 620 Tyr Ala Gly Asn Ile Met Gly Asp Leu Ser Ser Arg Arg Gly Leu Val 630 635 640 Gln Gly Met Ala Glu Gln Tyr Gly Ser Gln Ile Ile Arg Ala Asp Val 645 650 Pro Leu Ala Glu Met Phe Gly Tyr Ala Thr Thr Leu Arg Ser Met Ser 665 670 Gln Gly Arg Ala Thr Tyr Thr Met Glu Phe His His Phe Ala Glu Ala 675 680 685 Pro Arg Asn Val Ala Glu Glu Ile Ile Ala Lys Arg Val Lys Ser 690 695

<210> 8717 <211> 358 <212> PRT <213> Enterobacter cloacae

<400> 8717 Lys Gly Ile Val Met Ser Leu Arg His Leu Cys Ser Pro Arg Leu Arg 10 Gly Ser Leu Leu Gly Ser Leu Leu Phe Ala Gly Thr Phe Gln Val 20 25 His Ala Ala Glu Glu Met Leu Arg Lys Ala Val Gly Lys Gly Ala Tyr 35 40 Glu Met Ala Val Ser Gln Gln Glu Asn Ala Leu Trp Val Ala Thr Ser 50 55 Gln Ser Arg Lys Thr Asp Lys Gly Gly Val Val Tyr Arg Leu Asp Pro 7.0 7.5 Val Thr Leu Glu Val Thr Gln Ala Ile His Asn Asp Leu Lys Pro Phe 85 90 Gly Ala Thr Ile Asp Asn Ala Thr Gln Thr Leu Trp Phe Gly Asn Thr 100 105 110 Val Asn Ser Ala Val Thr Ala Ile Asp Ala Lys Thr Ser Glu Val Lys 115 120 Gly Arg Leu Val Leu Asp Asp Arg Lys Arg Ser Asp Thr Val Lys Pro 130 135 140 Leu Gln Pro Arg Gln Leu Val Ala Asp Asp Thr Thr Asn Thr Val Tyr 145 150 155 160 Ile Thr Gly Ile Gly Lys Glu Ser Val Ile Trp Val Val Asp Gly Ala 165 170 175 Thr Leu Lys Leu Lys Asp Thr Ile Thr Asn Thr Gly Thr Phe Ser Thr 185 190 Gly Leu Ala Leu Asp Ala Lys Ala Lys Arg Leu Tyr Thr Thr Asn Ala 200 Asp Gly Glu Leu Val Thr Ile Asp Thr Ala Thr Asn Lys Ile Leu Ser 215 220 Arg Lys Lys Val Gln Asp Asp Gly Lys Glu His Phe Tyr Leu Asn Leu 230 235 Ser Leu Asp Thr Val Gly Gln Arg Ala Phe Val Thr Asp Ser Lys Gln 245 250 255 Pro Glu Val Leu Val Val Asn Leu Lys Asp Gly Ser Val Met Gln Lys 260 265 Ile Ala Ala Pro Glu Ser Leu Ala Val Leu Phe Asn Pro Ala Arg Asn

280

Glu Ala Tyr Val Thr His Arg Glu Ala Gly Lys Val Ser Val Ile Asp

```
295
Ala Lys Thr Tyr Lys Val Thr Lys Thr Tyr Asp Thr Pro Val Tyr Pro
                 310
                                   315
Asn Ser Leu Ala Leu Ser Ala Asp Gly Lys Thr Leu Tyr Val Thr Val
             325
                                330
Lys Gln Lys Ser Thr Arg Gln Gln Glu Ala Thr Gln Pro Asp Asp Val
          340
                         345
Ile Arg Ile Ala Leu
       355
<210> 8718
<211> 192
<212> PRT
<213> Enterobacter cloacae
<400> 8718
Phe Asp Pro Phe Ser Ser Ala Phe Ala Gly Gly Thr Val Lys Ile Asn
                               10
Ile Ile Gly Thr Ser Gly Ser Gly Lys Ser Thr Phe Gly Arg Arg Ile
       2.0
                            25
                                              30
Ala Glu Ala Leu Ala Ile Pro Tyr Ile Glu Met Asp Arg Leu Tyr Trp
 35
                      4.0
                                          4.5
Arg Ala Asn Trp Gln Gly Thr Pro Asp Asp Glu Phe Leu Ala Thr Leu
 5.0
                     55
Glu Lys Ala Leu Ala Ala Ser Pro Asp Trp Val Leu Asp Gly Asn Tyr
                 7.0
                                   7.5
Asn Arg Thr Arg Asp Val Lys Trp Arg Asp Val Asp Leu Val Val Trp
              8.5
                                90
Ile Asp Arg Gly Phe Ile Arg Thr Leu Trp Gln Ala Val Thr Arg Ala
          100 105
Ser Arg Arg Ala Trp His Lys Gln Glu Leu Trp Pro Gly Thr Gly Asn
      115
                        120
Arg Glu Ser Phe Arg Arg Ser Phe Leu Ser Lys Asp Ser Ile Ile Ile
 130 135
                                       140
Trp Thr Ile Lys Thr Trp Arg Ser Asn Arg Lys Arg Tyr Gln Ala Asp
145 150 155
Met Gln Asn Pro Gln Tyr Lys His Ile Arg Phe Leu Arg Ile Thr Arg
       165 170 175
Arg Gln Asp Ala Glu Arg Leu Ile Ala Ser Leu Lys Ser Arg Arg
<210> 8719
<211> 379
<212> PRT
<213> Enterobacter cloacae
<400> 8719
Gln Gly Gly Tyr Arg Met Ser Phe Ser Glu Gln Leu Ile Ala Trp Arg
                               10
Arg Glu Leu His Gln Asn Pro Glu Leu Ser Gly Gln Glu Val Glu Thr
                            25
Thr Ala Arg Leu Arg Glu Trp Leu Thr Ala Ala Gly Ile Ala Pro Leu
                         40
Pro Tyr Asp Leu Gln Thr Gly Leu Val Ala Glu Ile Gly Thr Gly Asn
                   5.5
Ala Leu Val Ala Leu Arg Ala Asp Ile Asp Ala Leu Pro Ile Asp Glu
               7.0
                                   75
Arg Ser Gly Val Pro Phe Ser Ser Arg Arg Ala Gly Val Met His Ala
             85
                                90
Cys Gly His Asp Ile His Thr Ser Val Ile Leu Gly Ala Ala Leu Lys
          100
                            105
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Leu Lys Glu Arg Glu Ala Ser Leu Asn Gly Arg Val Arg Ile Leu Phe
     115
                     120
Gln Pro Ala Glu Glu Asn Phe Gly Gly Ala Lys Ser Met Val Arg Ala
                  135
                                 140
Gly Ala Leu Arg Asp Val Arg Ala Ile Phe Gly Met His Asn Glu Pro
         150
                   155
                                     160
Ser Leu Pro Val Gly Glu Phe Ala Thr Arg Gly Gly Pro Phe Tyr Ala
           165
                         170 175
Asn Val Asp Arg Phe Val Ile His Val Thr Gly Lys Gly Ala His Ala
        180
             185
Ala Arg Pro His Glu Gly Asn Asp Ala Ile Val Leu Ala Ser Gln Leu
   195 200 205
Val Thr Ala Leu Gln Ser Val Ala Ser Arg Asn Val Asn Thr Leu Asp
 210 215 220
Ser Val Val Leu Ser Val Thr Arg Ile Ala Gly Gly Asn Thr Trp Asn
225 230
                              235
Val Leu Pro Glu Ser Val Glu Leu Glu Gly Thr Leu Arg Thr His Arg
      245 250
Thr Glu Val Gln Gln Asn Val Lys Ala Arg Val Gly Glu Ile Ala Ala
 260 265
                             270
Gly Phe Ala Ser Ala Phe Ser Ala Gln Ile Asn Ile Thr Trp Tyr Ala
275 280
                                    285
Gly Pro Thr Ala Leu Val Asn Asp Glu His Trp Ala Val Phe Ala Thr
                 295
                                 300
Ser Val Ala Arg Glu Ala Gly Tyr Glu Thr Arg His Ala Glu Leu His
              310 315
Met Gly Gly Glu Asp Phe Ala Val Tyr Leu Gln Asn Ile Pro Gly Ala
           325
                           330
Phe Val Ser Ile Gly Ser Asn Ser Pro Phe Gly Leu His His Pro Ala
       340
                       345 350
Phe Asn Pro Asp Glu Ala Leu Ile Glu Pro Ala Ala Arg Tyr Phe Ala
 355
                    360
                                    365
Gln Leu Ala Glu Lys Ala Leu Gln His Phe
  370
                 375
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<210> 8720 <211> 354 <212> PRT

<213> Enterobacter cloacae

<400> 8720

Pro Gly Gly Ala Arg Phe Thr Gly Ala Trp Pro Val Pro His Arg Leu Ser Arg His His Ala Ala Arg Lys Ser Gly Leu Arg Arg Ala Gln Lys 20 30 Ser Val His Thr Thr Ile Lys Glu Lys Asn Ala Met Gln Lys Ser Ser 35 40 45 Leu Ile Leu Ala Leu Ala Leu Ala Phe Thr Pro Ala Val Trp Ala Glu 55 Asn Val Asn Ile Asn Gly Thr Gly Val Ser Ile Glu Ala Asn Lys Thr 70 75 Pro Ile Asn Thr Ala Lys Asn Ser Asp Ala Ile Ala Gln Leu Pro Lys 85 90 Asp Tyr Arg Phe Ala Val Pro Gly Lys Phe Thr Val Ala Val Ala Gly 100 105 Leu Asn Gln Pro Pro Leu Thr Val Phe Ser Asp Asn Lys Thr Leu 115 120 Leu Gly Ser Glu Val Asp Ile Ala Arg Leu Val Ala Asp Ser Leu Gly 135 140 Leu Glu Leu Asn Val Val Pro Thr Ser Trp Glu Asp Trp Pro Leu Gly 150 155

<210> 8721

<211> 173 <212> PRT

<210> 8722 <211> 312 <212> PRT

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Val Ala Ser Gly Lys Tyr Asp Ala Ala Ile Ser Asn Ile Thr Val Thr
           165
                  170
Lys Ala Arg Lys Glu Lys Phe Asp Phe Ala Thr Tyr Arg Lys Asp Ser
        180 185
                                     190
Leu Gly Phe Tyr Val Lys Ser Thr Ser Pro Ile Asn Ser Leu Val Lys
     195
           200
                                  205
Ala Glu Asp Ile Ala Gly Leu Arg Ile Ile Val Gly Ser Gly Thr Asn
       215 220
Gln Glu Ala Ile Leu Leu Ala Trp Asn Glu Glu Asn Leu Lys Lys Gly
   230
                 235 240
Leu Lys Pro Phe Thr Pro Ile Tyr Thr Lys Asp Asp Ala Ala Gln Thr 245 250 255
Leu Ala Leu Gln Ser Gly Arg Ala Asp Ala Tyr Phe Gly Pro Asn Val
      260 265 270
Ile Gly Ala Trp Lys Ala Ala Leu Asn Gly Lys Thr Lys Leu Val Gly 275 280 285
Ser Val Asp Gly Gly Trp Pro Lys Ala Ala His Ile Ala Val Thr Leu
 290 295 300
Lys Lys Gly Ser Gly Leu Ala Glu Pro Val Gln Thr Ala Leu Asn Gly
305 310 315 320
Gly Val Glu Arg Ile Pro Ser Ser Glu Val Asn Pro Ala Gly Leu Gly
     340 345
Asp
```

```
<213> Enterobacter cloacae
<400> 8721
Gly Gly Ala Met Arg Glu Gln Phe Arg Asp Val Ser Pro Glu Asp Thr
                           10
Asp Leu Gln Pro Ile Ile Glu Gly Leu Phe Gly Glu Tyr Ala Ala Arg
                          25
Tyr Gly Asp Tyr Phe Ser Lys Asp Ala Glu Val Glu Leu Thr Glu Trp
 35 40
Tyr Leu Ala Pro Gln Gly Leu Phe Ile Val Leu Glu Arg Asp Gly Glu
 50 55 60
Ile Ile Ala Thr Gly Ala Tyr Lys Pro Phe Asp Glu His Thr Ala Glu 65 \phantom{000}70\phantom{000} 70 \phantom{0000}75\phantom{000}
Ile Lys Arg Ile Trp Thr Asn Lys Thr Leu Arg Gln Gln Gly Leu Ala
Ala Arg Val Val Gln Glu Leu Glu Arg Arg Ala Val Leu Ala Gly Tyr
                         105 110
Ser His Ile Tyr Leu Thr Thr Gly Phe Arg Gln Pro Glu Ala Val Arg
   115 120 125
Leu Tyr Leu Ser Gln Gly Tyr Gln Pro Gln Phe Asp Leu Asn Arg Asp
 130 135 140
Pro Glu Glu Tyr Ser Gln Pro Pro Phe Asp Gly Arg Leu Arg Phe Thr
145 150 155 160
Lys Thr Leu Ile Arg Glu Ala Leu Ser Lys Thr Ala
```

170

165

<213> Enterobacter cloacae

```
<400> 8722
Gly Ala Thr Met Ser Asn Val Glu Thr Ile Lys Val Val Pro Ala Arg
Tyr Pro Leu Arg Ala Ala Gly Ala Val Val Ala Leu Phe Val Leu Ala
       20
                         25
Val Val Ile Gin Ser Val Ala Phe Asn Pro Arg Trp Glu Trp Ala Val
                    40
Phe Ala Arg Trp Phe Phe Asp Pro Val Ile Leu Glu Gly Val Gly Gln
                                60
Thr Leu Leu Thr Leu Ile Ser Thr Val Leu Ser Val Val Ile Gly
            70
                              75
Gly Met Leu Ala Leu Ala Arg Leu Ser Ser Ser Trp Leu Leu Ser Ser
                 90
          85
Leu Ala Trp Gly Tyr Ile Trp Leu Phe Arg Ser Leu Pro Leu Ile Val
        100
             105 110
Val Leu Ile Ile Leu Tyr Asn Phe Ser Tyr Leu Tyr Asp Thr Leu Ser
      115 120 125
Leu Gly Val Pro Phe Thr Gly Ile Thr Trp Gly Ser Phe Glu Thr Ile
 130
       135 140
Asn Val Leu Gly Gln Phe Ser Thr Ala Ile Val Gly Leu Thr Leu Val
145 150 155
Gln Ser Ala Tyr Thr Ala Glu Ile Ile Arg Gly Gly Phe Leu Gly Val
       165 170 175
Asp His Gly Gln Tyr Glu Ala Ala Ala Ala Leu Gly Leu Pro Ala Trp
 180 185 190
Arg Arg Thr Val Arg Ile Ile Leu Pro Gln Ala Leu Arg Thr Ile Leu
195 200
                                    205
Pro Ser Gly Phe Asn Glu Ile Ile Ser Leu Ala Lys Gly Thr Ala Met
 210 215
                                  220
Val Tyr Val Leu Ala Met Pro Glu Leu Phe Tyr Thr Ile Gln Met Ile
225 230 235
Tyr Asn Arg Thr Gln Asp Val Ile Pro Leu Leu Met Val Gly Ala Val 245 250 255
Trp Tyr Leu Val Ile Thr Thr Val Leu Ser Ala Ile Gln His Val Ile
    260 265 270
Glu Arg Gly Leu Ala Arg Ser Glu Arg Arg Ser Ala Val Asn Gln Asn
 275 280 285
Arg Ala Ala Ser Arg Ser Arg Ser Val Thr Thr Ser Pro Ala Gln Glu
 290 295
Pro Val His Ala Ser Leu Ser
<210> 8723
<211> 209
<212> PRT
<213> Enterobacter cloacae
<400> 8723
Gly Gly Asn Met Ile Lys Leu Tyr Gly Val Pro Gly Trp Gly Ser Ala
                            10
Ile Ser Glu Val Met Leu Thr Leu Ala Asp Ile Pro Tyr Gln Phe Val
                         25
Asn Val Asp Gly Phe Asp Gln Pro Gly Pro Gln Arg Glu Leu Leu Leu
                     4.0
Lys Leu Asn Pro Leu Cys Gln Val Pro Thr Leu Glu Leu Glu Asn Gly
Ala Ile Val Thr Glu Thr Ala Ala Ile Ala Leu Met Val Leu Asp Arg
             70
                               75
Arg Pro Asp Leu Ala Pro Pro Val Gly Gln Ala Glu Arg Gln Gln Phe
                            90
Gln Arg Leu Leu Ile Trp Phe Val Ala Asn Val Tyr Pro Thr Phe Thr
```

105 Tyr Ala Asp Tyr Pro Glu Arg Trp Val Pro Asp Ala Pro Glu Gln Leu 120 125 Lys Lys Asn Cys Ile Glu Tyr Arg Lys Ser Leu Tyr Leu Trp Phe Asp 130 135 140 Ser Gln Leu Ser Ala Ser Pro Phe Ala Phe Gly Lys Gln Leu Thr Leu 150 155 Leu Asp Val Tyr Ile Ala Val Ala Arg Thr Trp Gly Pro Arg His Glu 165 170 175 Trp Phe Ala Thr Asn Thr Pro Asn Phe Thr Ala Val Ala Asp Ala Val 180 185 190 Cys Ala Leu Pro Glu Leu His Lys Val Leu Lys Ala Asn Asp Ile Ile

<210> 8724 <211> 99 <212> PRT <213> Enterobacter cloacae

<400> 8724

<210> 8725 <211> 465 <212> PRT

<213> Enterobacter cloacae

<400> 8725 Ser Met Thr Leu Gly Ala Ser Gly Lys Glu Leu Leu Trp Ile Ile Asp 10 Ile Tyr Ser Leu Val Met Ala Gly Met Val Leu Pro Met Gly Ala Met 25 Gly Asp Arg Ile Gly Phe Lys Arg Leu Leu Met Ile Gly Ser Val Leu 40 Phe Gly Leu Ser Ser Leu Ala Ala Ala Phe Ala Pro Ser Ala Gly Trp 50 55 60 Leu Ile Ala Ala Arg Ala Ser Leu Ala Ile Gly Ala Ala Met Ile Ile 7.0 75 Pro Ala Thr Leu Ala Gly Ile Arg Thr Leu Phe Ile Asp Ala Arg His 90 Arg Asn Ile Ala Leu Gly Val Trp Ala Ala Val Gly Ser Gly Gly Ala 110 100 105 Ala Phe Gly Pro Leu Ile Gly Gly Met Leu Leu Glu His Phe Tyr Trp 115 120 125 Gly Ser Val Phe Leu Ile Asn Val Pro Ile Val Leu Met Val Val Ser 135

```
Leu Ala Ala Arg Phe Val Pro Ala Gln Gln Gly Arg Pro Glu Gln Pro
      150
                     155
Leu Asn Ile Ser His Ala Ile Met Leu Ile Val Ala Ile Leu Leu
            165
                           170
Val Tyr Ser Ala Lys Thr Ala Leu Lys Gly Val Leu Ser Pro Trp Met
         180
                        1.85
Val Thr Ile Thr Leu Leu Thr Gly Ala Val Met Leu Phe Ile Phe Val
      195
                     200
                                     205
Arg Ile Gln Leu Arg Ala Arg Val Pro Met Ile Asp Met Arg Leu Phe
  210
               215 220
Cys His Arg Ile Ile Leu Ser Gly Val Val Met Ala Met Thr Ala Met
                    235 240
               230
Ile Ala Leu Val Gly Phe Glu Leu Leu Met Ala Gln Glu Leu Gln Phe
        245 250 255
Val His Gly Phe Thr Pro Phe Glu Ala Gly Ile Phe Met Leu Pro Val
        260 265 270
Met Val Ala Ser Gly Phe Ser Gly Pro Ile Ala Gly Val Leu Val Gly
     275 280 285
Arg Leu Gly Leu Arg Ile Val Ala Ala Gly Gly Met Gly Leu Ser Ala
 290 295 300
Val Ser Phe Ile Gly Leu Ser Met Leu Asp Phe Ser Thr Gln Gln Trp
305 310 315 320
Gln Ala Trp Ser Leu Met Val Leu Leu Gly Phe Ser Ala Ala Ser Ala
     325 330
Leu Leu Thr Ser Thr Ser Ala Ile Met Ala Ala Ala Pro Lys Glu Lys 340 345 350
Ala Ala Ala Gly Ala Ile Glu Thr Met Ser Tyr Glu Leu Gly Ala
355 360 365
Gly Leu Gly Ile Ala Ile Phe Gly Leu Leu Leu Thr Arg Ser Phe Ser
370 375 380
Ala Ser Ile Val Leu Pro Gln Gly Leu Ser Ala Ser Leu Thr Asp Lys 385 $390$
Ala Ser Ser Ser Ile Gly Glu Ala Met Lys Val Ala Gln Glu Leu Thr
     405 410 415
Pro Ser Leu Ala Glu Pro Val Met Thr Ala Ala Lys Thr Ala Phe Ile
    420 425 430
Thr Ser His Ser Val Ala Leu Gly Ser Ala Gly Gly Met Leu Leu Ile
 435 440 445
Leu Ala Val Gly Ile Trp Phe Ser Leu Ala Lys Val Gly Gly Gln Gln
                  455
465
<210> 8726
<211> 72
<212> PRT
<213> Enterobacter cloacae
<400> 8726
Gln Ile Leu Glu Leu Val Gly Gln Thr Tyr Ser His Asp Val Val Gly
Ser His Phe Gly Ile Phe Gly Glu Leu Ala Val Ile His Glu Val Asp
               25
                                       30
Phe Val Ile Asn Val Gly Gly His Val Phe Val Glu Val Val Ala Arg
                40
                                  4.5
Ala Asn Val Asn Val Phe Asn Gln Ile Leu Val Ala Ile Arg Thr Asp
             5.5
Val Ser Thr Ser Arg Cys Gln
```

<210> 8727

```
<211> 262
<212> PRT
<213> Enterobacter cloacae
<400> 8727
Gln Arg Gln Ser Ile Ile Lys Ile Ser Lys Leu Val Asn Asn Ala Arg
                           10
His Val Asn Cys Val Glu Gly Asn Thr Thr Leu Tyr Ala Leu Pro Arg
      20
               25
                                     30
Ala Glu Ile Val Glu Arg Trp Arg Glu Gln Thr Thr Asp Asp Phe Arg
                                  45
   35
               4.0
Phe Cys Phe Lys Phe Pro Ala Thr Ile Ser His Asn Ala Ala Leu Arg
50 55 60
Asn Cys Asp Asp Leu Thr His Glu Phe Phe Thr Arg Met Ser Pro Leu
            70 75
Ala Asn Arg Ile Gly Gln Tyr Trp Leu Gln Leu Pro Ala Ala Phe Gly
           85 90
Pro Arg Asp Leu Pro Ala Leu Trp Gln Phe Leu Glu Ala Leu Pro Leu
       100 105 110
Asp Phe Thr Tyr Gly Val Glu Val Arg His Pro Glu Phe Phe Ala Lys
115 120 125
Gly Asp Ala Glu Lys Ala Leu Asn Arg Gly Leu His Glu Arg Ser Val
130 135 140
Asn Arg Val Ile Leu Asp Ser Arg Pro Val His Ser Ala Ile Pro His
145 150 155 160
Ser Glu Ala Val Val Asp Ala Gln Arg Lys Lys Pro Lys Val Pro Val
           165 170 175
His Ala Ile Val Thr Ala Gln Asn Pro Met Val Arg Phe Ile Gly Ser
      180 185 190
Asp Asn Met Gln Gln Asn Glu Glu Met Phe Ala Val Trp Leu Gln Thr
195 200 205
Leu Ala Lys Trp Glu His Thr Thr Pro Tyr Leu Phe Leu His Thr
210 215
Pro Asp Ile Ala Gln Ala Pro Glu Leu Val Asp Ala Leu Trp Gln Ala
225 230 235
Leu Gln Gln Ala Val Pro Ser Val Gly Pro Ala Pro Ser Ile Pro Gln
            245
                           250
Gln Ser Ser Leu Phe
         260
<210> 8728
<211> 143
<212> PRT
<213> Enterobacter cloacae
<400> 8728
Arg Arg Ala Ile Cys Gln Lys Gln Gly Val Ser Met Val Ser Ala Leu
                           10
Tyr Ala Val Leu Gly Ala Leu Leu Leu Ile Lys Phe Ser Phe Asp Val
                        25
Val Arg Leu Arg Met Gln Tyr Arg Val Ser Tyr Gly Asp Gly Gly Phe
   35
                    4.0
Ser Glu Leu Gln Ser Ala Ile Arq Ile His Gly Asn Ala Val Glu Tyr
 50
                                 60
               55
Ile Pro Val Ala Leu Ile Leu Leu Leu Leu Met Glu Met Asp Gly Ala
                              7.5
             7.0
Glu Thr Trp Met Val His Val Cys Gly Leu Leu Leu Ile Ala Gly Arg
           85
               90
Leu Met His Tyr Tyr Gly Phe His His Arg Leu Ile Arg Trp Arg Arg
```

105 Ser Gly Met Ser Ala Thr Trp Cys Ser Leu Leu Met Val Leu Ala

100

```
120
Asn Leu Trp Tyr Met Pro Trp Glu Leu Val Phe Ser Phe His
   130
                  135
<210> 8729
<211> 337
<212> PRT
<213> Enterobacter cloacae
<400> 8729
Leu Trp Phe Ser Gly Gly Ala Glu Ser Arg Arg Arg Ser Met Ile Glu
                        10
Phe Gly Asn Phe Tyr Gln Leu Ile Ala Lys Asn His Leu Ser His Trp
    20
                        25
Leu Glu Thr Leu Pro Ala Gln Ile Ala Thr Trp Gln Arg Asp Gln Gln
     3.5
                  40
                                  4.5
His Gly Leu Leu Lys Gln Trp Ser Asn Ala Val Glu Phe Leu Pro Glu
               5.5
                                 60
Leu Thr Pro His Arg Leu Asp Leu Leu His Ser Val Thr Ala Glu Ser
               7.0
                    75
Glu Glu Pro Leu Pro Ala Gly Gln Ile Asn Arg Ile Glu Thr Leu Met
       85 90
Arg Asn Leu Met Pro Trp Arg Lys Gly Pro Phe Ser Leu Tyr Gly Val
   100
                       105
                                       110
Asn Ile Asn Thr Glu Trp Arg Ser Asp Trp Lys Trp Asp Arg Val Leu
115
                    120
Pro His Leu Ser Asp Leu Thr Gly Arg Thr Ile Leu Asp Val Gly Cys
130 135
                                 140
Gly Ser Gly Tyr His Met Trp Arg Met Ile Gly Ala Gly Ala His Leu
145 150
                              155
Val Val Gly Ile Asp Pro Met Gln Leu Phe Leu Cys Gln Phe Glu Ala
           165
                           170 175
Val Arg Lys Leu Leu Gly Asn Asp Gln Arg Ala His Leu Leu Pro Leu
        180 185 190
Gly Ile Glu Gln Leu Pro Ala Leu Lys Ala Phe Asp Thr Val Phe Ser
   195 200 205
Met Gly Val Leu Tyr His Arg Arg Ser Pro Leu Glu His Leu Trp Gln
 210 215
                                 220
Leu Lys Asp Gln Leu Val Ser Gly Gly Glu Leu Val Leu Glu Thr Leu
              230
                              235
Val Ile Glu Gly Asp Glu His Ala Val Leu Val Pro Gly Asp Arg Tyr
          245
                           250
Ala Gln Met Arg Asn Val Tyr Phe Ile Pro Ser Ala Leu Ala Leu Lys
                        265
                                        270
Asn Trp Leu Glu Lys Cys Gly Phe Val Asp Val Arg Ile Ala Asp Val
     275 280
                                    285
Cys Val Thr Ser Ile Glu Glu Gln Arg Arg Thr Asp Trp Met Ile Thr
                 295
                                 300
Glu Ser Leu Glu Gln Phe Leu Asp Pro Asp Asp His Ser Lys Thr Ile
305 310 315
Glu Gly Tyr Pro Ala Pro Met Arg Ala Val Leu Ile Ala Thr Lys Pro
            325
                           330
                                           335
```

<210> 8730 <211> 581

<212> PRT

<213> Enterobacter cloacae

Gly Ile Gln Val Asn Ile Gln Ala Leu Leu Ser Glu Lys Val Ser Gln 10 Ala Leu Ile Ala Ala Gly Ala Pro Ala Asp Cys Glu Pro Gln Val Arg 25 Gln Ser Ala Lys Val Gln Phe Gly Asp Tyr Gln Ala Asn Gly Val Met 4.0 Ala Val Ala Lys Lys Leu Gly Met Pro Pro Arg Gln Leu Ala Glu Gln Val Leu Thr His Leu Asp Leu Thr Gly Ile Ala Ser Lys Thr Glu Ile 70 Ala Gly Pro Gly Phe Ile Asn Ile Phe Leu Glu Pro Ala Phe Leu Ala 85 Ser His Val Asp Ala Ala Leu Lys Ser Asp Arg Leu Gly Val Ala Gln 100 105 110 Pro Glu Ala Gln Thr Val Val Val Asp Tyr Ser Ala Pro Asn Val Ala 120 125 Lys Glu Met His Val Gly His Leu Arg Ser Thr Ile Ile Gly Asp Ala 135 140 Ala Val Arg Thr Leu Glu Phe Leu Gly His Lys Val Ile Arg Ala Asn 150 155 His Val Gly Asp Trp Gly Thr Gln Phe Gly Met Leu Ile Ala Tyr Leu 165 170 175 Glu Lys Gln Gln Gln Glu Asn Ala Gly Glu Met Ala Leu Ala Asp Leu 180 185 190 Glu Gly Phe Tyr Arg Glu Ala Lys Lys His Tyr Asp Glu Asp Glu Ala 195 200 205 Phe Ala Glu Arg Ala Arg Ser Tyr Val Val Lys Leu Gln Gly Gly Asp 210 215 220 Pro Tyr Phe Leu Glu Met Trp Arg Lys Leu Val Asp Ile Thr Met Ser 225 230 235 240 Gln Asn Gln Leu Thr Tyr Asn Arg Leu Asn Val Thr Leu Thr Arg Asp 245 250 255 Asp Val Met Gly Glu Ser Leu Tyr Asn Pro Met Leu Pro Gly Ile Val 260 265 270 Ala Asp Leu Lys Ala Lys Asn Leu Ala Val Glu Ser Glu Gly Ala Thr 275 280 285 Val Val Phe Leu Asp Glu Tyr Lys Asn Lys Glu Gly Glu Pro Met Gly 290 295 300 Val Ile Val Gln Lys Lys Asp Gly Gly Tyr Leu Tyr Thr Thr Thr Asp 305 310 315Ile Ala Cys Ala Lys Tyr Arg Tyr Glu Thr Leu His Ala Asp Arg Val 325 330 335 Leu Tyr Tyr Ile Asp Ser Arg Gln His Gln His Leu Met Gln Ala Trp 340 345 350 Thr Ile Val Arg Lys Ala Gly Tyr Val Pro Asp Ser Val Pro Leu Glu 355 360 His His Met Phe Gly Met Met Leu Gly Lys Asp Gly Lys Pro Phe Lys 375 Thr Arg Ala Gly Gly Thr Val Lys Leu Ser Asp Leu Leu Asp Glu Ala 390 395 Leu Glu Arg Ala Arg Arg Leu Val Ala Glu Lys Asn Pro Asp Met Pro 405 410 415 Ala Asp Glu Leu Glu Lys Leu Ala Asn Ala Val Gly Ile Gly Ala Val 420 425 430 Lys Tyr Ala Asp Leu Ser Lys Asn Arg Thr Thr Asp Tyr Ile Phe Asp 440 445 Trp Asp Asn Met Leu Ala Phe Glu Gly Asn Thr Ala Pro Tyr Met Gln 450 455 4.60 Tyr Ala Tyr Thr Arg Val Leu Ser Val Phe Arg Lys Ala Asn Ile Asp 470 475 Glu Ser Val Leu Ala Asn Ala Thr Val Ser Ile Thr Glu Asp Arg Glu

```
490
Ala Gln Leu Ala Ala Arg Leu Leu Gln Phe Glu Glu Thr Leu Ser Val
       500
                         505
Val Ala Arg Asp Gly Thr Pro His Val Met Cys Ala Tyr Leu Tyr Asp
      515
                      520
                                  525
Leu Ala Gly Leu Phe Ser Gly Phe Tyr Glu His Cys Pro Ile Leu Ser
           535
                           540
Ala Glu Ser Glu Ala Val Arg His Ser Arg Leu Lys Leu Ala Gln Leu
      550 555 560
Thr Ala Lys Thr Leu Lys Leu Gly Leu Asp Thr Leu Gly Ile Glu Thr
       565 570
Val Glu Arg Met
         580
<210> 8731
<211> 449
<212> PRT
<213> Enterobacter cloacae
<400> 8731
Ser His Ile Ala Leu Gly Arg Leu Glu Glu Ser Met Asp Arg Val Thr
                            1.0
Tyr Pro Thr Gly Val Glu Asn His Gly Gly Thr Leu Arg Ile Trp Phe
20
                         25
Asn Phe Lys Gly Lys Arg Val Arg Glu Ser Leu Gly Val Pro Asp Thr
35
                   40
Ala Lys Asn Arg Lys Ile Ala Gly Glu Leu Arg Thr Ser Val Cys Phe
                   5.5
                                   6.0
Ala Ile Arg Thr Gly Thr Phe Glu Tyr Ala Ala Gln Phe Pro Asp Ser
65 70
                                7.5
Pro Asn Leu Lys Thr Phe Gly Val Gly Lys Lys Glu Ile Thr Val Ser
           85
                             90
Glu Leu Ala Glu Lys Trp Leu Asp Leu Lys Arg Met Glu Ile Cys Ala
        100 105
                                           110
Asn Ala Leu Asn Arg Tyr Glu Ser Val Thr Arg Asn Met Val Pro Arg
115 120
Ile Gly Gly Asn Arg Leu Val Ser Ala Val Thr Lys Glu Glu Leu Leu
 130 135
                                   140
Tyr Ile Arg Lys Asp Leu Leu Thr Gly His Gln Met Pro Met Lys Gly
          150
                              155
                                                160
Lys Val Pro Ala Lys Gly Ile Ser Val Val Thr Val Asn Tyr Tyr Met
            165 170
Thr Thr Ile Ala Gly Met Phe Gln Phe Ala Ala Asp His Gly Tyr Leu
         180
                         185
                                          190
Glu Ala Asn Pro Phe Asp Gly Ile Lys Pro Leu Lys Lys Ala Arg Ala
     195
                      200
                                      205
Glu Pro Asp Pro Leu Thr Arg Asp Glu Phe Ile Arg Leu Ile Asp Ala
                   215
                                    220
Cys Arg His Gln Gln Thr Lys Asn Leu Trp Ser Leu Ala Val Tyr Thr
                230
                                235
Gly Val Arg His Gly Glu Leu Thr Ser Leu Ala Trp Glu Asp Ile Asp
            245
                             250
Leu Glu Ala Gly Thr Ile Thr Ile Arg Arg Asn Tyr Thr Lys Leu Gly
         260
                          265 270
Glu Phe Thr Leu Pro Lys Thr Glu Ala Ser Thr Asn Arg Val Ile His
                      280
                                       285
Leu Ile Gln Pro Ala Ile Ser Val Leu Arg Asn Gln Ala Glu Met Thr
                  295
                                    300
Arg Phe Gly Lys Lys His Gln Ile Asp Val Gln Leu Arg Glu Tyr Gly
305
               310
                              315
Arg Thr Glu Ser His Glu Cys Thr Phe Val Phe Asn Pro Gln Leu Val
```

```
325
                          330
Arg Arg Cys Gln Gln Val Gly Ile Ile Tyr Lys Val Asp Ser Ile Gly
      340
                 345
                             350
Asp Leu Trp Asp Ala Ala Met Lys Arg Ala Gly Ile Arg His Arg Lys
   355 360
Ala Tyr Gln Ser Arg His Thr Tyr Ala Cys Trp Ser Leu Ser Ala Gly
      375 380
Ala Asn Pro Ser Phe Ile Ala Ser Gln Met Gly His Ala Ser Ala Gln
385 390 395 400
Met Val Phe Asn Val Tyr Gly Ala Trp Met Ala Asp Ser Ser Ser Glu
      405 410 415
Gln Ile Ala Met Leu Asn Gln Arg Leu Ala Asp Phe Ala Pro Gln Met
      420 425 430
Pro Gln Ser Ile His Ser Ser Ala Arg Ala Leu Leu Lys Ser Val Ser
                    440
```

<210> 8732 <211> 280 <212> PRT <213> Enterobacter cloacae

275

<400> 8732 Trp Cys Trp Leu Thr Phe Gly Ile Cys Arg Gly Ser Trp Phe Ser Pro Ser Ile Ser Ala Gln Tyr Ala Pro Leu Phe Phe Pro Asp Phe Tyr Val 25 Met Ser Asp Arg Asp Thr Leu Phe Ser Ala Pro Ile Ala Ser Leu Gly 35 4.0 Asp Trp Thr Phe Asp Glu Arg Val Ala Glu Val Phe Pro Asp Met Ile 50 55 60 Gln Arg Ser Val Pro Gly Tyr Ser Asn Ile Ile Ser Met Ile Gly Met 65 70 75 Leu Ala Glu Arg Phe Val Gln Pro Gly Thr Gln Val Tyr Asp Leu Gly 90 Cys Ser Leu Gly Ala Ala Thr Leu Ser Ile Arg Arg Asn Val His His 100 105 110 Glu Gly Cys Lys Ile Val Ala Val Asp Asn Ser Pro Ala Met Val Glu 115 120 Arg Cys Arg Arg His Ile Asp Ala Tyr Lys Ala Pro Thr Pro Val Glu 135 140 Val Val Glu Gly Asp Ile Arg Asp Ile Asp Ile Gln Asn Ala Ser Met 145 150 155 160 Val Val Leu Asn Phe Thr Leu Gln Phe Leu Val Pro Asp Asp Arg Gln 165 170 175 Arg Leu Leu Asp Lys Ile Tyr Gln Gly Leu Asn Pro Gly Gly Ala Leu 180 185 190 Val Leu Ser Glu Lys Phe Ser Phe Glu Asp Ala Ser Val Gly Glu Leu 200 205 Leu Phe Asn Met His His Asp Phe Lys Arg Ala Asn Gly Tyr Ser Glu 215 220 Leu Glu Ile Ser Gln Lys Arg Ser Met Leu Glu Asn Val Met Leu Thr 230 235 Asp Ser Val Glu Thr His Lys Ala Arg Leu Arg Lys Ala Gly Phe Glu 245 250 His Ser Glu Leu Trp Phe Gln Cys Phe Asn Phe Gly Ser Leu Val Ala 260 265 Leu Lys Ala Gly Asp Ala Ala

```
<210> 8733
<211> 439
<212> PRT
<213> Enterobacter cloacae
<400> 8733
Ile Lys Ile Leu Tyr Ala Ser Thr Gln Glu Thr Leu Leu Ala His Arg
                  10
Gly Phe Phe Val Ala Ser Ala Asn Lys Leu Thr Leu Phe Ile Val Ile
   20
                 25
                                     30
Phe Met Leu Ala Gly Ile Leu Ser Gly Ala Ala Ile His Glu Tyr Ala
 35
                        45
                   40
Ser Ser Asp Ala Ile Gln Ala Trp Ser Glu Asn Ile Thr Leu Leu Thr
           5.5
                              60
Asp Ile Phe Leu Arg Leu Ile Lys Met Val Ile Ala Pro Leu Val Phe
             70 75 80
Ser Thr Leu Thr Val Gly Ile Met Lys Leu Gly Glu Thr Ser Thr Ile
      85 90 95
Gly Arg Val Gly Gly Lys Ala Met Val Trp Phe Ile Ser Ser Ser Val
      100 105 110
Leu Ser Ile Leu Val Gly Leu Phe Ile Val Thr Leu Glu Gln Pro Gly
115 120 125
Ser Gly Leu Asn Leu Ser Ile Pro Thr Glu Thr Val Asp Thr Gly Leu
130 135 140
Ala Val Ser Gly Met Ser Leu Lys Ala Phe Leu Ser His Thr Ile Pro
145 150 155
Thr Ser Ile Ala Gly Ala Met Ala Asn Asn Glu Ile Leu Gln Ile Val
   165 170 175
Val Phe Ser Met Phe Phe Gly Ile Gly Gly Ala Ser Leu Gly Gln Lys
180 185 190
Phe Asn Ala Pro Leu Val Ala Ala Leu Asp Val Val Ser His Ile Met
195 200 205
Leu Lys Val Thr Gly Tyr Val Met Tyr Val Ala Pro Leu Ala Ile Phe
210 215 220
Ala Ala Ile Ser Ser Val Ile Ala Thr Gln Gly Leu Gly Ile Leu Leu
225 230 235
Asn Tyr Ala Ser Phe Ile Gly Gly Tyr Tyr Val Ala Ile Leu Leu Thr
           245
                        250 255
Cys Leu Val Leu Leu Ala Val Gly Tyr Met Val Leu Lys Lys Glu Ile
        260 265 270
Phe Arg Leu Val Ala Met Leu Lys Asp Pro Val Leu Val Ala Phe Thr
 275 280 285
Thr Ser Ser Ser Glu Ala Ala Tyr Pro Lys Thr Leu Glu Gln Leu Ala
 290 295
                               300
Arg Phe Gly Cys Ser Arg Asn Ile Ala Ser Phe Val Leu Pro Ile Gly
         310
                            315 320
Tyr Ser Phe Asn Leu Val Gly Ser Met Val Tyr Cys Ser Phe Ala Ser
          325
                         330
Met Phe Ile Ala Gln Ala Tyr Asn Ile His Leu Ser Phe Thr Glu Val
                      345
                                     350
Thr Val Leu Met Leu Thr Leu Met Leu Ala Ser Lys Gly Ile Ala Gly
                   360 365
Val Pro Arg Ser Ser Leu Val Val Leu Ala Ala Thr Ile Pro Ser Phe
                375
                               380
Asn Ile Pro Val Ala Gly Ile Leu Leu Leu Met Gly Ile Asp His Phe
             390
                            395
Leu Asp Met Gly Arg Ser Ala Ile Asn Val Leu Gly Asn Gly Ile Ala
         405 410 415
Thr Ala Met Leu Ser Gln Asn Glu Gly Ala Arg Glu Ala Glu Ala Glu
        420
                    425
Leu Val Glu Gln Glu Ala
```

```
<210> 8734
<211> 147
<212> PRT
<213> Enterobacter cloacae
```

<400> 8734 Lys Glu Cys Val Met Ser Tyr Ser His Leu Leu Val Ser Val Ala Val Ser Pro Glu Ser His Gln Leu Val Ala Arg Ala Val Ser Ile Ala Arg 20 25 30 Pro Asn Asn Ala Arg Ile Ser Leu Ile Thr Leu Ala Ala Glu Pro Glu 35 4.0 4.5 Met Tyr Asn Gln Leu Ala Ala Pro Met Leu Glu Asp Ile Arg Glu Val 50 55 60 Leu Gln Glu Glu Thr Gln Gln Phe Leu Arg Glu Leu Val Glu Arg Ala 65 70 75 Asn Tyr Pro Val His Gln Thr Val Ile Ala Thr Gly Glu Leu Ser Glu 85 90 His Ile Leu Asp Ile Cys Arg Lys Gln Asn Ile Asp Leu Val Ile Cys 100 105 110 Gly Asn His Asn Gln Ser Phe Phe Ser Arg Ala Ala Cys Ser Ala Lys

115 120 125 Ser Ile Val Ser Ser Ser Gln Val Asp Val Leu Leu Val Pro Leu Gly 135 Gly Asn

145

<210> 8735 <211> 312

<212> PRT <213> Enterobacter cloacae

<400> 8735 Gly Arg Met Lys Asn Gln Ser His Pro Ile Val Ile Val Lys Lys Arg 10 Lys His Lys Ala His Gly His Gly Ser His Gly Ser Trp Lys Ile Ala 25 Tyr Ala Asp Phe Met Thr Ala Met Met Ala Phe Phe Leu Val Met Trp 40 Leu Ile Ser Ile Ser Ser Pro Lys Glu Leu Ile Gln Ile Ala Glu Tyr 55 Phe Arg Thr Pro Leu Ala Thr Ala Val Thr Gly Gly Pro Arg Ile Ser 70 75 Asn Ser Asp Ser Pro Ile Pro Gly Gly Gly Asp Asp Tyr Thr Gln Gln 90 Gln Gly Glu Val Lys Lys Gln Pro Asn Ile Asp Glu Leu Lys Lys Arg 100 105 110 Met Glu Gln Ala Arg Leu Lys Lys Leu Arg Gly Asp Leu Asp Gln Leu 115 120 125 Ile Glu Ala Asp Pro Lys Leu Arg Ala Leu Arg Pro His Leu Lys Ile 135 140 Asp Leu Val Gln Glu Gly Leu Arg Ile Gln Ile Ile Asp Ser Gln Asn 150 155 145 Arg Pro Met Phe Lys Thr Gly Ser Ala Asp Val Glu Pro Tyr Met Arg 165 170 Asp Ile Leu Arg Ala Ile Ala Pro Val Leu Asn Gly Ile Pro Asn Arg 180 185 190

Ile Ser Leu Ser Gly His Thr Asp Asp Phe Pro Tyr Ala Thr Gly Glu 200

```
Lys Gly Tyr Ser Asn Trp Glu Leu Ser Ala Asp Arg Ala Asn Ala Ser
         215
                        220
Arg Arg Glu Leu Val Ala Gly Gly Leu Asp Asp Gly Lys Val Leu Arg
          230
                              235
Val Val Gly Met Ala Ala Thr Met Arg Leu Thr Asp Arg Gly Pro Asp
         245
                          250
Asp Ala Ile Asn Arg Arg Ile Ser Leu Leu Val Leu Asn Gln Gln Ala
        260 265
Glu Gln Ala Ile Leu His Glu Asn Ala Glu Ser Gln Asn Glu Ser Leu
 275 280 285
Asp Asp Leu Lys Gln Pro Gly Ala Val Pro Ser Ala Ala Val Pro Thr
290 295
Ser Pro Pro Ala Asn Pro Arg
<210> 8736
<211> 264
<212> PRT
<213> Enterobacter cloacae
<400> 8736
Pro Cys His Gly Arg Lys Gly Arg Thr Ser Met Lys Pro Phe Phe Arg
                        10 . 15
Arg Ser Gly Leu Val Gly Leu Leu Gly Ala Thr Ala Leu Ala Ala Gly
                  25
Gln Ala Gln Ala Ala Ala Thr Ile Leu Leu Trp Pro Ile Asp Pro Trp
               40
Leu Ser Ala Glu Ala Arg Ala Thr Glu Leu Trp Ile Gln Asn Gln Gly
              55 60
Asn Ser Ala Thr Thr Met Gln Ile Arg Ile Val Arg Trp Lys Gln Glu
                            75
65 70
Gly Gly Tyr Glu Arg Tyr Thr Ala Gln Gln Asp Val Val Ala Ser Pro
Pro Ile Val Thr Ile Ala Lys Gly Ser Lys Gln Leu Ile Arg Leu Ile
      100 105 110
Lys Gln Gly Thr Ile Pro Ser Gly Val Glu Gln Ala Tyr Arg Ile Ile 115 120 125
Val Asp Glu Ile Pro Gln Pro Asp Ala Lys Ala Glu Pro Ser Met Gly
 130 135 140
Leu Lys Leu Gln Met Arg Tyr Ser Ile Pro Leu Phe Val Tyr Gly Gln
145 150 155 160
Gly Ile Pro Thr Leu Asn Glu Gly Ala His His Ala Leu Ala Asn Thr
         165 170 175
Gln Gln Leu Ser Trp Arg Val Val Gln Glu Gly Gly Lys Pro Ala Leu
      180 185 190
Gln Val Arg Asn Gln Gly Asp Val His Val Arg Leu Ser Gln Val Ala
   195
                    200 205
Val Glu Gln Gly Gly Gln Lys Arg Thr Val Ala Glu Gly Leu Leu Gly
 210 215 220
Tyr Val Leu Pro Gly Ser Thr Arg Ser Trp Pro Leu Pro Ala Gly Ile
225 230
                              235
Tyr Gln Pro Asn Arg Met Ser Ala Gln Ile Asn Ala Arg Asp Thr Gln
           245
                           250
Trp Gln Ser Thr Pro Val Asn
         260
```

<210> 8737

<211> 155 <212> PRT

<213> Enterobacter cloacae

```
<400> 8737
Pro Gly Lys Pro Ala Asp Ala Gly Glu Asn Gln Cys Arg Thr Gly Asn
Thr Tyr Leu Thr Gln Glu Tyr Tyr Phe Met Ala Asp Lys Glu Leu Lys
           20
                             25
Phe Leu Val Val Asp Asp Phe Ser Thr Met Arg Arg Ile Val Arg Asn
       35
                      40
Leu Leu Lys Glu Leu Gly Phe Asn Asn Val Glu Glu Ala Glu Asp Gly
              55
                                        60
Val Asp Ala Leu Asn Lys Leu Gln Ala Gly Gly Phe Gly Phe Val Ile
          70
Ser Asp Trp Asn Met Pro Asn Met Asp Gly Leu Glu Leu Leu Lys Thr
             85
                                9.0
Ile Arg Ala Asp Ala Gly Met Ala Ser Leu Pro Val Leu Met Val Thr
          100 105
Ala Glu Ala Lys Lys Glu Asn Ile Ile Ala Ala Ala Gln Ala Gly Ala
               120 125
       115
Ser Gly Tyr Val Val Lys Pro Phe Thr Ala Ala Thr Leu Glu Glu Lys
                   135
Leu Gly Lys Ile Phe Glu Lys Leu Gly Met
<210> 8738
<211> 477
<212> PRT
<213> Enterobacter cloacae
<400> 8738
Lys Ala Ile Gly His Leu Leu Val Val Ser Asn Arg Ile Ala Pro Pro
                                 1.0
Asp Asp Lys Lys Ala Ser Ala Gly Gly Leu Ala Val Gly Val Leu Gly
Ala Leu Lys Ala Ala Gly Gly Leu Trp Phe Gly Trp Ser Gly Glu Ile
                          40
Ser Asn Glu Glu Lys Pro Leu Lys Lys Val Ser Arg Gly Asn Ile Thr
 50
                      55
Trp Ala Ser Phe Ala Leu Ser Glu Lys Asp Tyr Asp Glu Tyr Tyr Ser
                                     75
                  7.0
Glu Phe Ser Asn Ala Val Leu Trp Pro Ala Phe His Tyr Arg Leu Asp
              85
                                 90
Leu Val Lys Phe Gln Arg Glu Ser Tyr Glu Gly Tyr Met Arg Val Asn
           100
                              105
Ala Leu Leu Ala Asp Lys Leu Leu Pro Leu Ile Glu Glu Asp Asp Ile
       115
                          120
                                             125
Leu Trp Ile His Asp Tyr His Leu Leu Pro Phe Ala Arg Glu Leu Arg
                      135
                                         140
   130
Lys Arg Gly Val Asn Asn Arg Ile Gly Phe Phe Leu His Ile Pro Phe
                   150
                                     155
Pro Thr Pro Glu Ile Phe Thr Ala Leu Pro Gln His Glu Glu Ile Leu
                                  170
               165
Glu Ala Leu Ser Asp Tyr Asp Leu Leu Gly Phe Gln Thr Glu Asn Asp
                             185
                                                 190
           180
Arg Leu Ala Phe Leu Asp Ser Val Ser Gly Lys Thr Arg Leu Val Thr
                                             205
                          200
       195
His Gly Gly Lys Ser His Thr Ala Trp Gly Arg Asn Phe His Thr Glu
   210
                       215
                                         220
Val Tyr Pro Ile Gly Ile Glu Pro Asp Glu Ile Ala Glu Gln Ala Ser
                   230
                                     235
Gly Pro Leu Pro Pro Lys Leu Ala Gln Leu Lys Asp Glu Leu Lys His
                                  250
               245
Val Lys Asn Ile Phe Ser Val Glu Arg Leu Asp Tyr Ser Lys Gly Leu
```

```
265
Pro Glu Arg Phe Leu Ala Tyr Glu Thr Leu Leu Asp Lys Phe Pro Gln
                              285
               280
His His Gly Lys Ile Arg Tyr Thr Gln Ile Ala Pro Thr Ser Arg Gly
         295
                            300
Glu Val Gln Ala Tyr Gln Asp Ile Arg His Gln Leu Glu Thr Glu Ala
305 310
                   315
Gly Arg Ile Asn Gly Arg Tyr Gly Gln Leu Gly Trp Thr Pro Leu Phe
       325 330
Tyr Leu Asn Gln His Phe Glu Arg Lys Ile Leu Met Lys Val Phe Arg
      340 345 350
Tyr Ala Asp Val Gly Leu Val Thr Pro Leu Arg Asp Gly Met Asn Leu
     355 360 365
Val Ala Lys Glu Tyr Val Ala Ala Gln Asp Pro Ala Asp Pro Gly Val
  370 375 380
Leu Val Leu Ser Gln Phe Ala Gly Ala Ala Asn Glu Leu Thr Ser Ala
385 390 395 400
Leu Val Val Asn Pro Tyr Asp Arg Asp Asp Val Ala Asn Ala Leu Asn
           405 410 415
Arg Ala Leu Thr Met Pro Leu Ala Glu Arg Ile Ser Arg His Ser Glu
        420 425 430
Met Met Glu Thr Ile Val Lys Asn Asp Ile Asn Arg Trp Gln Ala Arg
 435 440 445
Phe Ile Asp Asp Leu Arg Ala Ile Gln Pro Gln Ser Gln Glu Gly Asp
              455
Leu Gln Lys Lys Ile Ala Thr Phe Pro Lys Leu Ala
<210> 8739
<211> 202
<212> PRT
<213> Enterobacter cloacae
<400> 8739
Arg Ser Pro Glu Glu Lys Gly Leu Thr Met Ser Glu Lys Ser Ile Val
                      10
Gin Glu Ala Arg Asp Ile Gin Leu Ala Met Glu Leu Ile Thr Leu Gly
 20
                       2.5
Ala Arg Leu Gln Met Leu Glu Ser Glu Thr Gln Leu Ser Arg Gly Arg
                     40
Leu Ile Lys Leu Tyr Lys Glu Leu Arg Gly Ser Pro Pro Pro Lys Gly
                  55
Met Leu Pro Phe Ser Thr Asp Trp Phe Met Thr Trp Glu Gln Asn Ile
             7.0
                              75
His Ala Ser Met Phe Cys Asn Ala Trp Gln Tyr Leu Leu Lys Thr Gly
           85
                           9.0
Leu Cys Ser Gly Val Asp Ala Val Ile Lys Ala Tyr Lys Leu Tyr Leu
         100
                       105
Glu Gln Cys Pro Gln His Glu Glu Gly Pro Leu Leu Ala Leu Thr Arg
     115 120 125
Ala Trp Thr Leu Val Arg Phe Val Glu Ser Gly Met Leu Glu Leu Ser
  130
                  135 140
Arg Cys Asn Cys Cys Asp Gly Asn Phe Ile Thr His Ala His Gln Pro
               150 155 160
Ala Gly Ser Phe Ala Cys Ser Leu Cys Gln Pro Pro Ser Arg Ala Val
            165
                           170 175
Lys Arg Arg Lys Leu Ser Arg Asp Ala Ala Asp Ile Ile Pro Gln Leu
         180 185
Leu Asp Glu Gln Ile Glu His Ala Val
```

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<210> 8740
<211> 301
<212> PRT
<213> Enterobacter cloacae
<400> 8740
Arg Lys Asp Asp Val Val Leu Ile Leu Leu Gly Tyr Leu Val Val Leu
Gly Thr Val Phe Gly Gly Tyr Met Met Thr Gly Gly His Leu Gly Ala
       20
                         25
Leu Tyr Gln Pro Ala Glu Leu Val Ile Ile Gly Gly Ala Gly Val Gly
   35
                     4.0
Ala Phe Ile Val Gly Asn Asn Gly Lys Ser Ile Lys Gly Thr Leu Lys
 50 55
                                  60
Ala Ile Pro Leu Leu Phe Arg Arg Ser Lys Tyr Thr Lys Ser Met Tyr
65 70
                               75
Met Asp Leu Leu Ala Leu Leu Tyr Arg Leu Met Ala Lys Ser Arg Gln
       85 90 95
Gln Gly Met Phe Ser Leu Glu Arg Asp Ile Glu Asn Pro Lys Glu Ser
      100 105 110
Glu Ile Phe Ala Ser Tyr Pro Arg Ile Leu Ala Asp Ala Met Met Leu
          120 125
Asp Phe Ile Val Asp Tyr Leu Arg Leu Ile Ile Ser Gly Asn Met Asn
                   135 140
Thr Phe Glu Ile Glu Ala Leu Met Asp Glu Glu Ile Glu Thr His Glu
145 150 155
Ser Glu Ser Glu Val Pro Ala Asn Ser Leu Ala Leu Val Gly Asp Ser
            165 170 175
Leu Pro Ala Phe Gly Ile Val Ala Ala Val Met Gly Val Val His Ala
                         185 190
         180
Leu Ala Ser Ala Asp Arg Pro Ala Ala Glu Leu Gly Ala Leu Ile Ala
                                    205
 195
                    200
His Ala Met Val Gly Thr Phe Leu Gly Ile Leu Leu Ala Tyr Gly Phe
                  215 220
 210
Ile Ser Pro Leu Ala Ser Val Leu Arg Gln Lys Ser Ala Glu Thr Thr
               230 235 240
Lys Met Met Gln Cys Val Lys Ile Thr Leu Leu Ser Asn Leu Asn Gly
            245
                            250 255
Tyr Ala Pro Pro Ile Ala Val Glu Phe Gly Arg Lys Thr Leu Tyr Ser
         260
                         265 270
Ser Glu Arg Pro Ser Phe Ile Glu Leu Glu Glu His Val Arg Ala Val
                     280 285
Lys Asn Pro Asn Gln Gln Thr Thr Thr Glu Asp Ala
   290
                   295
<210> 8741
<211> 692
<212> PRT
<213> Enterobacter cloacae
<400> 8741
Asn Ser Leu Gly Pro Ser Leu Arg Leu Pro Phe Gln His Arg His Gln
                            1.0
Pro Ile Arg Gly Asp Ser Val Ser Met Asp Ile Thr Asp Phe Tyr Gln
         20
                         25
                                         3.0
Thr Phe Phe Asp Glu Ala Asp Glu Leu Leu Ala Asp Met Glu Gln His
                      40
                                      45
Leu Leu Asp Leu Val Pro Glu Ala Pro Asp Ser Glu Gln Leu Asn Ala
                  5.5
                                   60
Ile Phe Arg Ala Ala His Ser Ile Lys Gly Gly Ala Gly Thr Phe Gly
                7.0
```

Phe Thr Ile Leu Gln Glu Thr Thr His Leu Met Glu Asn Leu Leu Asp 90 Glu Ala Arg Arg Gly Glu Met Gln Leu Asn Thr Asp Ile Ile Asn Leu 110 100 Phe Leu Glu Thr Lys Asp Ile Met Gln Glu Gln Leu Asp Ala Tyr Lys 120 115 Ser Ser Ala Glu Pro Asp Ala Ala Ser Phe Glu Tyr Ile Cys Asn Ala 140 135 Leu Arg Gln Leu Ala Leu Glu Ala Lys Gly Glu Ala Ser Ala Pro Ala 155 145 150 Val Pro Ala Ala Lys Leu Ser Val Val Asp Ala Val Ala Glu Pro Ala 165 170 Thr Ala Pro Asp Ala Pro Ala Gly Lys Leu Arg Val Val Leu Ser Arg 185 190 180 Leu Lys Glu Asn Glu Val Asn Leu Leu Glu Glu Glu Leu Gly Asn Leu 195 200 205 Ala Thr Leu Ser Asn Val Val Lys Gly Lys Asp Ser Leu Ala Ala Thr 210 215 220 Leu Asp Gly Gly Ile Gly Gln Asp Asp Ile Val Ala Val Leu Cys Phe 230 235 Val Ile Glu Ala Asp Gln Ile Ala Phe Glu Thr Glu Ala Gly Ala Val 245 250 255 Glu Ala Pro Ala Pro Ala Glu Asn Thr Pro Ala Val Val Ala Ala Ala 260 265 270 Pro Ala Leu Lys Ala Val Pro Lys Glu Thr Ala Ala Pro Ala Arg Gly 275 280 285 Glu Lys Pro Ala Ala Arg Ser Ser Glu Ser Thr Ser Ile Arg Val Ala 290 295 300 Val Glu Lys Val Asp Gln Leu Ile Asn Leu Val Gly Glu Leu Val Ile 310 315 Thr Gln Ser Met Leu Ala Gln Arg Ser Asn Glu Leu Asp Pro Val Thr 325 330 335 His Gly Asp Leu Ile Thr Ser Met Gly Gln Leu Gln Arg Asn Ala Arg 340 345 350 Asp Leu Gln Glu Ser Val Met Ser Ile Arg Met Met Pro Met Glu Tyr 355 360 365 Val Phe Ser Arg Phe Pro Arg Leu Val Arg Asp Leu Ala Gly Lys Leu 370 375 380 Asn Lys Gln Ile Glu Leu Thr Leu Met Gly Ser Ser Thr Glu Leu Asp 390 395 Lys Ser Leu Ile Glu Arg Ile Ile Asp Pro Leu Thr His Leu Val Arg 405 410 415 Asn Ser Leu Asp His Gly Ile Glu Leu Pro Glu Asn Arg Val Ala Ala 425 420 Gly Lys Ser Pro Val Gly Asn Leu Ile Leu Ser Ala Glu His Gln Gly 435 440 445 Gly Asn Ile Cys Ile Glu Val Thr Asp Asp Gly Ala Gly Leu Asn Arg 455 460 Glu Arg Ile Leu Ala Lys Ala Ile Ser Gln Gly Met Ala Val Asn Glu 470 475 Asn Met Thr Asp Glu Glu Val Gly Met Leu Ile Phe Ala Pro Gly Phe 485 490 Ser Thr Ala Glu Gln Val Thr Asp Val Ser Gly Arg Gly Val Gly Met 500 505 510 Asp Val Val Lys Arg Asn Ile Gln Glu Met Gly Gly His Val Glu Ile 520 525 515 Gln Ser Lys Gln Gly Ala Gly Thr Thr Ile Arg Ile Leu Leu Pro Leu 535 540 Thr Leu Ala Ile Leu Asp Gly Met Ser Val Lys Val Ala Asp Glu Val 555 550 Phe Ile Leu Pro Leu Asn Ala Val Met Glu Ser Leu Gln Pro Arg Glu

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570
Glu Asp Leu His Pro Leu Ala Gly Gly Glu Arg Val Leu Glu Val Arg
         580
                           585
                                            590
Gly Glu Tyr Leu Pro Leu Val Glu Leu Trp Lys Val Phe Glu Val Asp
      595
                       600
                                         605
Gly Ala Lys Thr Glu Ala Thr Gln Gly Ile Val Val Ile Leu Gln Ser
       615
                                      620
Ala Gly Arg Arg Tyr Ala Leu Leu Val Asp Gln Leu Ile Gly Gln His
          630 635
Gln Val Val Lys Asn Leu Glu Ser Asn Tyr Arg Lys Val Pro Gly
            645 650
Ile Ser Ala Ala Thr Ile Leu Gly Asp Gly Ser Val Ala Leu Ile Val
       660 665 670
Asp Val Ser Ala Leu Gln Gly Leu Asn Arg Glu Gln Arg Val Ala Asn
                        680
Thr Ala Ala
   690
<210> 8742
<211> 191
<212> PRT
<213> Enterobacter cloacae
<400> 8742
Met Lys Arg Lys Leu Leu Phe Ile Cys Ala Gly Thr Val Leu Thr Ala
             5
                               1.0
Ala Thr Val Gly Gln Ala Leu Ala Val Thr Ser Ser Gly Thr Ile Gly
                           25
                                             30
Ala Thr Leu Thr Leu Thr Asn Gly Cys Leu Ile Asn Gly Ser Pro Thr
35
                        40
                                         4.5
Gln Asn Gly Ile Asn Phe Gly Thr Leu Asp Phe Gly Thr His Pro Ala
                55
                                      60
Thr Phe Ser Thr Leu Thr Thr Gin Leu Thr Gly Ala Ser Gly Gly Asn
                 70
                                  7.5
Thr Phe Thr Ile Gln Cys Thr Thr Ala Ser Tyr Thr Val Ala Ile Thr
                               90
            8.5
Gly Asn Thr Asn Ala Thr Ala Pro Gly Thr Val Val Gly Thr Pro Gly
          100 105
                                            110
Thr Pro Ala Arg Tyr Leu Val Asn Thr Ala Asn Ala Ala Gln Gly Val
              120 125
      115
Ala Tyr Ser Leu Tyr Ser Asp Ser Gly Tyr Asn Asn Val Ile Ala Asn
   130
                     135
                                      140
Asn Ala Ala Leu Pro Val Ala Ser Thr Ala Gly Gly Val Asn Ser Tyr
                 150
                                   155
Thr Leu Tyr Gly Arg Ile Thr Gly Gly Gly Asn Ser Val Thr Val Val
             165 170 175
Pro Gly Thr Tyr Thr Asp Thr Ile Asn Val Ser Val Thr Tyr
          180
                            185
<210> 8743
<211> 545
<212> PRT
<213> Enterobacter cloacae
<400> 8743
Thr Ala Ala Ala Cys Arg Leu Met Gly Ala Trp Met Leu Asn Arg Ile
                                10
Arg Ile Ser Thr Thr Leu Phe Leu Ile Leu Ile Leu Cys Gly Val Leu
                         25
                                              30
Gln Val Gly Ser Asn Gly Leu Ser Phe Trp Ala Phe Arg Asp Gly Tyr
```

Gln Asn Leu Gln Glu Val Glu Thr Ser Asn Gln Gln Arg Ser Ala Leu 55 Ala Gln Thr Arg Ala Val Leu Leu Gln Ala Ser Thr Ala Leu Asn Lys 70 75 Ala Gly Thr Leu Thr Ala Leu Ser Tyr Pro Pro Glu Asp Ile Lys Ala 85 90 Leu Met Val Val Ala Arg Ser Ser Leu Lys Gln Ala Asp Ala Gln Phe 100 105 110 Lys Ala Phe Thr Ala Gln Glu Ala Val Ser Glu Lys Glu Lys Ala Leu 115 120 Lys Val Ala Met Lys Lys Thr Phe Asp Val Trp Tyr Gly Asp Leu Asp 130 135 140 His Gln Ala Thr Trp Leu Glu Asn Asn Gln Leu Ser Asp Phe Leu Thr 145 150 155 160 Ala Pro Val Gln Ala Ser Gln Ala Ala Phe Asp Asp Ser Phe Asn Ala 165 170 175 Trp Gln Gln Asp Ile Asn Gln Phe Val Ala Arg Ala Gly Ala Asp Ser 180 185 190 Arg Thr Ser Tyr Arg Met Ser Gly Val Ile Phe Leu Thr Met Val Ile 195 200 205 Leu Ala Ala Leu Leu Thr Gly Gly Ser Leu Trp Trp Ser Arg Lys Met 210 215 220 Ile Val Gln Pro Leu Ala Ile Val Ser Ser His Phe Asp Ser Ile Ala 225 230 235 Lys Gly Asp Leu Ala Arg Pro Val Ala Val Tyr Gly Arg Asn Glu Ile 245 250 Ser Ala Ile Phe Ala Ser Leu Lys Ala Met Gln Ser Ser Leu Arg Glu 260 265 Thr Val Ser Asn Val Arg Gln Gly Ser Tyr Ala Met His Thr Gly Ile 275 280 285 Ser Glu Ile Ala Ala Gly Asn Asn Asp Leu Ser Ser Arg Thr Glu Gln 290 295 300 Gln Ala Ala Ser Leu Ala Gln Thr Ala Ala Ser Met Glu Gln Leu Thr 305 310 315 Ala Thr Val Ser Gln Asn Ala Asp Asn Ala Arg Gln Ala Ser Asp Leu 325 330 335 Ser Lys Gln Ala Ala Met Thr Ala Lys Arg Gly Gly Asp Gln Ala Ser 340 345 350 His Val Ala Ser Thr Met Gln Glu Ile Ala Ala Ser Ser Gln Lys Ile 360 365 Gly Asp Ile Ile Ser Val Ile Asp Gly Ile Ala Phe Gln Thr Asn Ile 375 380 Leu Ala Leu Asn Ala Ala Val Glu Ala Ala Arg Ala Gly Glu Gln Gly 385 390 395 400 Arg Gly Phe Ala Val Val Ala Gly Glu Val Arg Asn Leu Ala Ser Arg 405 410 Ser Ala Asn Ala Ala Lys Glu Ile Lys Gly Leu Ile Glu Glu Ser Val 420 425 430 Ser Arg Val Gln Gln Gly Ser Ala Leu Val Asp Thr Ala Ala Gln Thr 440 445 Met His Glu Ile Val Thr Ser Val Thr Arg Val Asn Asp Ile Met Gly 455 460 Glu Ile Ala Ser Ala Ser Asp Glu Gln Arg Arg Gly Ile Glu Gln Val 470 475 Ala Gln Ala Val Thr Gln Met Asp Gln Val Thr Gln Gln Asn Ala Ser 485 490 Leu Val Glu Glu Ala Ala Ala Thr Asp Gln Leu Ala Asn Gln Ala 500 505 510 Asp His Leu Thr Gly Leu Val Ala Val Phe Asn Val Lys Glu His Val 515 520 Glu Ala Val Thr Glu Val Gly Arg Ser Gln Ala Val Pro Val Val Ser

530 535 540 545 <210> 8744 <211> 353 <212> PRT <213> Enterobacter cloacae <400> 8744 Gly Lys Ser Met Ser Lys Ile Arg Val Leu Ser Val Asp Asp Ser Ala 10 Leu Met Arg Gln Ile Met Thr Glu Ile Ile Asn Ser His Ser Asp Met 20 25 30 Glu Met Val Ala Thr Ala Pro Asp Pro Leu Val Ala Arg Asp Leu Ile 35 40 4.5 Lys Lys Tyr Asn Pro Asp Val Leu Thr Leu Asp Val Glu Met Pro Arg * 55 Met Asp Gly Ile Asp Phe Leu Glu Lys Leu Met Arg Leu Arg Pro Met 70 75 Pro Val Val Met Val Ser Ser Leu Thr Gly Lys Gly Ser Glu Ile Thr 85 90 95 Leu Arg Ala Leu Glu Leu Gly Ala Val Asp Phe Val Thr Lys Pro Gln 100 105 110 Leu Gly Ile Arg Glu Gly Met Leu Ala Tyr Ser Glu Met Ile Ala Glu 115 120 125 Lys Ile Arg Thr Ala Ser Arg Ala Lys Leu Ala Ala His Lys Pro Thr 130 135 140 Ala Ala Pro Ala Thr Leu Lys Ala Gly Pro Leu Leu Ser Ser Glu Lys 145 150 155 160 Leu Leu Val Ile Gly Ala Ser Thr Gly Gly Thr Glu Ala Ile Arg His 165 175 175 Val Leu Gln Pro Leu Pro Leu Ser Ser Pro Gly Ile Leu Ile Thr Gln 180 185 190 His Met Pro Pro Gly Phe Thr Arg Ser Phe Ala Glu Arg Leu Asn Lys 195 200 205 Leu Cys Gln Ile Ser Val Lys Glu Ala Glu Asp Gly Glu Arg Val Leu 210 215 220 Pro Gly His Ala Tyr Ile Ala Pro Gly Asp Lys His Met Glu Leu Ala 225 230 235 240 Arg Ser Gly Ala Asn Tyr Gln Ile Lys Ile His Asp Gly Pro Pro Val 245 250 255 Asn Arg His Arg Pro Ser Val Asp Val Leu Phe His Ser Val Ala Lys 260 265 270 His Ala Gly Arg Asn Ala Val Gly Val Ile Leu Thr Gly Met Gly Asn 275 280 285 Asp Gly Ala Ala Gly Met Leu Ala Met His Gln Ala Gly Ala Trp Thr 290 295 300 Ile Ala Gln Asn Glu Ala Ser Cys Val Val Phe Gly Met Pro Arg Glu 305 310 315 Ala Ile Asn Met Ser Gly Val Ser Glu Val Val Asp Leu Ser Gln Val 325 330 335 Ser Gln Gln Met Leu Ala Lys Ile Ser Ala Gly Gln Ala Ile Arg Ile 340 345

<210> 8745

<211> 240 <212> PRT

<213> Enterobacter cloacae

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<400> 8745
Ser His Ser Pro Arg Arg Leu Trp Lys Arg Ser Ser Gly Arg Ser Ser
                          10
Arg Asn Ser Ala Cys Glu Val Met Asp Met Leu Gln Pro Ala Met Lys
        20
                        25
Pro Val Glu Glu His Ser Pro Ser Asp Ile Ile Ala Arg Ile Gly Ser
  35
                    40
                                   4.5
Leu Thr Arg Met Leu Arg Asp Ser Leu Arg Glu Leu Gly Leu Asp Gln
                  55
                         60
Ala Ile Ala Glu Ala Ala Glu Ala Ile Pro Asp Ala Arg Asp Arg Leu
              7.0
                  75
Asp Tyr Val Val Gln Met Thr Ala Gln Ala Ala Glu Arg Ala Leu Asn
           85
                         90
Ser Val Glu Ala Ser Gln Pro His Gln Asp Ala Met Glu Lys Gly Ala
        100 105 110
Lys Ala Leu Ser Lys Arg Trp Asp Glu Trp Phe Glu Asn Pro Ile Glu
     115 120 125
Leu Ala Asp Ala Arg Glu Leu Val Thr Asp Thr Arg Gln Tyr Leu Gly
 130 135 140
Asp Val Pro Gly His Thr Ser Phe Thr Asn Ala Gln Leu Leu Asp Ile
145 150 155
Met Met Ala Gln Asp Phe Gln Asp Leu Thr Gly Gln Val Ile Lys Arg
     165 170 175
Met Met Asp Val Ile Glu Glu Ile Glu Arg Gln Leu Leu Met Val Leu
180 185 190
Leu Glu Asn Ile Pro Glu Pro Ala Ala Arg Pro Lys Arg Glu Asn Glu
195 200 205
Ser Leu Leu Asn Gly Pro Gln Leu Asp Thr Ser Lys Ala Gly Val Val
210 215 220
Ala Ser Gln Asp Gln Val Asp Asp Leu Leu Asp Ser Leu Gly Phe
             230
                             235
```

<210> 8746 <211> 391 <212> PRT <213> Enterobacter cloacae

<400> 8746 Ile Asn Gly Leu Arg Ala Gly Thr Val Ala Glu Glu Asn Asp Asp Lys 5 1.0 Thr Glu Ala Pro Thr Pro His Arg Leu Glu Lys Ala Arg Glu Asp Gly 20 25 Gln Ile Pro Arg Ser Arg Glu Leu Thr Ser Leu Leu Ile Leu Val Val 35 4.0 Gly Val Cys Ile Ile Trp Trp Gly Gly Glu Met Leu Ala Arg Arg Leu 55 60 Ala Gly Met Leu Ser Ala Gly Leu Arg Phe Asp His Ser Met Val Asn 65 70 75 Asp Pro Asn Leu Ile Leu Ile Gln Ile Ile Asn Leu Val Lys Ser Ala 85 90 Met Ile Ala Leu Leu Pro Leu Ile Ala Gly Val Val Ile Val Ala Leu 100 105 110 Val Ser Pro Val Met Leu Gly Gly Leu Val Phe Ser Gly Lys Ser Leu 120 125 Gln Pro Lys Phe Ser Lys Leu Asn Pro Leu Pro Gly Ile Ala Lys Met 135 140 Phe Ser Ala Gln Thr Gly Ala Glu Leu Leu Lys Ala Ile Leu Lys Ser 145 150 155 Leu Leu Met Gly Ser Thr Ala Gly Phe Phe Leu Trp His His Trp Pro 170

```
Glu Met Met Arg Leu Ile Ser Glu Ser Pro Met Thr Ala Met Lys Asn
                        185
          180
                                          190
Ala Leu Asn Leu Val Gly Leu Cys Ser Leu Leu Val Val Leu Ser Ile
      195
                     200
                                       205
Ile Pro Met Val Ala Phe Asp Val Ile Phe Gln Ile Tyr Ser His Ile
       215
                        220
Lys Lys Leu Arg Met Ser Arg Gln Asp Ile Arg Asp Glu Tyr Lys Gln
225
      230
                      235
Met Glu Gly Asp Pro His Val Lys Gly Arg Ile Arg Gln Met Gln Arg
          245
                             250 255
Ala Ala Arg Arg Arg Met Met Glu Asp Val Pro Lys Ala Asp Val
         260 265 270
Ile Val Thr Asn Pro Thr His Tyr Ser Val Ala Leu Gln Tyr Asp Glu
     275 280 285
Asn Lys Met Ser Ala Pro Lys Val Val Ala Lys Gly Ala Gly Leu Ile
 290 295 300
Ala Leu Arg Ile Arg Glu Ile Ala Thr Glu Asn Arg Val Pro Ile Leu
305 310
                                315
Glu Ala Pro Pro Leu Ala Arg Ala Leu Tyr Arg His Ala Glu Ile Gly
          325 330
Gln Gln Ile Pro Gly Gln Leu Tyr Ala Ala Val Ala Glu Val Leu Ala
          340
                         345
                                          350
Trp Val Trp Gln Leu Lys Arg Trp Arg Leu Ala Gly Gly Gln Arg Pro
 355 360 365
Val Lys Pro Glu Asn Leu Pro Val Pro Glu Ala Leu Asp Phe Leu Asn
370 375
Glu Lys Asp Thr Asp Gly
<210> 8747
<211> 144
<212> PRT
<213> Enterobacter cloacae
<400> 8747
Pro Gln Tyr Ser His Asp Gly Asp His Arg Arg Glu Ile Met Arg Lys
Trp Leu Trp Ile Leu Leu Phe Pro Leu Ala Ala Gln Ala Ala Gly Glu
                          2.5
                                           30
Gly Ala Trp Gln Ala Ser Ser Ile Gly Leu Thr Leu Asn His Arg Gly
                      4.0
                                       4.5
Glu Ser Ile Ser Ser Arg Pro Leu Ser Ala Ser Glu Pro Val Ser Gly
                   55
                                    60
Gln Met Thr Leu Val Ala Trp Asn Tyr Thr Leu Thr Gly Pro Thr Pro
                                 75
              70
                                                 80
Ala Gly Leu Arg Val Arg Leu Cys Ser Leu Thr Arg Cys Ala Glu Ile
            8.5
                            90
                                              95
Glu Gly Gln Ser Gly Thr Thr Gln Ala Phe Asn Gly Val Ser Ala Gln
         100
                          105
Glu Pro Leu Arg Phe Ile Trp Glu Val Pro Gly Gly Gly Arg Leu Ile
   115
                       120
Pro Ala Leu Lys Val Gln Arg Asn Glu Val Leu Val Asn Tyr Arg
                   135
                                   140
<210> 8748
<211> 533
<212> PRT
<213> Enterobacter cloacae
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<400> 8748

Leu Gly Leu Thr Ala Met Lys Thr Arg Lys Ile Gly Leu Ala Asn Tyr

Leu Ala Tyr Gly Ser Gly Asp Phe Leu Gly Ala Gly Thr Thr Ala Leu 25 Thr Ala Ala Trp Leu Leu Tyr Phe Tyr Thr Thr Phe Cys Gly Leu Thr 35 40 Pro Ile Glu Ala Thr Phe Ile Phe Ala Ala Ala Arg Val Leu Asp Ala Val Val Ser Pro Leu Met Gly Phe Leu Thr Asp Asn Phe Gly Thr Thr 70 7.5 Trp Leu Gly Lys Arg Phe Gly Arg Arg Lys Phe Phe Ile Leu Leu Gly 8.5 90 Ile Pro Cys Val Phe Ser Tyr Ser Leu Met Trp Val Gly Asp Met Ser 100 105 Phe Trp Tyr Tyr Leu Leu Thr Tyr Leu Ile Phe Asp Ile Val Tyr Thr 120 115 Met Ile Leu Val Pro Tyr Glu Thr Leu Val Pro Glu Met Thr Asp Asp 130 135 140 Phe Lys Gln Lys Thr Lys Phe Ser Gly Ala Arg Ile Ser Met Ala Gln 150 155 160 Met Ser Ala Ile Leu Ala Ser Phe Leu Pro Gly Ile Leu Leu Thr His 165 170 175 Phe Gly Lys Asp Asn Ala Ile Ser Phe Phe Tyr Ala Ser Leu Val Phe 180 185 190 Ser Val Leu Cys Ala Leu Met Leu Thr Phe Val Trp Phe Phe Thr Trp 195 200 205 Glu Arg Pro Arg Glu Glu Trp Ser Glu Ala Ala Leu Arg Ala Glu Glu 210 215 220 Glu Lys Lys Leu Thr Leu Gly Gln Ser Leu Asn Arg Leu Phe Val 225 230 235 240 Glu Leu Ser Ser Thr Leu Arg Ile Lys Ile Phe Arg Gln His Leu Gly 245 250 255 Met Tyr Leu Gly Gly Tyr Ile Ala Gln Asp Val Phe Asn Ala Val Phe 260 265 270 Thr Tyr Tyr Val Val Phe Val Leu Met Gln Glu Ala Ser Met Ala Ser 275 280 Asn Leu Leu Gly Thr Met Ala Ile Phe Gln Phe Leu Ala Val Ile Gly 290 295 300 Met Ile Pro Leu Cys Ile Arg Phe Gly Pro Ala Pro Ser Tyr Arg Met 305 310 315 Val Val Leu Phe Gly Leu Ala Ser Leu Ser Tyr Ala Val Leu Tyr 325 330 Tyr Ala Gly Leu Ser Asp Val Tyr Ala Leu Leu Leu Leu Ile Ser Ala 340 345 350 Val Ala Gly Leu Gly Arg Gly Gly Ile Asn Tyr Val Pro Trp Asn Thr 355 360 365 Tyr Thr Tyr Ile Ala Asp Val Asp Glu Val Ile Thr Gly Gln Arg Arg 370 375 380 Glu Gly Ile Phe Ala Gly Ile Met Thr Leu Thr Arg Lys Ala Ser Gln 385 390 395 400 Ala Gly Ala Val Met Leu Val Gly Ile Val Met Gln Met Ser Gly Phe 405 410 415 Val Ser Gly Gln Lys Val Gln Pro Ala Glu Val Ser His Thr Ile Leu 425 430 Met Ile Leu Ser Val Gly Thr Ile Leu Val Leu Phe Cys Gly Phe Leu 440 445 Val Ser Leu Arg Phe Lys Leu Asn Leu Gln Thr His Ser Thr Leu Arg 450 455 460 Glu Glu Thr Ala Lys Met Arg Glu Ser Gly His Ala Met Pro Glu Ala 465 470 475 Val Thr Pro Gln Ala Arg Ala Thr Val Glu Met Leu Ala Gly Met Pro 490

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Tyr Glu Ser Leu Trp Gly Asn Asn Ile Gly Tyr Leu Asn Arg Asn
               505
       500
Lys Pro Ala Ala Pro Ser Leu Lys Asp Arg Ala Val Leu Asn Ser Thr
      515
                     520
Tvr Asn Arg Gly
   530
<210> 8749
<211> 188
<212> PRT
<213> Enterobacter cloacae
<400> 8749
Pro Met Ala Asn Trp His Thr Ile Asp Glu Leu His Asp Ile Ser Ala
                              1.0
Asp Leu Pro Arg Phe Thr Gln Ala Phe Thr Glu Leu Ala Thr Arg Leu
        20
                      25
Gly Leu Asp Ile Ala Pro Leu Glu Ala Asp His Ile Ser Leu Arg Cys
      35
                     40
                                        45
His Gln Asn Ala Thr Ala Glu Arg Trp Arg Arg Gly Phe Glu Gln Cys
                  55
Gly Glu Leu Leu Ser Glu Asn Ile Ile Asn Gly Arg Pro Ile Cys Leu
           70
                                 75
Phe Lys Leu His Ala Pro Val Thr Val Ala His Trp Gln Phe Thr Val
           85 90
Val Glu Leu Pro Trp Pro Gly Glu Lys Arg Tyr Pro His Glu Gly Trp
        100 105
                                            110
Glu His Ile Glu Ile Val Leu Pro Gly Glu Pro Glu Thr Leu Asn Ala
 115 120 125
Arg Ala Leu Thr Leu Leu Ser Asp Glu Gly Leu Ser Gln Pro Gly Ile
 130 135 140
Phe Val Lys Thr Ser Ser Pro Lys Gly Glu Arg Glu Arg Leu Pro Asn
145 150 155 160
Pro Thr Leu Ala Val Thr Asp Gly Asn Val Thr Val Lys Phe His Pro
           165 170
Trp Thr Ile Glu Gln Ile Val Ala Ser Glu Ala
          180
<210> 8750
<211> 255
<212> PRT
<213> Enterobacter cloacae
<400> 8750
Val Lys Phe Lys Glu Asp Asp Met Ala Leu Leu Glu Ile Cys Cys Tyr
                              10
Ser Val Glu Cys Ala Val Thr Ala Gln Arg His Gly Ala Asp Arg Ile
         2.0
                           25
                                            30
Glu Leu Cys Ala Ala Pro Lys Glu Gly Gly Leu Thr Pro Ser Ser Gly
      35
                       40
                                        45
Val Leu Lys Ser Ala Arg Gln Ala Ile Thr Ile Pro Val His Pro Ile
                   55
                                     60
Ile Arg Pro Arg Gly Gly Asp Phe Cys Tyr Thr Ala Gly Glu Phe Ser
               7.0
                                  75
                                                  80
Ala Met Leu Glu Asp Ile Ala Leu Val Arg Asp Leu Gly Phe Pro Gly
             85
                              90
Leu Val Ile Gly Val Leu Asp Glu Asp Gly Asn Ile Asp Leu Pro Arg
         100 105
Met Arg Gln Val Met Arg Ala Ala Arg Gly Met Ala Val Thr Phe His
      115
                       120
Arg Ala Phe Asp Met Cys Gln Asp Pro Ile Gln Ala Phe Asp Thr Leu
```

```
135
Ala Glu Leu Gly Val Ala Arg Val Leu Thr Ser Gly Gln Gln Ser Ser
                           155
              150
Ala Glu Lys Gly Leu Lys Leu Ile Thr Glu Leu Lys Ala His Ser Gly
            165
                             170
Val Pro Ile Ile Met Ala Gly Ala Gly Val Arg Ala Ser Asn Leu Glu
         180
                      185
                                 190
Leu Phe Leu Asn Ala Gly Val Glu Glu Leu His Ser Ser Ala Gly Lys
 195
                  200
                          205
Trp Ile Pro Ser Pro Met Arg Tyr Arg Asn Thr Gly Leu Ser Met Ser
                215
                       220
Thr Asp Ala Glu Ala Asp Glu Tyr Ser Arg Tyr Gly Val Asp Gly Glu
225 230 235
Ser Val Ala Val Met Lys Ser Leu Ile Glu Arg His His Val
             245
                            250
<210> 8751
<211> 154
<212> PRT
<213> Enterobacter cloacae
<400> 8751
Ile Gln Leu Cys Ile Trp Pro Phe Leu Phe Ile Pro Gly Asp Phe Pro
                   10
Ala Thr Ser Arg Gly Ala Val Phe Pro His Lys Asn Asn Ser Trp Leu
 20 25
Phe Gly Met Gly Lys Met His Thr Ser Glu Leu Leu Lys His Ile Tyr
35
             40
Asp Ile Asn Leu Ser Tyr Leu Leu Leu Ala Gln Arg Leu Ile Ser Gln
50 55
                                  60
Asp Lys Pro Ser Ala Met Phe Arg Leu Gly Val Asn Glu Glu Met Ala
65 70
                     75
Thr Met Leu Gly Gly Leu Thr Leu Pro Gln Met Val Lys Leu Ala Glu
   85 90 95
Thr Asn Gln Leu Val Cys Gln Phe Arg Phe Asp Asn Pro Gln Thr Ile
 100 105 110
Thr Arg Leu Thr Gln Glu Ser Arg Val Asp Asp Leu Gln Gln Ile His
 115 120 125
Thr Gly Ile Leu Leu Ser Thr Arg Leu Leu Asn Glu Ile Ser Gln Pro
 130 135
Asp Asp Val Ala Arg Lys Lys Arg Ala
               150
<210> 8752
<211> 173
<212> PRT
<213> Enterobacter cloacae
<400> 8752
Val Lys Gly Asn Asn Met Thr Gly Met Ser Asn Val Thr Lys Leu Ala
                         1.0
Gly Glu Pro Ser Gly Gln Glu Phe Leu Val Phe Thr Leu Gly Asp Glu
                       25
                                        3.0
Glu Tyr Gly Ile Asp Ile Leu Lys Val Gln Glu Ile Arg Gly Tyr Asp
                  40
```

Gln Val Thr Arg Ile Ala Asn Thr Pro Ala Phe Ile Lys Gly Val Thr 55 Asn Leu Arg Gly Val Ile Val Pro Ile Val Asp Leu Arg Val Lys Phe 75 7.0 Ser Gln Gly Asp Val Glu Tyr Asn Asp Asn Thr Val Val Ile Val Leu 90

```
Asn Leu Gly Gln Arg Val Val Gly Ile Val Val Asp Gly Val Ser Asp
       100
                            105
 Val Leu Ser Leu Thr Ala Asp Gln Ile Arg Pro Ala Pro Glu Phe Ala
       115
                        120
                                 125
 Val Thr Leu Ser Thr Glu Tyr Leu Thr Gly Leu Gly Ala Leu Gly Glu
    130
                     135
                             140
 Arq Met Leu Ile Leu Val Asn Ile Glu Lys Leu Leu Asn Ser Glu Glu
 145
               150
                      155
 Met Ala Leu Leu Asp Ile Ala Ala Asn His Val Ala
              165
<210> 8753
 <211> 203
 <212> PRT
 <213> Enterobacter cloacae
<400> 8753
Arg Leu Tyr Arg Glu Pro Ile Pro Thr Arg Leu Thr Ser Ala Ser Pro
              5
                              10
                                                 15
Thr Asp Ser Ala Met Lys Ala Leu Cys Leu Cys Leu Arg Glu Ser Ala
        20
                            2.5
                                             30
Glu Gly Val Val His Pro Phe Leu Ala Leu Ile Val Gly Leu Met Met
      35
                     40
                                         4.5
Ile Cys Asp Ala Arg Ala Val Thr Ser Gln Ser Phe Arg Val Ser Ala
  50
                 5.5
                                      60
Thr Val Val Pro Gly Cys Ser Val Ser Thr Gly Thr Gly Gly Arg Phe
                70
                                75
                                                    80
Gly Thr Leu Asp Phe Gly Thr Arg Asn Gly Val Asp Asn Thr Pro Val
            85
                     90
                                                95
Ser Thr Ser Phe Val Ala Asp Gly Ala Leu Ser Ile Ala Cys Thr Pro
        100
                           105
Gly Val Ala Leu Ser Met Ser Ile Asn Gly Gly Gln Asn Tyr Ser Ser
 115
                       120
                                          125
Val Arg Arg Met Thr Arg Ser Gly Gly Thr Glu Val Val Gly Tyr Arg
 130 135
                                     140
Leu Tyr Ser Ser Ser Ser Leu Ala Ala Asn Ser Glu Ile Gly Val Asn
145
       150
                                  155
                                                   160
Gln Ala Ile Pro Ile Thr Tyr Thr Asn Ser Asn Asn Ile Ala Leu Pro
             165
                            170 175
Leu Phe Gly Val Ala Leu Leu Thr Gly Phe Ser Leu Pro Gly Thr Tyr
         180
                           185
                                      190
Ser Asp Gln Leu Thr Val Thr Leu Ser Trp
       195
<210> 8754
<211> 800
<212> PRT
<213> Enterobacter cloacae
<400> 8754
Cys Gln Gly Tyr Ala Met Ala Ile Asp Ala Arg Gln Leu Lys Pro Ala
                               10
Met Met Ile Leu Leu Cys Val Ser Thr Ser Ala Phe Ala Glu Thr Gly
         20
                           25
                                             30
Asp Asp Ser Leu Pro Pro Pro Pro Asp Ala Arg Thr Met Asn Gly Glu
                        40
                                         45
Ala Val Phe Gln Leu Ala Leu Val Leu Asn His Tyr Asp Thr Gly Leu
                   55
                                     60
Val Val Pro Val Thr Gln Arg Glu Gly Ala Trp Phe Ile Ser Gly Ala
```

Asp Leu Leu Arg Ala Gly Leu Pro Pro Ala His Val Pro Ala Gly Glu

7.0

Val Asn Leu Ser Thr Leu Thr Ser Val Arg Ala Glu Tyr Asp Ser Thr 105 100 110 Ala Gln Arg Leu Leu Thr Val Pro Arg Asp Trp Val Ala Ala Arg 115 120 125 Ile Thr Pro Phe Ser Glu Gln Asn Thr His Ser Lys Pro His Tyr Gly 130 135 140 Arg Gly Ala Leu Leu Asn Tyr Asp Val Tyr Thr Asn His Ser Glu His 150 155 160 Thr Gly Gly Gln Ala Ser Val Trp His Glu Phe Arg Tyr Phe Asn Glu 165 170 175 Asp Tyr Ser Phe Ser Ser Thr Gly Tyr Ala Arg Gln Asn Phe Thr Gly 180 185 190 Asn Ser Gly Gln Glu Gly Tyr Val Arg Tyr Asp Ser Thr Phe Leu 195 200 205 Ile Thr Asn Glu Glu Asp Ala Thr Thr Trp Thr Val Gly Asp Val Ile 210 215 220 Ser Asp Ala Leu Ser Trp Ser Thr Asn Val Arg Met Gly Gly Ile Ser 225 230 235 Tyr Gly Arg Asp Phe Ser Leu Arg Pro Asp Leu Val Thr Trp Pro Leu 245 250 255 Pro Ala Phe Ser Gly Glu Ala Ala Val Pro Thr Ser Val Asp Leu Phe 260 265 270 Ile Asn Gly Tyr Arg Ser Gly Ser Thr Arg Leu Gln Pro Gly Pro Phe 275 280 285 Thr Leu Thr Asn Leu Pro Tyr I'e Asn Gly Ala Gly Asp Ala Val Leu 290 295 300 Val Thr Thr Asp Ala Leu Gly Arg Gln Val Ser Thr Thr Leu Pro Phe 305 310 315 Tyr Val Ser Ser Asp Leu Leu Lys Gln Gly Leu Ser Asp Gly Ala Val 325 330 335 Thr Leu Gly Ser Leu Arg Arg Asn Tyr Gly Ile Glu Asn Phe Asp Tyr 340 345 350 Gly Pro Ala Ala Gly Ser Gly Ser Tyr Arg Tyr Gly Val Thr Asp Trp 355 360 365 Leu Thr Leu Glu Gly His Ala Glu Gly Ala Glu Ser Leu Ala Leu Gly 370 375 380 Gly Ala Gly Thr Val Leu Lys Leu Gly Arg Phe Gly Val Val Asn Thr 385 390 395 400 Ser Trp Thr Gln Ser Arg Met Arg Gly Asp Ser Gly Gly Gln Ile Asn 405 410 415 Trp Gly Tyr Gln Tyr Asn Thr Ser Glu Phe Ser Val Ala Thr Gln His 420 425 430 Thr Arg Arg Asp Arg Gly Phe Gly Asn Leu Ala Leu Tyr Asp Gln Pro 435 440 445 Thr Val Tyr Asp Glu Asn Asp Asn Pro Val Ala Ser Leu Ser Arg Asn 450 455 460 Thr Asp Gln Tyr Ser Leu Thr Phe Asn Leu Gly Gly Tyr Gly Asn Ile 465 470 475 480 Gly Ala Ala Trp Ile Gly Val Glu Ser Phe Asp Ser Lys Lys Thr Glu 485 490 495 Leu Leu Asn Leu Ser Trp Ser Arg Asn Leu Trp Gly Ser Ser Ser Ile 500 505 510 Tyr Leu Ala Ala Ser Arg Asp Gln Gln Arg Gly Asp Trp Thr Val Ala 515 520 525 Leu Ser Leu Gln Val Pro Leu Gly Glu Arg Asp Ser Ala Ala Val Thr 530 535 540 Phe Glu Asn Thr Pro Asp Ala Gly Ser Thr Gln Arg Ile Asn Tyr Asn 545 550 555 His Ser Met Pro Ser Asp Gly Gly Phe Ser Trp Asn Met Ala Trp Ala

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Asn Gln Ser Arg Ser Ser Asn Tyr Gln Gln Ala Thr Leu Gly Trp Arg
    580
                       585
Asn Asn Asn Val Glu Leu Gln Gly Gly Gly Tyr Gly Glu Lys Gly Met
                    600
 595
Met Thr Trp Trp Gly Glu Ala Met Gly Ser Val Val Leu Met Asp Gly
         615
                                 620
Glu Leu Phe Ala Ala Asn Lys Ile Asn Asp Ala Phe Val Val Ile Ser
      630
                              635
Thr Asp Gly His Pro Asp Val Pro Val Ser Tyr Glu Asn Gln Pro Val
          645
                          650
Gly Lys Thr Asn Asn Lys Gly Tyr Leu Leu Val Ser Gly Val Ser Ala
                        665
                            670
Tyr Tyr Pro Ala Ser Tyr Arg Ile Asp Thr Leu Asn Leu Pro Ala Asp
                     680 685
Thr Arg Leu Lys Glu Thr Glu Arg Arg Val Ala Ile Arg Arg His Asn
                695
                      700
Gly Tyr Leu Val Asp Phe Pro Met Glu Gln Glu Arg Val Ala Ser Val
    710 715
Ile Leu His Asp Ala Gln Gly Asn Ala Ile Pro Val Gly Ser Gln Val
    725 730 735
Arg Arg Ala Ser Arg Ser Ser Ala Val Val Gly Tyr Asp Gly Leu Ala
 740 745 750
Trp Leu Glu Asn Leu Asn Asp Val Asn Pro Leu Glu Val Ile Thr Pro
 755 760 765
Glu Gly Lys Arg Cys Thr Ala Thr Leu Thr Val Gly Ala Asn Pro Glu
770 775 780
His Lys Leu Gln Thr Tyr Gly Pro Leu Thr Cys Arg Glu Ala Pro
785 790
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<212> PRT <213> Enterobacter cloacae

<210> 8755

<211> 591

<400> 8755 Leu Ser Thr Ser His Ser Asp Ser Arg Ala Phe Pro Phe Arg Lys Cys 1 5 10 15 Lys Val Pro Val Ala Cys Ala Asp Asn Thr Val Asn Lys Ser Met Arg 20 25 Arg Cys Cys Met Leu Asn Arg Ile Arg Val Val Thr Met Leu Met Met 35 40 45 Val Leu Val Ile Phe Ala Leu Leu Gln Leu Thr Ser Gly Gly Leu Phe 50 55 Phe Ser Ser Leu Lys Gln Asn Gln Asp Ser Phe Ala Ala Ser Asn Asp 70 75 Leu Arg Met Gln Gln Ser Glu Leu Thr Thr Thr Trp Asp Leu Met Leu 8.5 90 Gln Thr Arg Ile Asn Leu Ser Arg Ser Ser Ala Arg Met Met Asp 105 110 Pro Asn Asn Gln Gln Ser Ser Ala Lys Thr Glu Leu Leu Lys Asn Ala 115 120 125 Arg Ala Thr Leu Ala Asp Ala Ala Lys His Tyr Asp Ala Phe Lys Lys 130 135 140 Ile Ala Pro Gln Pro Ala Met Ala Gln Ala Ser Ala Asn Ile Asp Glu 145 150 155 160 Lys Tyr Gln Ala Tyr Phe Ala Gly Leu Thr Glu Leu Val Gln Phe Leu 165 170 175 Glu Lys Gly Asn Met Asp Ala Tyr Phe Ala Gln Pro Thr Gln Gly Met 185 190 Gln Asn Ala Leu Gly Ala Ala Leu Gly Glu Tyr Ala Lys Ala Ser Gly 200 205

```
Glu Leu Tyr His Ser Ala Phe Thr Gln Ser Gln Asn Asp Tyr Arg Phe
 210
          215
Ala Lys Trp Gln Met Ala Val Leu Ala Leu Ala Leu Val Ile Val Leu
            230
                             235
Val Ala Val Trp Tyr Gly Ile Arg His Ile Leu Leu Asn Pro Leu Gly
            245 250 255
Arg Val Ile Ala His Ile Arg Asp Ile Gly Arg Gly Asp Leu Thr Lys
         260 265
Thr Leu Ser Val Ser Gly Arg Asn Glu Ile Thr Glu Leu Ala Thr Ser
                    280
Val Asp His Met Gln Arg Ser Leu Ile Asp Thr Val Ala Asn Val Arg
  290
                 295 300
Glu Gly Ala Asp Ala Ile Tyr Thr Gly Thr Ser Glu Ile Ala Met Gly
    310 315 320
Asn Asn Asp Leu Ser Ser Arg Thr Glu Gln Gln Ala Ser Ala Leu Glu
         325 330
Glu Thr Ala Ala Ser Met Glu Gln Leu Thr Ala Thr Val Lys Gln Asn
    340 345
Ala Asp Asn Ala Arg Gln Ala Ser Gln Leu Ala Glu Ser Ala Ser Asp
 355 360 365
Thr Ala Gln Arg Gly Gly Arg Val Val Asp Gly Val Val Lys Thr Met
 370 375
                               380
His Asp Ile Ala Asp Ser Ser Lys Lys Ile Ala Asp Ile Ile Ser Val
385 390 395 400
Ile Asp Gly Ile Ala Phe Gln Thr Asn Ile Leu Ala Leu Asn Ala Ala
         405 410 415
Val Glu Ala Ala Arg Ala Gly Glu Gln Gly Arg Gly Phe Ala Val Val
        420 425 430
Ala Gly Glu Val Arg Asn Leu Ala Ser Arg Ser Ala Asn Ala Ala Lys
     435 440
                                  445
Glu Ile Lys Ala Leu Ile Glu Asp Ser Val Ser Arg Val Asp Thr Gly
 450 455
                                460
Ser Val Leu Val Glu Ser Ala Gly Glu Thr Met Asn Asp Ile Val Asn
465 470
                             475
Ala Val Thr Arg Val Thr Asp Ile Met Gly Glu Ile Ala Ser Ala Ser
          485
                          490 495
Asp Glu Gln Ser Arg Gly Ile Asp Gln Val Ala Leu Ala Val Ser Glu
        500 505 510
Met Asp Arg Val Thr Gln Gln Asn Ala Ala Leu Val Gln Glu Ser Ala
  515 520
                                   525
Ala Ala Ala Ala Leu Glu Asp Gln Ala Ser Arg Leu Lys Met Ala
 530 535
                                540
Val Ser Ala Phe Arg Leu Thr Ser Lys Thr Thr Asn Thr Val Ser Ser
             550 ° 555
Arg Ser Val Tyr Gly Glu Ala Ala Pro Ala Pro Val Thr Ala Arg Thr
         565 570 575
Arg Ala Ala Val Thr Gly Gln Asp Glu Asn Trp Glu Thr Phe
                       585
<210> 8756
<211> 292
<212> PRT
<213> Enterobacter cloacae
<400> 8756
Glu Gly Ala Met Thr Ser Pro Met Pro Ser Gly Gln Thr Ser Leu Leu
1 5
                        10
Leu Gln Met Thr Gln Arg Leu Ala Leu Ser Asp Ala His Phe Arg Arg
                  25
Ile Cys Gln Leu Ile Tyr Gln Arg Ala Gly Ile Val Leu Ala Asp His
```

4.0

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Lys Arg Asp Met Val Tyr Asn Arg Leu Val Arg Arg Leu Arg Thr Leu
Gly Leu Tyr Asp Phe Gly Arg Tyr Leu Ser Met Leu Glu Ala Asn Gln
              70
                          75
Asn Ser Ala Glu Trp Gln Ala Phe Ile Asn Ser Leu Thr Thr Asn Leu
                 90 95
           85
Thr Ala Phe Phe Arg Glu Ala His His Phe Pro Val Leu Ala Glu His
        100
            105 110
Ala Arg Arg Arg Gly Gly Glu Tyr Arg Val Trp Ser Ala Ala Ala Ser
     115
          120 125
Thr Gly Glu Glu Pro Tyr Ser Leu Ala Ile Thr Leu Ala Asp Thr Leu
       135 140
Gly Met Ala Pro Gly Arg Trp Lys Val Tyr Ala Ser Asp Ile Asp Thr
    150 155
Glu Val Leu Glu Lys Ala Arg Asn Gly Val Tyr Arg Gln Asp Glu Leu
       165 170 175
Lys Thr Leu Ser Pro Gln Gln Leu Gln Arg Tyr Phe Met Arg Gly Thr
      180 185 190
Gly Pro His Glu Gly Leu Val Arg Val Arg Gln Glu Leu Ala Asn Cys
  195 200
                                   205
Val Glu Phe Ala Pro Val Asn Leu Leu Asp Lys Gln Tyr Asn Val Pro
 210 215 220
Gly Pro Phe Asp Ala Ile Phe Cys Arg Asn Val Met Ile Tyr Phe Asp
225 230 235
Lys Thr Thr Gln Gln Asp Ile Leu Arg Arg Phe Val Pro Leu Lys 245 250 250
Pro Asp Gly Leu Leu Phe Ala Gly His Ser Glu Asn Phe Ser Asn Leu
  260 265 270
Val Arg Glu Phe Ser Leu Arg Gly Gln Thr Val Tyr Ala Leu Ser Lys
 275
          280
Glu Lys Ala
 290
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<210> 8757 <211> 698 <212> PRT <213> Enterobacter cloacae

<400> 8757 Thr Arg Arg Thr Leu Met Ala Asn Leu Val Ala Met Leu Arg Leu Pro 1 5 10 Gly Asn Leu Lys Ser Thr Gln Trp Gln Ile Leu Ala Gly Pro Ile Leu 20 25 Ile Leu Leu Ile Leu Ser Met Met Val Leu Pro Leu Pro Ala Phe Ile 35 40 Leu Asp Leu Leu Phe Thr Phe Asn Ile Ala Leu Ser Ile Met Val Leu 50 55 60 Leu Val Ala Met Phe Thr Gln Arg Thr Leu Glu Phe Ala Ala Phe Pro 70 - 75 80 Thr Ile Leu Leu Phe Thr Thr Leu Leu Arg Leu Ala Leu Asn Val Ala 8.5 90 Ser Thr Arg Ile Ile Leu Met Glu Gly His Thr Gly Ala Ala Ala Ala 105 Gly Lys Val Val Glu Ala Phe Gly His Phe Leu Val Gly Gly Asn Phe 115 120 125 Ala Ile Gly Ile Val Val Phe Val Ile Leu Val Ile Ile Asn Phe Met 135 140 Val Ile Thr Lys Gly Ala Gly Arg Ile Ala Glu Val Gly Ala Arg Phe 145 150 155 Val Leu Asp Gly Met Pro Gly Lys Gln Met Ala Ile Asp Ala Asp Leu 165 170

Asn Ala Gly Leu Ile Ala Glu Asp Glu Ala Lys Lys Arg Arg Ala Glu 180 185 Val Thr Gln Glu Ala Asp Phe Tyr Gly Ser Met Asp Gly Ala Ser Lys 195 200 205 Phe Val Arg Gly Asp Ala Ile Ala Gly Ile Leu Ile Met Val Ile Asn 215 220 Val Val Gly Gly Leu Leu Val Gly Val Leu Gln His Gly Met Asp Met 225 235 230 Gly His Ala Ala Glu Ser Tyr Thr Leu Leu Thr Ile Gly Asp Gly Leu 245 250 Val Ala Gln Ile Pro Ala Leu Val Ile Ser Thr Ala Ala Gly Val Ile 260 265 270 Val Thr Arg Val Ser Thr Asp Gln Asp Val Gly Glu Gln Met Val Gly 275 280 285 Gln Leu Phe Ser Asn Pro Arg Val Met Leu Leu Ser Ala Ala Val Leu 295 300 Gly Leu Leu Gly Met Val Pro Gly Met Pro Asn Leu Val Phe Leu Leu 305 310 315 320 Phe Thr Ala Ala Leu Leu Gly Leu Ala Trp Trp Met Arg Gly Arg Glu 325 330 335 Thr Gln Pro Lys Ala Glu Pro Ala Pro Val Lys Met Pro Glu Asn Thr 340 345 350 Gln Ala Val Glu Ala Thr Trp Asn Asp Val Gln Leu Glu Asp Ser Leu 355 360 365 Gly Met Glu Val Gly Tyr Arg Leu Ile Pro Met Val Asp Phe Gln Gln 375 380 Asp Gly Glu Leu Leu Gly Arg Ile Arg Ser Ile Arg Lys Lys Phe Ala 385 390 395 Gln Asp Met Gly Phe Leu Pro Pro Val Val His Ile Arg Asp Asn Met 405 410 415 Asp Leu Pro Pro Ala Arg Tyr Arg Ile Leu Met Lys Gly Val Glu Ile 420 425 430 Gly Ser Gly Asp Ala Tyr Pro Gly Arg Trp Leu Ala Ile Asn Pro Gly 435 440 Thr Ala Ala Gly Thr Leu Pro Gly Glu Gln Thr Thr Asp Pro Ala Phe 450 455 460 Gly Leu Ala Ala Ile Trp Ile Glu Ser Ala Leu Lys Glu Gln Ala Gln 465 470 475 Ile Gln Gly Tyr Thr Val Val Glu Ala Ser Thr Val Val Ala Thr His 485 490 Leu Asn His Leu Ile Gly Gln Phe Ser Ala Glu Leu Phe Gly Arg Gln 500 505 510 Glu Ala Gln Gln Leu Leu Asp Arg Val Thr Gln Glu Met Pro Lys Leu 515 520 Thr Glu Asp Leu Val Pro Gly Val Leu Thr Leu Thr Thr Leu His Lys 530 535 540 Val Leu Gln Asn Leu Leu Asp Glu Lys Val Pro Ile Arg Asp Met Arg 550 555 Thr Ile Leu Glu Thr Leu Ala Glu His Ala Pro Leu Gln Ser Asp Pro 565 570 575 His Glu Leu Thr Ala Val Val Arg Val Ala Leu Gly Arg Ala Ile Thr 585 Gln Gln Trp Phe Pro Gly Thr Gly Glu Val Gln Val Ile Gly Leu Asp 600 Thr Pro Leu Glu Arg Leu Leu Gln Ala Leu Gln Gly Gly Gly 615 620 Leu Glu Pro Gly Leu Ala Asp Arg Leu Leu Ala Gln Thr Gln Glu Ala 630 635 Leu Ala Arg Gln Glu Met Leu Gly Ala Pro Pro Val Leu Leu Val Asn 645 650 His Ala Leu Arg Pro Leu Leu Ser Arg Phe Leu Arg Arg Ser Leu Asn

660 665 Gln Leu Val Val Leu Ser Asn Met Glu Leu Ser Asp Asn Arg Asn Ile 680 675 Arg Met Thr Ala Thr Ile Gly Gly Lys 690 <210> 8758 <211> 389 <212> PRT <213> Enterobacter cloacae <400> 8758 Ile Arg His Thr Thr Glu Val Lys Met Met Lys Val Trp Pro Val Lys 10 His Ser Pro Leu Leu Arg Gln Pro Glu Arg Phe Ile Ala Arg Asp Glu 20 25 Leu Lys Ser Leu Ile Gln Lys Val Thr His Asn Leu Val Asn Ile His 35 40 4.5 Asp Lys Thr Gly Glu Phe Leu Leu Arg Leu Asp Asp Gly Arg Val Ile 50 55 Asp Thr Lys Gly Trp Ala Gly Trp Glu Trp Thr His Gly Val Gly Leu 65 70 75 Tyr Gly Ile Trp Gln Tyr Tyr Cys Gln Thr Gly Asp Glu Gly Met Arg 85 90 Glu Val Ile Asp Ser Trp Phe Thr Asp Arg Phe Ala Glu Gly Ala Thr 100 105 110 Thr Lys Asn Val Asn Thr Met Ser Pro Phe Leu Thr Leu Ala Tyr Arg 115 120 125 Tyr Glu Glu Thr Lys Asn Pro Ala Trp Leu Pro Trp Leu Glu Ser Trp 130 135 140 Ala Glu Trp Ala Met Asn Asp Met Pro Arg Thr Glu His Gly Gly Met 145 150 155 Gln His Ile Thr Leu Ala Glu Glu Asn His Gln Gln Met Trp Asp Asp 165 170 175 Thr Leu Met Met Thr Val Leu Pro Leu Ala Lys Ile Gly Lys Leu Leu 180 185 190 Asn Lys Pro Glu Tyr Val Glu Glu Ala Ile Tyr Gln Phe Leu Leu His 195 200 205 Val Gln Asn Leu Met Asp Arg Glu Thr Gly Leu Trp Phe His Gly Trp 210 215 220 Asn Tyr Asp Gly Asn His Asn Phe Val Arg Ala Arg Trp Ala Arg Gly 225 230 235 240 Asn Ser Trp Leu Thr Ile Val Ile Pro Asp Phe Leu Glu Leu Val Asp 245 250 255 Leu Pro Glu Asn Asn Ala Val Arg Arg Tyr Leu Val Gln Val Leu Asn 265 270 Ala Gln Thr Ala Ala Leu Ala Lys Phe Gln Asp Glu Ser Gly Leu Trp 280 285 His Thr Leu Leu Asp Asp Pro Glu Ser Tyr Leu Glu Ala Ser Ala Thr 290 295 300 Ala Gly Phe Ala Tyr Gly Ile Leu Lys Ala Val Arg Lys Arg Tyr Val 305 310 315 Gly Ala Glu Tyr Ala Glu Val Ala Glu Lys Ala Ile Arg Gly Ile Val 325 330 Lys Asn Ile Ser Pro Glu Gly Glu Leu Leu Gln Thr Ser Phe Gly Thr 340 345 350 Gly Met Gly Ser Asp Leu Ala Phe Tyr Arg Gln Ile Pro Leu Thr Ser 360 365 Met Pro Tyr Gly Gln Ala Met Ala Ile Leu Cys Leu Thr Glu Tyr Leu 375 380 Arg Lys Tyr Phe

3.0

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385
<210> 8759
<211> 111
<212> PRT
<213> Enterobacter cloacae
<400> 8759
Gln Lys Tyr Val Gln Lys Asn Leu Phe Pro Leu Asp Asp Val Ile Asp
                        10
Asn Val Gln Glu Glu Thr Lys Asp Leu Asp Ile Gly Asp Leu Gln Val
 20
                         25
Ala Gln Lys Val Val Met Glu Lys Ile Thr Gln Ser Val Glu Ser Val
 35 40
                          45
Cys Glu Lys Thr Tyr Ser Thr Lys Trp Glu Thr Ser Asp Leu Ile Thr
 50 55
                        60
Phe Asp Asn Lys Asp Lys Tyr Ala Arg Ile Ser Lys Asn Asn Thr Gly
65 70
                               7.5
Arg Lys Ile Arg Ser Glu Phe Asn Arg Ile Asn Ala Gly Phe Ile Lys
```

<210> 8760 <211> 207 <212> PRT <213> Enterobacter cloacae

100

<400> 8760 Tyr Leu Gln Glu Asn His Met Val Leu Val Thr Arg Pro Ala Pro Asp Phe Thr Ala Ala Ala Val Leu Gly Asn Gly Glu Ile Val Glu Asn Phe 25 Asn Phe Lys Gln His Thr Asn Gly Lys Ala Thr Val Leu Phe Phe Trp 40 45 Pro Met Asp Phe Thr Phe Val Cys Pro Ser Glu Leu Ile Ala Phe Asp 50 55 Lys Arg Tyr Glu Glu Phe Gln Lys Arg Gly Val Glu Val Val Gly Val 70 75 Ser Phe Asp Ser Glu Phe Val His Asn Ala Trp Arg Asn Thr Pro Val 8.5 9.0 Glu Asn Gly Gly Ile Gly Ala Val Lys Tyr Ala Met Val Ala Asp Ile 100 105 110 Lys Arg Glu Ile Gln Gln Ala Tyr Gly Ile Glu His Pro Asp Ala Gly 115 120 125 Val Ala Leu Arg Gly Ser Phe Leu Ile Asp Ala Asn Gly Ile Val Arg 130 135 140 His Gln Val Val Asn Asp Leu Pro Leu Gly Arg Asn Ile Asp Glu Met 145 150 155 Leu Arg Met Val Asp Ala Leu Gln Phe His Glu Glu His Gly Glu Val 165 170 Cys Pro Ala Gln Trp Glu Lys Gly Lys Glu Gly Met Ala Ala Ser Pro 180 185 190 Asp Gly Val Ala Lys Tyr Leu Ser Glu Asn Val Ser Ser Leu 200

85 90 95

Glu Leu Glu Glu Phe Ile Lys Glu Thr Leu Lys Val Ser Glu

105

<210> 8761 <211> 1049 <212> PRT

<213> Enterobacter cloacae

<400> 8761 Arg Gly Arg Lys Arg Met Lys Ile Leu Ser Leu Arg Leu Lys Asn Leu 10 Asn Ser Leu Lys Gly Glu Trp Lys Ile Asp Phe Thr Ala Glu Pro Phe 20 25 Ala Ser Asn Gly Leu Phe Ala Ile Thr Gly Ala Thr Gly Ala Gly Lys 35 40 4.5 Thr Thr Leu Leu Asp Ala Ile Cys Leu Ala Leu Tyr His Glu Thr Pro 5.5 60 Arg Leu Asn Lys Val Ser Gln Ala Gln Asn Asp Leu Met Thr Arg Asp 70 75 Thr Ala Glu Cys Leu Ala Glu Val Glu Phe Glu Val Lys Gly Val Ala 85 90 Tyr Arg Ala Phe Trp Ser Gln Asn Arg Ala Arg Asn Gln Pro Asp Gly 100 105 Asn Leu Gln Ala Pro Arg Val Glu Leu Ala Arg Cys Glu Asp Gly Lys 115 120 Ile Leu Ala Asp Lys Val Thr Asp Lys Leu Glu Gln Thr Ala Ala Leu 135 140 Thr Gly Leu Asp Tyr Gly Arg Phe Thr Arg Ser Met Leu Leu Ser Gln 150 155 Gly Gln Phe Ala Ala Phe Leu Asn Ala Lys Pro Ser Asp Arg Ala Glu 165 170 Leu Leu Glu Glu Leu Thr Gly Thr Glu Ile Tyr Gly Gln Ile Ser Ala 180 185 190 Met Val Phe Glu Lys His Lys Ala Ala Arg Asn Ala Leu Glu Met Cys 195 200 205 Glu Ala Gln Ala Ala Gly Val Val Leu Leu Ser Glu Glu Gln Gln Gln 210 215 His Leu Gln Gln Ser Leu Gln Ala Leu Thr Asp Glu Glu Lys Ile Leu 225 230 235 Leu Ala Gln Gln Gln Ser Gln Gln Lys Asp Phe Gln Trp Leu Thr Arg 245 250 255 Asn Asp Glu Leu Ile Arg Glu Gln Gln Arg Ala Ala Ala Ser Gln Gln 260 265 Gln Ala Gln Gln Ala Leu Thr Asp Ala Ala Pro Gln Leu Ala Lys Leu 280 285 Gln Leu Ala Gln Pro Ala Ala Gln Leu Arg Pro Leu Trp Glu His Gln 295 300 Gln Glu Gln Thr Ala Arg Leu Ser Gln Thr Ala Glu Arg Ile Val Glu 305 310 315 320 Val Asn Thr Arg Leu Leu Asp Arg Ala Ala Gln Arg Ala Cys Ile Arg 325 330 335 Asn Gly Ala Gln Arg Asn Arg Glu Gln Leu Gln Thr Glu His Thr Ala 340 345 Leu Thr Gln Trp Leu Thr Glu His Asp Arg Phe Arg Gln Trp Gly Gln 355 360 365 Glu Ile Ala Gly Trp Arg Ala His Phe Thr Gln Leu Asn Arg Asp Lys 375 380 Asn Gln Leu Val Ala Lys Ala Ala Arg Met Ala Glu Leu Arg Gln Lys 390 395 400 Leu Ala Glu Met Pro Glu Ser Thr Leu Thr Leu Thr Ala Glu Asp Leu 405 410 415 Ala Thr Ala Met Glu Gln Gln Ala Gln Ser Arg Ala Leu Arg Gln Arg 420 425 Leu Thr Ala Leu His Ala Arg Tyr Gln Pro Leu Gln Lys Arg Leu Arg 435 440 Gln Asn Ala Glu Ser Val Gln Lys Ala Gln Ala Glu Gln Gly Lys Leu 455 460 Asn Glu Thr Leu Ile Leu Arg Arg Gln Gln Phe Lys Glu Lys Asn Gln 470 475

His Tyr Ala Asp Leu Lys Ala Leu Cys Glu Arg Glu Ala Thr Ile Lys 485 490 Asp Leu Glu Asn Tyr Arg Ala Gln Leu Glu Ala Gly Lys Pro Cys Pro 500 505 510 Leu Cys Gly Ser Arg Glu His Pro Ala Val Val Gln Tyr Gln Ala Leu 51.5 520 525 Glu Leu Thr Asp Asn Gln Arg Arg Arg Asp Ala Leu Glu Lys Glu Val 535 540 Ala Ala Leu Lys Glu Glu Gly Leu Leu Val Leu Gly Gln Val Asn Ala 550 555 Leu Thr Gln Gln Ile Gln Arg Glu Thr Glu Glu Ala Gln Ala Leu Ser 565 570 575 Gln Glu Glu Gln Ala Leu Thr Lys Glu Trp Leu Glu Val Cys Thr Ser 580 585 590 Leu Asn Ile Ala Leu Asn Ile Gln Asp Asp Ile Ala Leu Trp Met Ser 595 600 605 Ala Gln Glu Gln Tyr Glu Arg Gln Leu Tyr Gln Leu Ser Gln Arg Leu 610 615 620 Thr Leu Gln Asn Gln Leu Ile Glu Gln Glu Gly Gln Ala Arg Gln Tyr 630 635 640 Gln Gln Gln Leu Thr Ala Thr Arg Gln Ala Leu Ala Ala Ser Leu Glu 645 650 655 Ser Leu Ser Leu Ser Val Pro Asp Glu Gly Ala Glu Ser Ala Trp Leu 665 Ser Ala Arg Glu Ser Glu Tyr Thr Leu Trp Gln Glu Lys Gln Ala Gln - 685 680 His Gly Thr Ile Gln Glu Arg Ile Asn Ala Leu Met Pro Ile Leu Glu 700 695 Thr Leu Pro Val Thr Asp Asp Thr Glu Ala Asp Ala Val Ile Pro Glu 710 715 Lys Trp Arg Gly Ile His Asp Glu Cys Val Ser Leu Gln Ser Gln Leu 725 730 Thr Thr Leu Gln Gln Gln Glu Thr Leu Glu Arg Glu Arg Leu Gln Gln 740 745 750 Ser Gln Ala Gln Phe Asn Ala Ala Leu Thr Ala Ser Cys Phe Ala Asp 755 760 765 Arg Glu Ala Phe Leu Ser Ala Leu Leu Asp Glu Ala Ser Ile Arg Gln 770 775 780 Leu Glu Gln Gln Lys Gln Thr Leu Glu Asn Gln Leu Gln Gln Thr Thr 790 795 800 Ala Leu Ser Val Gln Ala Ser Gln Gln Leu Gln Ala His Gln Ala Gln 805 810 Arg Pro Glu Gly Leu Glu Thr Asp Ala Ala Thr Leu Gln Ala Gln Leu 825 His Gln Leu Ala Gln Gln Leu Arg Asp Asn Thr Thr His Gln Gly Glu 835 840 845 Ile Arg Gln Gln Leu Lys Gln Asp Ala Asp Asn Arg Leu His Gln Gln 855 860 Ala Leu Met Gln Gln Ile Glu Glu Ala Ala Arg Gln Ala Asp Asp Trp 870 875 Gly Tyr Leu Asn Ala Leu Ile Gly Ser Ser Thr Gly Asp Lys Phe Arg 885 890 Lys Phe Ala Gln Gly Leu Tnr Leu Asp Asn Leu Val Trp Leu Ala Asn 900 905 Gln Gln Leu Asn Arg Leu His Gly Arg Tyr Leu Leu Gln Arg Lys Ala 915 920 Ser Asp Ala Leu Glu Leu Glu Val Val Asp Thr Trp Gln Ala Asp Ala 935 940 Ile Arg Asp Thr Arg Thr Leu Ser Gly Gly Glu Ser Phe Leu Val Ser 950 955 Leu Ala Leu Ala Leu Ala Leu Ser Asp Leu Val Ser His Lys Thr Arg

965 970 Ile Asp Ser Leu Phe Leu Asp Glu Gly Phe Gly Thr Leu Asp Ser Glu 985 980 990 Thr Leu Asp Thr Ala Leu Asp Ala Leu Asp Ala Leu Asn Ala Thr Gly 995 1000 1005 Lys Thr Ile Gly Val Ile Ser His Val Glu Ala Met Lys Glu Arg Ile 1010 1015 1020 Pro Val Gln Ile Lys Val Lys Lys Ile Asn Gly Leu Gly Tyr Ser Arg 1025 1030 1035 Leu Asp Arg Glu Phe Ala Val Asn 1045 <210> 8762 <211> 314 <212> PRT <213> Enterobacter cloacae <400> 8762 Phe Asn Asp Lys Ala Val Glu Ile Ile Met Leu Trp Phe Lys Asn Leu 10 Met Val Tyr Arg Leu Ser Arg Asp Val Ser Leu His Ala Glu Glu Met 20 25 Glu Lys Gln Leu Ala Ala Tyr Ser Phe Thr Pro Cys Gly Ser Gln Asp 35 40 Met Ala Lys Thr Gly Trp Val Pro Pro Met Gly Ser Gln Ser Asp Ala 50 55 Leu Thr His Ala Ser Ser Thr Gly Gln Ile Ile Val Cys Ala Arg Lys 65 70 75 Glu Glu Lys Ile Leu Pro Thr Pro Val Val Lys Gln Ala Leu Glu Ala 85 90 Lys Ile Phe Lys Leu Glu Ala Glu Gln Gly Arg Lys Leu Lys Lys Thr 100 105 110 Glu Lys Asp Ser Leu Lys Asp Glu Val Leu His Ser Leu Leu Pro Arg 115 120 125 Ala Phe Ser Arg Phe Ser Gln Thr Met Met Trp Ile Asp Thr Val Asn 130 135 140 Gly Leu Ile Met Val Asp Cys Ala Ser Ala Lys Lys Ala Glu Asp Thr 145 150 155 Leu Ala Leu Leu Arg Lys Ser Leu Gly Ser Leu Pro Val Val Pro Leu 165 170 175 Ala Leu Glu Thr Pro Ile Glu Leu Thr Leu Thr Glu Trp Val Arg Ser 180 185 190 Gly Thr Ala Ala Gln Gly Phe Gln Ile Leu Asp Glu Ala Glu Leu Lys 195 200 205 Ala Leu Leu Glu Asp Gly Gly Val Ile Arg Ala Lys Lys Gln Glu Leu 210 215 220 Val Ser Asp Glu Ile Ala Val His Ile Glu Ala Gly Lys Val Val Thr 230 235 Lys Leu Ala Leu Asp Trp Gln Gln Arg Ile Gln Phe Val Met Cys Asp 245 250 255 Asp Gly Ser Val Lys Arg Leu Lys Phe Cys Asp Glu Leu Arg Asp Gln 260 265 270 Asn Glu Asp Ile Asp Arg Glu Asp Tyr Ala Gln Arg Phe Asp Ala Asp 280 285 Phe Ile Leu Met Thr Gly Glu Leu Ala Ala Leu Ile Gln Asn Leu Val 295 Glu Gly Leu Gly Gly Glu Ala Gln Arg 310

<210> 8763 <211> 274 <212> PRT <213> Enterobacter cloacae

<400> 8763 Arg Arg Asp Val Met Asp Lys Lys Ile Gly Phe Ile Gly Cys Gly Asn Met Gly Lys Ala Ile Leu Gly Gly Leu Ile Ala Ser Gly Gln Val Leu Pro Gly Gln Ile Trp Val Tyr Thr Pro Ser Pro Asp Lys Val Ala Ala 40 Leu Arg Asp Glu Tyr Gly Val Asn Ala Ala Glu Ser Ala Gln Glu Val 5.5 Ala Gln Val Ala Asp Ile Val Phe Gly Ala Val Lys Pro Asn Ile Met 7.0 7.5 Ile Lys Val Leu Ser Glu Ile Thr Ser Ser Leu Asn Lys Glu Thr Leu 85 90 Val Val Ser Ile Ala Ala Gly Val Thr Leu Asp Gln Leu Ala Arg Ala 100 105 Leu Gly His Asp Arg Lys Ile Val Arg Ala Met Pro Asn Thr Pro Ser 115 120 125 Leu Val Asn Ala Gly Met Thr Ser Val Thr Pro Asn Ala Leu Val Thr 130 135 140 Ser Glu Asp Val Ala Asp Val Leu Asn Ile Phe Arg Cys Phe Gly Glu 145 150 155 Ala Glu Val Ile Ala Glu Pro Met Ile His Pro Val Val Gly Val Ser 165 170 Gly Ser Ala Pro Ala Tyr Val Phe Met Phe Ile Glu Ala Met Ala Asp 180 185 Ala Ala Val Leu Gly Gly Met Pro Arg Ala Gln Ala Tyr Lys Phe Ala 195 200 2.0.5 Ala Gln Ala Val Met Gly Ser Ala Lys Met Val Leu Glu Thr Gly Lys 210 215 220 His Pro Gly Glu Leu Lys Asp Met Val Cys Ser Pro Gly Gly Thr Thr 225 230 235 Ile Glu Ala Val Arg Val Leu Glu Asp Arg Gly Phe Arg Ser Ala Val 245 250 255 Ile Glu Ala Met Glu Lys Cys Met Glu Lys Ser Glu Lys Leu Ser Lys

<210> 8764 <211> 300 <212> PRT <213> Enterobacter cloacae

<400> 8764 Thr Ser Gly Met Ile Met Lys Lys Thr Leu Leu Ala Ala Gly Ala Val 10 Leu Ala Leu Ser Ser Phe Thr Val Asn Ala Ala Glu Asn Asp Lys 20 25 Pro Gln Tyr Leu Ser Asp Trp Trp His Gln Ser Val Asn Val Val Gly 40 Ser Tyr His Thr Arg Phe Gly Pro Gln Ile Arg Asn Asp Thr Tyr Leu 5.5 Glu Tyr Glu Ala Phe Ala Lys Lys Asp Trp Phe Asp Phe Tyr Gly Tyr 7.0 Met Asp Ala Pro Val Phe Phe Gly Gly Asn Thr Asp Ala Lys Gly Ile 85 95 Trp Asn His Gly Ser Pro Leu Phe Met Glu Ile Glu Pro Arg Phe Ser 100 105

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Ile Asp Lys Leu Thr Gly Thr Ser Leu Ala Phe Gly Pro Phe Lys Glu
     115
           120
Trp Tyr Phe Ala Asn Asn Tyr Ile Tyr Asp Met Gly Arg Asn Lys Ser
  130
        135
                                140
Gly Arg Gln Ser Thr Trp Tyr Met Gly Leu Gly Thr Asp Ile Glu Thr
    150
                  155
Gly Leu Pro Met Ser Leu Ser Met Asn Val Tyr Ala Lys Tyr Gln Trp
      165 170
Gln Asn Tyr Gly Ala Ala Asn Glu Asn Glu Trp Asp Gly Tyr Arg Phe
       180 185
                           190
Lys Val Lys Tyr Phe Val Pro Ile Thr Gln Leu Trp Gly Gly Asn Leu
          200 205
Ser Tyr Ile Gly Phe Thr Asn Phe Asp Trp Gly Ser Asp Leu Gly Asp
      215 220
Asn Asp Phe Arg Asp Leu Asn Gly Arg Lys Ala Arg Thr Asn Asp Ser
    230 235 240
Ile Ala Ser Ser His Ile Leu Ala Leu Asn Tyr Asp His Trp His Tyr
       245 250 255
Ser Val Val Ala Arg Tyr Trp His Asn Gly Gly Gln Trp Asn Asp Asp
      260 265 270
Ala Ser Leu Asn Phe Gly Asn Gly Asp Phe Ser Val Arg Ser Thr Gly
 275 280 285
Trp Gly Gly Tyr Leu Val Val Gly Tyr Asn Phe
         295
<210> 8765
<211> 441
<212> PRT
<213> Enterobacter cloacae
<400> 8765
Gln Ile Tyr Glu Lys His Tyr His Tyr Lys Trp Gln Thr Val Val Leu
        5
Leu Gln Arg Leu Phe Ser Val Pro Arg Lys Phe Ile Ile Leu Leu Ser
        20 25
Tyr Tyr Cys His Gly Ser Phe Met Arg Ile Leu His Thr Ser Asp Trp
    35 40 45
His Leu Gly Gln Asn Phe Tyr Ser Lys Ser Arg Ala Ala Glu His Glu
 50 55
Ala Phe Leu Asn Trp Leu Leu Glu Thr Ala Gln Ala His Glu Val Asp
65 70 75
Ala Ile Ile Val Ala Gly Asp Ile Phe Asp Thr Gly Ser Pro Pro Ser
          85 90
Tyr Ala Arg Glu Leu Tyr Asn Arg Phe Val Val Asn Leu Gln Gln Thr
       100
                    105 110
Gly Cys His Leu Val Ile Val Ala Gly Asn His Asp Ser Val Ala Thr
    115 120 125
Leu Asn Glu Ser Arg Asp Ile Leu Ala Phe Leu Asn Thr Thr Val Val
 130 135 140
Ala Ser Ala Gly His Ala Pro Gln Ile Leu Lys Lys Arg Asp Gly Thr
145 150 155 160
Pro Gly Ala Val Leu Cys Pro Ile Pro Phe Leu His Pro Arg Asp Ile
          165
                         170 175
Val Gln Ser Gln Ala Gly Leu Ser Gly Ser Glu Lys Gln Gln His Leu
       180 185 190
Leu Gln Ala Ile Thr Arg Tyr Tyr His Gln Gln His Thr Glu Ala Cys
 195 200 205
Ala Leu Arg Gly Asp Gln Ala Ile Pro Ile Ile Ala Thr Gly His Leu
               215
Thr Thr Val Gly Ala Ser Lys Ser Asp Ala Val Arg Glu Ile Tyr Ile
                             235
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Gly Thr Leu Asp Ala Phe Pro Ala Gln Asn Phe Pro Pro Ala Asp Tyr
       245
                  250
Ile Ala Leu Gly His Ile His Arg Ala Gln Ile Ile Gly Gly Cys Glu
        260
                        265
His Ile Arg Tyr Cys Gly Ser Pro Ile Ser Leu Ser Phe Asp Glu Thr
                  280
                         285
     275
Gly Lys Ala Lys Ser Val His Leu Val Ser Phe Thr Gly Gly Lys Leu
                 295
                                 300
Ser Ala Val Glu Thr Leu Glu Val Pro Val Thr Gln Pro Leu Ala Val
305 310 315
Leu Lys Gly Asp Leu Ala Ala Ile Thr Ala Gln Leu Asp Gln Trp Arg
                           330
       325
Gly Thr Ala Leu Asn Pro Pro Val Trp Leu Asp Ile Glu Ile Thr Thr
      340 345 350
Asp Asp Tyr Leu Tyr Asp Met Gln Arg Lys Ile Gln Thr Leu Thr Glu
 355 360 365
Asp Leu Pro Val Glu Val Leu Leu Val Arg Arg Ser Arg Glu Gln Arg
 370 375
                                 380
Glu Lys Ile Leu Leu Asn Ala Gln Arg Glu Thr Leu Ser Glu Leu Arg
    390 395 400
Val Glu Glu Val Phe Ala Arg Arg Leu Ala His Glu Glu Val Asp Glu
    405 410 415
Ala Arg Arg Thr Arg Leu Asn Glu Leu Phe Ala Gln Thr Leu His Ser
   420 425
Leu His Asp Glu Asp Glu Asn Ala
<210> 8766
<211> 213
<212> PRT
<213> Enterobacter cloacae
<400> 8766
Ser Ser Ala His Thr Leu Leu Gln Gln Leu Ala Ala Thr Gly Gln
                 1.0
Arg Lys Arg Met Asn Phe Leu Ala His Leu His Leu Ala His Leu Ala
        20 25
Asp Ser Ser Leu Ser Gly Asn Leu Leu Ala Asp Phe Val Arg Gly Asn
   35 40
Pro Ala Glu Ala Tyr Ser Pro Glu Val Val Asp Gly Ile Phe Met His
               55
Arg Arg Ile Asp Val Leu Thr Asp Asn Leu Pro Glu Val Thr Glu Ala
       7.0
                   7.5
Lys Thr Trp Phe Arg Pro Glu Thr Arg Arg Val Ala Pro Ile Thr Leu
                           90
         8.5
Asp Val Met Trp Asp His Phe Leu Ser Arg His Trp Pro Gln Leu Ser
      100
                        105
Pro Asp Met Ser Leu Pro Glu Phe Val Arg Tyr Ala His Ala Gln Val
    115 120
                                     125
Ser Ile Ile Leu Pro Asp Ser Pro Pro Arg Phe Val Asn Leu Asn Asn
 130 135 140
Tyr Leu Trp Ser Glu Arg Trp Leu Glu Arg Tyr Arg Glu Met Asp Phe
              150
145
                              155
Ile Gln Asn Val Leu Asn Gly Met Ala Ser Arg Arg Pro Arg Leu Asp
           165
                           170
Ala Leu Arg Asp Ser Trp His Asp Leu Asp Glu His Tyr Asp Ala Leu
        180 185 190
Glu Thr Arg Phe Trp Gln Phe Tyr Pro Arg Met Met Thr Gln Ala Lys
      195
                     200
Asn Lys Glu Leu
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<210> 8767
<211> 91
<212> PRT
<213> Enterobacter cloacae
<400> 8767
Gly Asn Ser Thr Met Lys Asn Leu Ile Ala Glu Leu Leu Val Lys Leu
Ala Gln Lvs Glu Glu Glu Ser Lvs Glu Leu Val Ala Gln Val Glu Ala
            20
                               25
                                                   30
Leu Glu Ile Val Val Thr Ala Leu Leu Arg Gln Met Ala Lys Pro Glu
                           40
Gln Glu Ala Leu Ile Asp Asn Val Glu Gly Ala Leu Glu Lys Ala Arg
                       55
                                          60
Pro Asp Ser Gln Val Pro Ala Glu Asp Ala Glu Leu Leu Gln Gln Tyr
                   70
Val Lys Lys Leu Leu Arg His Pro Arg Ser
               8.5
<210> 8768
<211> 65
<212> PRT
<213> Enterobacter cloacae
<400> 8768
Ala Met Pro Thr Arg Pro Pro Tyr Pro Arg Glu Ala Arg Ile Val Thr
                                  10
Val Glu Lys Gly Asn Gly Asp Gln Thr Val Thr Trp Tyr Gln Leu Arg
          20
                               25
Ala Asp His Pro Lys Pro Asp Ser Leu Ile Ser Glu His Glu Thr Glu
      35
                40
Gln Glu Ala Leu Asp Ala Lys Arg Arg Tyr Glu Asp Pro Glu Lys Ser
                      5.5
65
<210> 8769
<211> 369
<212> PRT
<213> Enterobacter cloacae
<400> 8769
Leu Phe Phe His Leu Phe Cys Met Gln Arg Asn Val Ala Ala Glu Thr
              5
Val Asn His Gln Ile Phe Glu Pro Gln His Asp Asn Phe His Gly Leu
                               25
Val Val Lys Ser Ala Gly Met Ile Thr Asn Cys Arg Ile Ala Cys Ile
       35
                           4.0
                                               45
Ala Asn Arg Glu Ala Gly Phe Tyr Ser Val Asp Asn Gln Asn Asn Glu
                       55
Glu Cys Leu Val Arg Ile Gly Ile Asp Leu Gly Gly Thr Lys Thr Glu
                   70
                                       75
Val Ile Ala Leu Ser Glu Gln Gly Glu Gln Leu Phe Arg His Arg Leu
               8.5
                                   90
                                                       95
Pro Thr Pro Arg Asp Asp Tyr His Gln Thr Ile Glu Thr Ile Ala Arg
           100
                               105
Leu Val Asp Met Ala Glu Gln Ala Thr Gly Glu Thr Gly Thr Val Gly
       115
                           120
Met Gly Ile Pro Gly Ser Ile Ser Pro Tyr Thr Gly Val Val Lys Asn
   130
                       135
                                           140
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Ala Asn Ser Thr Trp Leu Asn Gly Gln Pro Phe Asp Lys Asp Leu Ser 160 150 145 Gln Arg Leu Asn Arg Glu Val Arg Leu Ala Asn Asp Ala Asn Cys Leu 175 165 170 Ala Val Ser Glu Ala Val Asp Gly Ala Ala Ala Gly Ala Gln Thr Val 180 185 190 Phe Ala Val Ile Ile Gly Thr Gly Cys Gly Ala Gly Val Ala Phe Gly 200 195 Gly Arg Ser His Ile Gly Gly Asn Gly Thr Ala Gly Glu Trp Gly His 210 215 220 Asn Pro Leu Pro Trp Met Asp Glu Asp Glu Leu Lys Tyr Arg Ala Glu 225 230 235 240 Val Pro Cys Tyr Cys Gly Lys Gln Gly Cys Ile Glu Thr Phe Ile Ser 245 250 255 Gly Thr Gly Phe Ala Thr Asp Tyr His Arg Leu Ser Gly Gln Pro Leu 265 270 260 Lys Gly Asn Glu Ile Met Arg Leu Val Glu Glu Gln Asp Pro Val Ala 275 280 285 Glu Leu Ala Leu Ser Arg Tyr Glu Met Arg Leu Ala Lys Ser Leu Ala 295 300 290 His Val Ile Asn Ile Leu Asp Pro Asp Val Ile Val Leu Gly Gly 310 315 320 305 Met Ser Asn Val Asp Arg Leu Tyr Ala Thr Val Pro Thr Leu Val Lys 330 335 325 Gln Trp Val Phe Gly Gly Glu Cys Glu Thr Pro Ile Arg Lys Ala Val 345 350 340 His Gly Asp Ser Ser Gly Val Arg Gly Ala Ala Trp Leu Trp Pro Glu 360 355

<210> 8770 <211> 239 <212> PRT

<213> Enterobacter cloacae

<400> 8770 Leu Lys Tyr Asp Lys Thr Gly Gln Ser Met Ala Arg Arg Ile Leu Val 10 Val Glu Asp Glu Ala Pro Ile Arg Glu Met Val Cys Phe Val Leu Glu 25 20 Gln Asn Gly Phe Gln Pro Val Glu Ala Glu Asp Tyr Asp Ser Ala Val 40 35 Asn Gln Leu Asn Glu Pro Trp Pro Asp Leu Ile Leu Leu Asp Trp Met 60 55 Leu Pro Gly Gly Ser Gly Leu Gln Phe Ile Lys His Ile Lys Arg Glu 75 Ala Met Thr Arg Asp Ile Pro Val Val Met Leu Thr Ala Arg Gly Glu 90 8.5 Glu Glu Asp Arg Val Arg Gly Leu Glu Thr Gly Ala Asp Asp Tyr Ile 110 105 100 Thr Lys Pro Phe Ser Pro Lys Glu Leu Val Ala Arg Ile Lys Ala Val 125 115 120 Met Arg Arg Ile Ser Pro Met Ala Val Glu Glu Val Ile Glu Met Gln 130 135 140 Gly Leu Ser Leu Asp Pro Thr Ser His Arg Val Met Thr Gly Glu Asn 150 155 145 Pro Leu Asp Met Gly Pro Thr Glu Phe Lys Leu Leu His Phe Phe Met 165 170 175 Thr His Pro Glu Arg Val Tyr Ser Arg Glu Gln Leu Leu Asn Asn Val 185

Trp Gly Thr Asn Val Tyr Val Glu Asp Arg Thr Val Asp Val His Ile 200 195 Arg Arg Leu Arg Lys Ala Leu Glu Leu Ser Gly His Asp Arg Met Val 210 215 220 Gln Thr Val Arg Gly Thr Gly Tyr Arg Phe Ser Thr Arg Phe 225 230 <210> 8771 <211> 433 <212> PRT <213> Enterobacter cloacae <400> 8771 Arg Val Leu Glu Arg Leu Ser Trp Lys Arg Leu Val Phe Glu Leu Ile 1 5 10 Leu Cys Cys Ile Pro Ala Leu Ile Leu Gly Ala Ile Phe Gly Tyr Leu 25 2.0 Pro Trp Phe Leu Leu Val Ala Val Thr Gly Leu Leu Val Trp His Phe 35 40 Trp Asn Leu Leu Arg Leu Ser Trp Trp Leu Trp Val Asp Arg Ser Met 55 Thr Pro Pro Pro Gly Ser Gly Ser Trp Glu Pro Leu Leu Tyr Gly Leu 75 70 His Gln Met Gln Met Arg Asn Lys Lys Arg Arg Arg Glu Leu Gly Ser 8.5 90 Leu Ile Lys Arg Phe Arg Ser Gly Ala Glu Ser Leu Pro Asp Ala Val 100 105 110 Ile Leu Thr Thr Glu Glu Gly Thr Ile Phe Trp Cys Asn Gly Leu Ala 120 115 Gln Gln Leu Leu Gly Leu Arg Trp Pro Asp Asp Asn Gly Gln Asn Ile 130 135 Leu Asn Leu Leu Arg Tyr Pro Glu Phe Thr Leu Tyr Leu Lys Lys Arg 145 150 155 Asp Phe Ser Arg Pro His Asn Leu Lys Leu Asn Asn Gly Arg His Leu 165 170 175 Glu Ile Arg Val Met Pro Tyr Ser Asp Arg Gln Trp Leu Met Val Ala 180 185 190 Arg Asp Val Thr Gln Met His Gln Leu Glu Gly Ala Arg Arg Asn Phe 195 200 Phe Ala Asn Val Ser His Glu Leu Arg Thr Pro Leu Thr Val Leu Gln 210 215 220 Gly Tyr Leu Glu Met Met Gln Glu Gln Thr Leu Glu Gly Ala Pro Arg 230 235 Glu Lys Ala Leu His Thr Met Arg Glu Gln Thr Phe Arg Met Glu Gly 250 245 Leu Val Lys Gln Leu Leu Thr Leu Ser Lys Ile Glu Ala Ala Pro Ser 260 265 Leu Ala Leu Asn Asp Ile Ile Asp Val Pro Met Met Leu Arg Val Val 280 285 Glu Arg Glu Ala Gln Thr Leu Ser His Asn Gln His Thr Leu Ser Phe 295 300 290 Asp Val Asp Asn Thr Leu Lys Val Leu Gly Ser Glu Asp Glu Leu Arg 310 315 Ser Ala Ile Ser Asn Leu Ile Tyr Asn Ala Val Asn His Thr Pro Lys 330 Gly Thr His Ile Ala Val Arg Trp Gln His Thr Pro Ala Gly Ala Glu 345 350 Phe Ser Val Glu Asp Asn Gly Pro Gly Ile Gly Pro Glu His Leu Pro 355 360 365

Arg Leu Thr Glu Arg Phe Tyr Arg Val Asp Lys Ala Arg Ser Arg Gln

380

3.0

4.5

<210> 8772 <211> 442

Thr Gly Gly Ser Gly Leu Gly Leu Ala Ile Val Lys His Ala Val Ser 395 390 His His Glu Ser Arg Leu Asn Ile Glu Ser Thr Leu Gly Lys Gly Thr 405 410 Arg Phe Ser Phe Val Ile Pro Glu Arg Leu Ile Ala Lys Lys Ser Ala 420 425

<212> PRT <213> Enterobacter cloacae <400> 8772 Gly Phe Met Thr His His Leu Lys Ser Arg Asp Ile Ile Ala Leu Gly 10 Phe Met Thr Phe Ala Leu Phe Val Gly Ala Gly Asn Ile Ile Phe Pro 20 25 Pro Met Val Gly Leu Gln Ala Gly Glu His Val Trp Thr Ala Ala Phe 4.0 35 Gly Phe Leu Leu Thr Ala Val Gly Leu Pro Val Leu Thr Val Ile Ala 5.5 50 Leu Ala Lys Val Gly Gly Val Asp Ser Leu Ser Thr Pro Ile Gly 7.0 8.5 90 105 100 115 120

75 Lys Val Ala Gly Val Leu Leu Ala Thr Val Cys Tyr Leu Ala Val Gly Pro Leu Phe Ala Thr Pro Arg Thr Ala Thr Val Ser Phe Glu Val Gly Ile Ala Pro Leu Thr Gly Asp Gly Ala Met Pro Leu Phe Ile Tyr Ser Leu Ile Tyr Phe Ala Ile Val Ile Leu Val Ser Leu Tyr Pro Gly Lys 130 135 140 Leu Leu Asp Thr Val Gly Asn Phe Leu Ala Pro Leu Lys Ile Val Ala 150 155 160 Leu Ile Val Leu Ala Val Ala Ala Ile Val Trp Pro Ala Gly Pro Ile 170 165 Ser Ser Ala Met Asp Ala Tyr Gln Asn Ala Ala Phe Ser Asn Gly Phe 185 180 Val Asn Gly Tyr Leu Thr Met Asp Thr Leu Gly Ala Met Val Phe Gly 200 195 Ile Val Ile Val Asn Ala Ala Arg Ser Arg Gly Val Thr Glu Ala Arg 215 220 210 Leu Leu Thr Arg Tyr Thr Ile Trp Ala Gly Leu Met Ala Gly Val Gly 230 235 Leu Thr Leu Leu Tyr Leu Ala Leu Phe Arg Leu Gly Ser Asp Ser Ala 245 250 Thr Leu Val Asp Gln Ser Ala Asn Gly Ala Ala Ile Leu His Ala Tyr 265 270 260 Val Gln His Thr Phe Gly Gly Ala Gly Ser Met Leu Leu Ala Ala Leu 285 280 275 Ile Phe Leu Ala Cys Leu Val Thr Ala Val Gly Leu Thr Cys Ala Cys 300 295 Ala Glu Phe Phe Ala Gln Tyr Leu Pro Leu Ser Tyr Arg Thr Leu Val 315 320 310 Phe Ile Leu Gly Ile Phe Ser Met Ala Val Ser Asn Leu Gly Leu Ser 330 325 His Leu Ile Gln Val Ser Ile Pro Val Leu Thr Ala Ile Tyr Pro Pro 350 345 Cys Ile Val Leu Val Val Leu Ser Phe Thr Arg Pro Trp Trp His Asn 360 365

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Ser Thr Arg Ile Ile Ala Pro Ala Met Phe Ile Ser Leu Ile Phe Gly
               375 380
Ile Leu Asp Gly Ile Lys Ala Ser Ala Phe Ala Glu Ile Leu Pro Ala
                             395
            390
Trp Thr Gln Arg Leu Pro Leu Ser Glu Gln Gly Leu Ala Trp Leu Met
                410 415
           405
Pro Ser Val Val Ala Leu Val Leu Ala Ile Ile Trp Asp Arg Ala Ala
   420 425
Gly Arg Gln Val Thr Ser Asn Ala His
<210> 8773
<211> 485
<212> PRT
<213> Enterobacter cloacae
<400> 8773
Ser Thr Ala Thr Asn Cys Leu Thr Thr Gly Leu Lys Ala Pro Trp Phe
                         10
Phe Val Phe Phe Val Leu Asn Gly Lys Ile Leu Met Glu Ser Thr Asn
               25
      20
Lys Leu Lys Arg Gly Leu Ser Thr Arg His Ile Arg Phe Met Ala Leu
                         45
               40
Gly Ser Ala Ile Gly Thr Gly Leu Phe Tyr Gly Ser Ala Asp Ala Ile
               5.5
                     60
 5.0
Lys Met Ala Gly Pro Ser Val Leu Leu Ala Tyr Ile Ile Gly Gly Ala
                  75
65
            7.0
Ala Ala Tyr Ile Ile Met Arg Ala Leu Gly Glu Met Ser Val His Asn
           85 90 95
Pro Ser Ala Ser Ser Phe Ser Arg Tyr Ala Gln Glu Asn Leu Gly Pro
         100 1.05 1.10
Leu Ala Gly Phe Ile Thr Gly Trp Thr Tyr Cys Phe Glu Ile Leu Ile
115 120 125
Val Ala Ile Ala Asp Val Thr Ala Phe Gly Ile Tyr Met Gly Val Trp
130 135 140
Phe Pro Ala Val Pro His Trp Ile Trp Val Leu Ser Val Val Leu Ile
145 150 155 160
Ile Cys Ala Val Asn Leu Met Ser Val Lys Val Phe Gly Glu Leu Glu
           165 170 175
Phe Trp Phe Ser Phe Phe Lys Val Ala Thr Ile Ile Ile Met Ile Leu
      180 185 190
Ala Gly Phe Gly Ile Ile Ile Trp Gly Ile Gly Asn Gly Gly Gln Pro
                     200 205
      195
Thr Gly Ile His Asn Leu Trp Ser Asn Gly Gly Phe Phe Ser Asn Gly 210 215 220
Trp Leu Gly Met Val Met Ser Leu Gln Met Val Met Phe Ala Tyr Gly
               230 235 240
225
Gly Ile Glu Ile Ile Gly Ile Thr Ala Gly Glu Ala Lys Asp Pro Glu
            245
                          250 255
Lys Ser Ile Pro Arg Ala Ile Asn Ser Val Pro Met Arg Ile Leu Val
                     265 270
         260
Phe Tyr Val Gly Thr Leu Phe Val Ile Met Ser Ile Tyr Pro Trp Asn
      275 280 285
Gln Val Gly Thr Asn Gly Ser Pro Phe Val Leu Thr Phe Gln His Met
                  295
                      300
Gly Ile Ala Phe Ala Ala Ser Ile Leu Asn Phe Val Val Leu Thr Ala
               310 315
305
Ser Leu Ser Ala Ile Asn Ser Asp Val Phe Gly Val Gly Arg Met Leu
                           330
            325
His Glv Met Ala Glu Gln Gly Ser Ala Pro Lys Val Phe Ala Lys Thr
         340
                        345
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Ser Arg Arg Gly Thr Pro Trp Val Thr Val Leu Val Met Thr Val Ala
                       360
 355
Leu Leu Phe Ser Val Tyr Leu Asn Tyr Ile Met Pro Glu Asn Val Phe
 370 375
                                     380
Leu Val Ile Ala Ser Leu Ala Thr Phe Ala Thr Val Trp Val Trp Ile
385 390
                                 395
Met Ile Leu Leu Ser Gln Ile Ala Phe Arg Arg Arg Leu Ser Pro Glu
      405 410
Glu Ala Lys Ala Leu Lys Phe Lys Val Pro Gly Gly Val Pro Thr Thr
         420 425 430
Ile Val Gly Leu Ile Phe Leu Val Phe Ile Ile Gly Leu Ile Gly Tyr
      435 440
                                        445
His Pro Asp Thr Arg Ile Ser Leu Tyr Val Gly Phe Ala Trp Ile Val
  450 455 460
Leu Leu Leu Val Gly Trp Met Phe Lys Cys Arg Arg Asp Arg Gln Leu
                        475
Ala Glu Ala Gln
<210> 8774
<211> 615
<212> PRT
<213> Enterobacter cloacae
<400> 8774
Arg Gln Phe His Gln Arg Gly Phe Val Met Leu Asn Ala Trp His Leu
                             10
Pro Val Ala Pro Phe Val Asn Gln Asn Lys Asp Asn Leu Val Ile Thr
                        25
          20
Leu Trp Leu Ala Gly Asp Asn Gln Pro Glu Arg Val Thr Leu Arg Ala
                      40
      35
Glu Val Asp Asn Glu Glu Thr Ser Leu Lys Met His Lys Val Arg Ser
                    55
Gln Pro Gln Pro Gly Val Thr Ala Trp Arg Ala Asn Ile Asp Leu Arg
                 70
                                75
Ser Gly Gln Pro Arg Arg Arg Tyr Gly Phe Lys Leu Leu Trp Asn Asn
                              90
Arg Gln Leu Trp Phe Thr Pro Gln Gly Phe Ser Arg Phe Pro Pro Ala
                          105 110
          100
Arg Leu Glu Gln Phe Ala Val Asp His Pro Asp Asn Gly Pro Gln Trp
                       120
                                      125
Val Asn Asp Gln Val Phe Tyr Gln Ile Phe Pro Asp Arg Phe Ala Arg
                                    140
                    135
   130
Ser Glu Lys Arg Thr Val Asp Gln Asp Lys Val Tyr Tyr His His Ala
                               155
              150
Val Gly His Asp Ile Ile Leu Lys Lys Trp Asp Glu Pro Leu Thr Ala
                              170 175
              165
Gln Ala Gly Gly Ser Thr Phe Tyr Gly Gly Asp Leu Asp Gly Ile Ser
                           185
                                           190
          180
Glu Lys Leu Pro Tyr Leu Lys Lys Leu Gly Val Thr Ala Leu Tyr Leu
                                        205
                        200
       195
Asn Pro Val Phe Lys Ala Pro Ser Val His Lys Tyr Asp Thr Gln Asp
                    215
                                     220
Tyr Arg His Val Asp Glu Gln Phe Gly Gly Asp Glu Ala Leu Leu Arg
                 230
                                  235
Leu Arg His Asn Thr Gln Lys Glu Gly Met Arg Leu Ile Leu Asp Gly
                              250
                                   255
            245
Val Phe Asn His Ser Gly Asp Ser His Ala Trp Phe Asp Arg His Asn
                               270
          260
                           265
Gln Ser Met Gly Gly Ala Cys His Asn Pro Asp Ser Pro Gln Arg Asp
```

```
Trp Tyr Ser Phe Asp Glu Asn Gly Arg Ala Leu Asp Trp Leu Gly Tyr
  290
                295
Pro Ser Leu Pro Lys Leu Asp Phe Gln Ser Pro Ser Leu Val Asn Glu
           310
                          315
305
Ile Tyr Gly Gly Asp Asp Ser Ile Val Arg His Trp Leu Lys Ala Pro
          325 330 335
Trp Asn Met Asp Gly Trp Arg Leu Asp Val Val His Met Leu Gly Glu
        340 345 350
Ala Gly Gly Ala Arg Asn Asn Leu Gln His Val Ala Ala Ile Thr Arg
     355 360 365
Ser Ala Lys Ala Ala Arg Ser Glu Ala Phe Val Phe Gly Glu His Phe
 370 375 380
Gly Asp Ala Arg Gln Trp Leu Gln Ala Asp Ala Glu Asp Ala Ala Met
    390 395 400
Asn Tyr Arg Gly Phe Thr Phe Pro Leu Trp Gly Phe Leu Ala Asn Thr
         405 410 415
Asp Ile Ser Tyr Asp Pro Gln His Ile Asp Ala Glu Thr Cys Met Ala
        420
                      425 430
Trp Met Glu Asn Tyr Arg Ala Gly Leu Ser His Gln Gln Gln Leu Arg
                   440 445
     435
Met Phe Asn Gln Leu Asp Ser His Asp Thr Ala Arg Phe Lys Ser Leu
              4.5.5
                               460
Leu Gly Lys Asp Val Ala Arg Leu Pro Leu Ala Val Thr Trp Leu Phe
465 470
                            475
Thr Trp Pro Gly Val Pro Cys Ile Tyr Tyr Gly Asp Glu Val Gly Leu
          485
                          490 495
Asp Gly Asn Asn Asp Pro Phe Cys Arg Lys Thr Phe Pro Trp Glu Pro
        500
                      505
                          510
Glu Lys Gln Asp Gln Asp Leu Phe Ser Leu Tyr Gln Arg Met Ala Thr
 515
                   520 525
Leu Arg Lys Gln Ser Gln Ala Leu Arg Tyr Gly Gly Cys Gln Val Met
 530 535 540
Tyr Ala His Asp Asn Val Val Val Phe Val Arg Val Tyr Asn Gln Gln
             550
                            555
Arg Val Leu Val Ala Ile Asn Arg Gly Glu Ala Cys Glu Val Val Leu
          565
                         570
                                        575
Glu Asp Ser Pro Leu Leu Ala Gly Lys Met Trp Lys Ser Lys Glu Gly
        580
                      585 590
Lys Ala Thr Phe Gln Gly Ser Val Leu Thr Leu Pro Ala Ile Ser Ala
                    600
Ala Val Trp Phe Gly Ser
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610 <210> 8775 <211> 158 <212> PRT

<213> Enterobacter cloacae

<400> 8775

Arg Asp Gly Val Ala Gly Ala Gly Ala Arg Gln Arg Asp Met Gly Ala 10 Asn Gly Arg Arg His Phe Ala Glu Pro Pro Ala Tyr Phe Arg Ser Ala 20 25 30 Gln Ser Leu Leu Ala Gly Cys Gly Leu Ala Val Ala Glu Asn Arg Ala 40 45 Ala Gly Gln Leu Gly Ile Ala Gly Arg Trp Val Ala Val Leu Val Ser 55 Gly Val Ala Gly Arg Val Ala Val Pro Glu Ala Gly Val Ile Ala 70 75 Ser Gly Arg Arg Ala Gly Ala Asp Gly Gly Val Asp Leu Gly Met Ala 90

Ala Gly Cys Arg Ser Ser Gly Met Val Gly Ala Gly Cys Gln Gln Met
100
Ala Ala Val Ala Gly Asp Ala Ala Asp Gly Ala Val Ser Gly Leu Ala
115
120
Pro Ala Asp Ser Gly Gly Arg Leu Gly Lys Ser Gly Leu Gly Tyr Arg
130
Ala Ala Cys Arg Pro Asp Ala Ala Ala Ala Arg Arg Arg Arg
145
155

<210> 8776 <211> 369 <212> PRT

<213> Enterobacter cloacae

355

<400> 8776 Thr Met Pro Pro Val Phe Lys Ser Arg Val Tyr Val Met Arg Val Ala 1 5 Asp Phe Ser Phe Glu Leu Pro Glu Ser Leu Ile Ala His Tyr Pro Met 20 25 30 Pro Glu Arg Ser Ser Cys Arg Leu Leu Ser Leu Asp Gly Pro Thr Gly 40 4.5 Ala Leu Thr His Gly Thr Phe Thr Asp Leu Leu Asp Lys Leu Asn Pro 55 Gly Asp Leu Leu Val Phe Asn Asn Thr Arg Val Ile Pro Ala Arg Leu 75 70 Phe Gly Arg Lys Ala Ser Gly Gly Lys Ile Glu Val Leu Val Glu Arg 85 90 Met Leu Asp Asp Lys Arg Ile Leu Ala His Ile Arg Ala Ser Lys Ala 100 105 110 Pro Lys Pro Gly Ala Glu Leu Leu Gly Asp Asp Glu Ser Ile Lys 115 120 125 Ala Thr Met Thr Ala Arg His Asp Ala Leu Phe Glu Val Glu Phe Asn 135 140 130 Asp Glu Arg Thr Val Leu Asp Ile Leu Asn Ala Ile Gly His Met Pro 150 155 Leu Pro Pro Tyr Ile Glu Arg Pro Asp Glu Glu Ala Asp Arg Glu Leu 165 170 175 Tyr Gln Thr Val Tyr Ser Gln Lys Pro Gly Ala Val Ala Ala Pro Thr 185 190 180 Ala Gly Leu His Phe Asp Glu Pro Leu Leu Glu Lys Leu Arg Ala Lys 195 200 205 Gly Ile Glu Met Ala Phe Val Thr Leu His Val Gly Ala Gly Thr Phe 215 220 Gln Pro Val Arg Val Asp Ser Ile Glu Asp His Ile Met His Ser Glu 235 230 Tyr Ala Glu Val Pro Gln Glu Val Val Asp Ala Val Leu Ala Ala Lys 250 245 Ala Arg Gly Ser Arg Val Val Ala Val Gly Thr Thr Ser Val Arg Ser 265 260 Leu Glu Ser Ala Ala Gln Ala Ala Lys Ser Glu Leu Ile Glu Pro Phe 285 280 275 Phe Gly Asp Thr Gln Ile Phe Ile Tyr Pro Glý Tyr Gln Tyr Lys Val 290 300 295 Ile Asp Ala Leu Val Thr Asn Pne His Leu Pro Glu Ser Thr Leu Ile 315 Met Leu Val Ser Ala Phe Ala Gly Tyr Gln His Thr Met Asn Ala Tyr 330 Lys Ser Ala Val Glu Gln Lys Tyr Arg Phe Phe Ser Tyr Gly Asp Ala 340 345 Met Phe Ile Thr Tyr Asn Pro Gln Ala Leu Asn Glu Arg Val Gly Glu

360

<210> 8777 <211> 111 <212> PRT <213> Enterobacter cloacae

85 90 Phe Val Ala Ala Val Leu Pro Lys Gly Thr Met Lys Ala Leu 100 105 110

<210> 8778 <211> 625 <212> PRT <213> Enterobacter cloacae

<400> 8778 Ser Gln Leu Phe Pro Lys Gly Thr Ala Val Leu Asn Arg Tyr Pro Leu 1.0 Trp Lys Tyr Ile Met Leu Val Val Val Ile Ile Val Gly Leu Leu Tyr 25 30 20 Ala Leu Pro Asn Leu Tyr Gly Glu Asp Pro Ala Val Gln Ile Thr Gly 45 40 35 Ala Arg Gly Val Ala Ala Ser Giu Gln Thr Leu Ile Gln Val Gln Lys 5.5 60 50 Thr Leu Gln Glu Glu Lys Ile Thr Ala Lys Ser Val Ala Leu 🤾 Glu 80 70 7.5 Gly Ala Ile Leu Ala Arg Phe Asp Thr Thr Asp Thr Gln Leu Arg Ala 8.5 90 Arg Glu Ala Leu Met Gly Val Leu Gly Asp Lys Tyr Val Val Ala Leu 110 100 105 Asn Leu Ala Pro Ala Thr Pro Arg Trp Leu Ala Ala Leu Asn Ala Glu 125 120 115 Pro Met Lys Leu Gly Leu Asp Leu Arg Gly Gly Val His Phe Leu Met 135 140 130 Glu Val Asp Met Asp Thr Ala Leu Gly Lys Leu Gln Glu Gln Asn Ile 150 155 145 Asp Ser Leu Arg Ser Asp Leu Arg Asp Lys Gly Ile Pro Tyr Thr Thr 165 170 Val Arg Lys Glu Asp Asn Tyr Gly Met Ser Ile Thr Phe Arg Asp Ser 180 185 Ala Ala Arg Asp Gln Ala Val Thr Tyr Leu Ser Gln Arg His Arg Asp 195 200 205 Leu Val Ile Thr Ser Gln Gly Ser Asn Gln Leu Arg Ala Val Met Thr 215 210 Asp Ala Arg Leu Ser Glu Ala Arg Glu Tyr Ala Val Gln Gln Asn Ile 230 235 Asn Ile Leu Arg Asn Arg Val Asn Gln Leu Gly Val Ala Glu Pro Leu



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245
                         250
Val Gln Arg Gln Gly Ala Asp Arg Ile Val Val Glu Leu Pro Gly Ile
        260
                      265
                                  270
Gln Asp Thr Ala Arg Ala Lys Glu Ile Leu Gly Ala Thr Ala Thr Leu
                   280
                               285
Glu Phe Arg Leu Val Asn Ser Ser Val Asp Gln Ala Ala Ala Ser
               295
                       300
Gly Arg Val Pro Gly Asp Ser Glu Val Lys Gln Thr Arg Glu Gly Gln
           310
                    315 320
Pro Val Val Leu Tyr Lys Arg Val Ile Leu Thr Gly Asp His Ile Thr
           325
                       330
Asp Ser Thr Ser Ser Gln Asp Glu Tyr Asn Gln Pro Gln Val Asn Ile
        340
            345 350
Ser Leu Asp Ser Ala Gly Gly Asn Ile Met Ser Asn Phe Thr Lys Asp
    355
            360
                       365
Asn Ile Gly Lys Pro Met Ala Thr Leu Phe Val Glu Tyr Lys Asp Ser
            375 380
Gly Lys Lys Asp Ala Asn Gly Arg Ala Val Leu Val Lys Glu Glu Glu
     390 395 400
Val Ile Asn Ile Ala Asn Ile Gln Ser Arg Leu Gly Asn Ser Phe Arg
         405 410 415
Ile Thr Gly Ile Ser Asn Pro Asn Glu Ala Arg Gln Leu Ser Leu Leu
     420 425 430
Leu Arg Ala Gly Ala Leu Ile Ala Pro Ile Gln Ile Val Glu Glu Arg
 435 440
Thr Ile Gly Pro Thr Leu Gly Met Gln Asn Ile Lys Gln Gly Leu Glu
 450 455 460
Ala Cys Leu Ala Gly Leu Ala Val Ser Ile Ile Phe Met Ile Phe Phe
   470 475
Tyr Lys Lys Phe Gly Leu Ile Ala Thr Ser Ala Leu Ile Ala Asn Leu
      485 490
Val Leu Ile Ile Gly Ile Met Ser Leu Leu Pro Gly Ala Thr Leu Thr
   500 505 510
Ala Asn Val Leu Ile Asn Glu Arg Ile Lys Glu Glu Leu Ser Asn Gly
530 535 540
Arg Ser Val Gln Gln Ala Ile Glu Glu Gly Tyr Lys Gly Ala Phe Ser
545 550 555 560
Ser Ile Phe Asp Ala Asn Val Thr Thr Leu Ile Lys Val Leu Ile Leu
         565 570 575
Tyr Ala Val Gly Thr Gly Ala Ile Lys Gly Phe Ala Ile Thr Thr Gly
     580 585
Ile Gly Val Ala Thr Ser Met Phe Thr Ala Ile Val Gly Thr Arg Ala
  595 600
                                 605
Ile Val Asn Leu Leu Tyr Gly Gly Lys Arg Val Lys Lys Leu Ser Ile
                              620
```

625

<210> 8779 <211> 128 <212> PRT <213> Enterob

<213> Enterobacter cloacae

<400> 8779

Ghn Ghn Ala Gly Gly Arg Met Lys Ser Val Ile Asn Trp Phe Glu Ile I 100 Pro Val Ala Asp Met Asp Arg Ala Ile Lys Phe Tyr Glu Ser Val Met 200 Gln Val Ala Leu Arg Arg Glu Lys Met Asp Val Ala Glu Leu Ala Val

```
4502
Phe Pro His Glu Asp Pro Ala Thr Gly Gly Ala Leu Ala Lys Phe Asp
Gly Val Thr Pro Ser Ser Gln Gly Ala Ile Ile Tyr Leu His Thr Asp
                   7.0
                                     7.5
Asn Leu Ala Ala Thr Leu Asp Arg Ile Ala Ser Ala Gly Gly Glu Cys
                                 90
Val Phe Gly Pro Leu Glu Leu Pro Gln Gly Ile Gly Thr Ile Ala Leu
           100
                   105
Phe Thr Asp Ser Glu Gly Asn Arg Val Gly Leu His Gln Pro Val
<210> 8780
<211> 157
<212> PRT
<213> Enterobacter cloacae
<400> 8780
Trp Gly Glu Thr Met Ala Ile Trp Val Asp Ala Asp Ala Cys Pro Asn
                               10
Val Ile Lys Glu Ile Leu Phe Arg Ala Ala Glu Arg Val Gln Met Pro
    2.0
                              25
                                                 30
Leu Thr Leu Val Ala Asn Gln Asn Ile Arg Val Pro Pro Ser Arg Tyr
 35
                         40
Ile Arg Ser Leu Arg Val Pro Ala Gly Phe Asp Val Ala Asp Asn Glu
 50
                      5.5
Ile Val Arg Leu Cys Asp Ala Gly Asp Leu Val Ile Thr Ala Asp Ile
                  70
                                     7.5
Pro Leu Ala Ala Asp Val Leu Ala Lys Gly Ala Ala Ala Leu Asn Pro
           8.5
                                 9.0
Arg Gly Glu Arg Tyr Ser Pro Ala Thr Ile Arg Glu Lys Leu Thr Met
   100
                              105
Arg Asp Phe Met Asp Thr Leu Arg Ser Ser Gly Val Gln Thr Gly Gly
 115
                         120
                                             125
Pro Asp Ser Leu Ser Gln Arg Asp Arg Gln Gln Phe Ala Ala Glu Leu
 130 135 140
Asp Lys Trp Leu Leu Glu Val Lys Arg Arg Pro Ala
       150
<210> 8781
<211> 223
<212> PRT
<213> Enterobacter cloacae
<400> 8781
Pro Thr Ser Gly Arg Phe Cys Gly Thr Val Trp Leu Pro Gln Ala Cys
                               10
His Ser Val Pro Leu Cys Ser Lys Val Ser Ala Thr Ser Thr Ala Ile
                             25
Ile Ser Leu Gln Pro Ser Val Ile Arg Gln Gln Gly Glu His Leu Val
                         40
Met Asn Pro Pro Ile Phe Leu Val Gly Pro Arg Gly Cys Gly Lys Thr
                     55
                                         60
Thr Val Gly Leu Glu Leu Ala Arg Leu Cys Gln Ser Gln Phe Val Asp
                  7.0
Thr Asp His Trp Leu Gln Glu Asn Ala Gly Lys Thr Ile Ala Asp Ile
              8.5
                                 90
Val Glu Asp Glu Gly Trp Glu Ser Phe Arg Ala Arg Glu Thr Ala Thr
                             105
Leu Glu Ala Val Thr Ala Pro Ser Thr Val Ile Ala Thr Gly Gly Gly
```

```
Ile Ile Leu Ala Ser Tyr Asn Arg Gln Phe Met Arg Glu Lys Gly Val
                      135
                                   140
 Val Ile Tyr Leu Cys Ala Pro Val Ser Thr Leu Val Gly Arg Leu Glu
                  150
                                  155
 Ala Phe Pro Glu Glu Gly Gln Arg Pro Ala Leu Thr Ala Lys Pro Leu
               165
                                170 175
 Ser Glu Glu Val Ser Glu Val Leu Ala Glu Arg Asp Ala Leu Tyr Arg
        180
                             185
 Glu Ala Ala His His Val Val Asp Ala Ser Ala Ser Pro Glu Lys Val
       195
                      200 205
 Ala Ile Gln Ile Ile Thr Ala Leu Arg Leu Ala Cys Ala Ser
    210
                   215
<210> 8782
 <211> 107
 <212> PRT
<213> Enterobacter cloacae
<400> 8782
Trp Ile Phe Leu Tyr Lys Tyr Lys Gly Gln Phe Met Leu Gln Ser Asn
                               10
Glu Tyr Phe Ser Gly Lys Val Lys Ser Ile Gly Phe Thr Ser Ser Ser
       20
                             25
                                                30
Thr Gly Arg Ala Ser Val Gly Val Met Ala Glu Gly Glu Tyr Thr Phe
      35
                         40
                                         4.5
Gly Thr Ala Glu Ala Glu Glu Met Thr Val Val Ser Gly Ala Leu Asn
               55
Val Leu Leu Pro Gly Glu Thr Glu Trp Lys Val Tyr Ser Ala Gly Gln
                 70
                                  7.5
Val Phe Asn Val Pro Gly His Ser Glu Phe His Leu Gln Val Ala Glu
        85 90
Pro Thr Ser Tyr Leu Cys Arg Tyr Leu Lys
           100
<210> 8783
<211> 342
<212> PRT
<213> Enterobacter cloacae
<400> 8783
Thr Cys Cys Thr Ala Ala Ser Ala Ser Lys Ser Cys Leu Ser Glu Glu
Cys Val Val Ala Gln Glu Tyr Thr Val Glu Gln Leu Asn His Gly Arg
          20
                             25
Lys Val Trp Asp Phe Met Arg Trp Asp Tyr Trp Ala Phe Gly Ile Ser
    35
                        4.0
Gly Phe Leu Leu Ile Leu Ser Ile Val Ile Met Gly Val Lys Gly Phe
                     55
                                        60
Asn Trp Gly Leu Asp Phe Thr Gly Gly Thr Val Ile Glu Ile Thr Leu
                 70
                                    75
Glu Lys Pro Val Asp Met Asp Gln Met Arg Glu Ser Leu Gln Lys Ala
             8.5
                                90
Gly Phe Glu Glu Pro Leu Leu Gln Asn Phe Gly Ser Ser Arg Asp Ile
          100
                             105
                                               110
Met Val Arg Met Pro Pro Val His Asp Ala Asn Gly Ser Gln Glu Leu
                         120
                                            125
Gly Ser Lys Val Val Gln Val Ile Asn Glu Thr Thr Ser Gln Asp Ala
                    135
                                        140
Thr Val Lys Arg Ile Glu Phe Val Gly Pro Ser Val Gly Ala Asp Leu
                 150
                                  155
Ala Gln Thr Gly Ala Met Ala Leu Leu Val Ala Leu Ile Ser Ile Leu
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17C Ile Tyr Val Gly Phe Arg Phe Glu Trp Arg Leu Ala Ala Gly Val Val 180 185 190 Ile Ala Leu Ala His Asp Val Val Ile Thr Met Gly Ile Leu Ser Leu 200 Phe His Ile Glu Ile Asp Leu Thr Ile Val Ala Ser Leu Met Ser Val 215 220 Ile Gly Tyr Ser Leu Asn Asp Ser Ile Val Val Ser Asp Arg Ile Arg 230 235 Glu Asn Phe Arg Lys Ile Arg Arg Gly Thr Pro Tyr Glu Ile Phe Asn 245 250 Val Ser Leu Thr Gln Thr Leu His Arg Thr Leu Ile Thr Ser Gly Thr 260 265 270 Thr Leu Met Val Ile Leu Met Leu Phe Leu Phe Gly Gly Pro Val Leu 275 280 285 Glu Gly Phe Ser Leu Thr Met Leu Ile Gly Val Ser Ile Gly Thr Ala 295 300 290 Ser Ser Ile Tyr Val Ala Ser Ala Leu Ala Leu Lys Leu Gly Met Lys 310 315 Arg Glu His Leu Ile Gln Gln Lys Val Glu Lys Glu Gly Ala Asp Gln 325 330 Pro Ser Ile Leu Pro 340 <210> 8784 <211> 248 <212> PRT <213> Enterobacter cloacae <400> 8784 Pro Cys Leu Pro Thr Ala Lys Val Ile Ala Ser Ala Ser Ile Asn Arg 10 Tyr Glu Ser Lys Pro Met Thr Arg Arg Ala Asp Arg Leu Phe Gln Ile 20 25 Val Gln Ile Leu Arg Gly Arg Arg Leu Thr Thr Ala Ala His Leu Ala 35 40 Glu Arg Leu Gly Val Ser Glu Arg Thr Val Tyr Arg Asp Ile Arg Asp 50 55 60 Leu Ser Leu Ser Gly Val Pro Val Glu Gly Glu Ala Gly Ser Gly Tyr 70 75 Arg Leu Met Ser Gly Phe Asp Leu Pro Pro Leu Met Leu Thr Asn Lys 85 90 Glu Ser Glu Ala Leu Met Val Ala Ile Arg Leu Leu Lys Thr Trp Gly 100 105 Gly Glu Ser Leu Ser Arg Glu Leu Glu Ser Ala Gln Glu Lys Val Leu 115 120 125 Ala Ile Leu Pro Glu Glu Ser Arg Arg Lys Ala Glu Gln Thr Arg Ile 130 135 140 Tyr Ala Pro Asp Ile Ala Leu Gln Pro His Ser Arg Ser Gly Phe Asp 145 150 155 Val Ile His Gln Ala Ile Ser Ala Leu Arg Val Leu Ala Leu His Tyr 165 170 Arg Asp Glu Ala Gly Gln Leu Thr Trp Arg Glu Val Gln Pro Leu Gly 180 185 190 Leu Phe Phe Trp Gly Glu His Trp Leu Leu Ala Ala Trp Cys Glu Arg 195 200 205 Arg Asp Asp Tyr Arg Cys Phe Arg Leu Asp Arg Cys Leu His Ile Thr 215 220 Leu Thr Glu Arg Arg Phe Ser Glu Ser Ala Asp Arg Ser Leu Ala Asp 230 235

Phe Leu Arg Lys Val Lys Gln

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<210> 8785
<211> 197
<212> PRT
<213> Enterobacter cloacae
<400> 8785
Arg Tyr Pro Gly Leu Met Ile Ser Leu Phe Val Thr Thr Met Val Ile
                            10
Gln Leu Cys Asn Gly Ser Val Gly Pro Ile Leu Ala Leu Phe Ile Lys
                          25
                                           30
Ser Met Ala Pro Asp Ser Ser Asn Ile Ala Phe Leu Ser Gly Met Ile
                      40
                            45
Ala Ala Val Pro Gly Val Ser Ala Leu Met Ser Ala Pro Arg Leu Gly
                   55 60
Lys Leu Gly Asp Arg Ile Gly Thr Ala Arg Ile Leu Met Ala Thr Leu
                70
                                 75
Ile Ile Ala Val Ile Leu Phe Phe Ala Met Ser Phe Val Thr Thr Pro
           85
                             90
Leu Gln Leu Gly Ile Leu Arg Phe Leu Leu Gly Phe Ala Asp Gly Ala
    100
              105
                                           110
Met Leu Pro Ala Val Gln Thr Leu Leu Val Lys Tyr Ser Ser Asp Gln
 115
                       120
                                     125
Val Thr Gly Arg Ile Phe Gly Tyr Asn Gln Ser Phe Met Tyr Leu Gly
 130 135 140
Asn Val Ala Gly Pro Leu Ile Gly Ala Ser Val Ser Ala Met Ala Gly
145 150 155
Phe Arg Trp Val Phe Ala Ala Thr Ala Val Val Leu Leu Asn Ile
       165 170 175
Ile Gln Leu Ala Phe Ala Leu Arg Arg Arg Arg Ile Ala Glu Ala
 180
                          185
Lys Ser Ala Arg
  195
<210> 8786
<211> 121
<212> PRT
<213> Enterobacter cloacae
<400> 8786
Arg Thr Arg Leu Asn Val Glu Leu His Ile Lys Asp Gly Ala Met Lys
          5
                           10
Thr Thr Ile Leu Ile Thr Leu Leu Ser Gly Leu Cys Leu Met Ala Ser
         20
Ala His Ala Glu Glu Lys Thr Leu Thr Pro Gln Gln Gln Arg Met Thr
                    40
Thr Cys Asn Gln Gln Ala Thr Ser Gln Ser Leu Lys Gly Asp Ala Arg
 50 55
Lys Thr Tyr Met Ser Asp Cys Leu Lys Asn Gly Ala Thr Lys Pro Gly
             70
                                7.5
                                                 80
Glu Lys Ser Leu Thr Pro Gln Gln Gln Lys Met Arg Glu Cys Asn Ala
                             90
Gln Ala Thr Gln Gln Met Leu Lys Gly Asp Asp Arg Ser Lys Phe Met
                      105
Ser Ala Cys Leu Lys Lys Gln Ala
<210> 8787
<211> 400
<212> PRT
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<213> Enterobacter cloacae

```
<400> 8787
Arg Val Ser His Gly Cys Gly Ser Pro Lys Ile Ser Tyr Phe Pro Arg
Tyr Pro Pro Leu Tyr Asn Leu Gly Lys Cys Phe Arg Ile Phe Pro Lys
         20
                                           3.0
Met Met Asn Asp Glu Phe Tyr Asp Ser His Gly Asn Ile Arg Glu Ala
      35
                       4.0
                                     4.5
Trp His Gln Gln Leu Ser Gln Asp Asp Ser Tyr Arg Ser Gly Leu Arg
                   55
Phe Ala Arg Arg Ile Arg Leu Ala Arg Ile Val Gly Leu Ala Ala Leu
                 70
                                 75
Phe Val Pro Leu Ala Ser Val Leu Val Ser Gln Phe Leu Ser Gly Val
             8.5
                             90
Trp Trp Leu Leu Val Gly Trp Val Phe Val Trp Pro His Leu Ala
         100
                          105 110
Trp Gln Leu Ala Phe Arg Ser Ala Glu Pro His Arg Ser Glu Ile Val
      115
                   120 125
Asn Leu Lys Ile Asp Ala Ile Leu Ala Gly Val Trp Met Gly Leu Thr
 130 135 140
Gly Phe Asn Ala Leu Pro Thr Ala Ala Leu Ile Met Met Ile Gly Met
145 150 155
Asn Met Met Gly Ser Gly Gly Cys Arg Leu Phe Leu Thr Gly Leu Ala
            165 170
Leu Leu Ala Leu Ser Ala Leu Leu Thr Val Gln Ser Thr Gly Thr Pro
       180 185
                                           190
Val Leu Leu Thr Ser Glu Pro Leu Ala Leu Trp Leu Thr Leu Pro Val
   195 200
Leu Val Val Tyr Pro Met Leu Phe Ala Trp Leu Ser His Arg Thr Ala
 210
                   215
Ile Arg Leu Ala Glu His Lys Arg Arg Leu Glu Leu Met Ser Thr Arg
       230 235
Asp Gly Met Thr Gly Val Phe Asn Arg Arg His Trp Glu Thr Leu Leu
            245 250
Arg Tyr Glu Phe Glu Ala Cys Arg Arg Ser His Arg His Ala Thr Ile
        260
                         265
                              270
Leu Leu Ile Asp Ile Asp His Phe Lys Thr Ile Asn Asp Thr Trp Gly
     275
                      280
                                       285
His Asp Val Gly Asp Glu Ala Ile Val Ala Ile Thr Arg Gln Leu Gln
       295
                                   300
Leu Thr Leu Arg Ser Gly Asp Tyr Ile Gly Arg Phe Gly Gly Asp Glu
             310
                                315
Phe Ala Val Ile Met Ser Gly Thr Pro Ala Asp Ser Ala Ile Ala Ala
             325
                             330
Met Ser Arg Val His Glu Arg Leu Val Asn Met Pro Leu His Gly Ala
         340
                          345
                                           350
Pro Thr Ala Arg Leu Cys Ile Ser Val Gly Val Ala Pro Trp Gly Ala
                       360
                                        365
Gln Phe Thr His Tyr Arg Glu Trp Leu Lys Ala Ala Asp Val Ala Leu
                   375
                                    380
Tyr Lys Ala Lys Asn Ala Gly Arg Gly Arg Thr Glu Val Ala Ala
                                 395
<210> 8788
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<211> 231

<212> PRT <213> Enterobacter cloacae

<400> 8788

Arg Lys Ala Ile Lys Met Lys Ala Thr Leu Ala Ile Leu Thr Ile Gly

```
Val Val Pro Val Ser Glu Val Leu Pro Leu Leu Thr Glu His Val Ser
                          25
Glu Gln Gln Ile Thr His Leu Ser Leu Leu Gly Lys Leu Ser Arg Glu
      3.5
Glu Val Met Glu Asp Tyr Ala Val Gly Glu Gly Glu Asp Pro Leu Ala
                                  60
Thr Leu Leu Ser Asp Gly Lys Leu Ala His Val Ser Arg Gln Lys Ile
                              7.5
Glu Arg Ala Leu Gln Gly Val Ile Glu Val Leu Asp Asn Gln Asp Tyr
            85
                          90
Asp Val Ile Leu Leu Met Ser Thr Ala Pro Val Lys Gly Leu Ser Ala
         100
                       105 110
Arg Asn Ala Ile Leu Leu Glu Pro Met Arg Ile Ile Pro Pro Leu Val
      115
            120
Ala Ser Ile Val Asp Gly His Gln Val Gly Val Ile Val Pro Val Glu
        135
Glu Leu Leu Asp Asn Gln Thr Val Lys Trp Ala Ala Leu Glu His Thr
    150 155
Pro Leu Tyr Ala Leu Ala Asn Pro Phe Trp Asp Ser Glu Ala Lys Leu
        165 170 175
Ile Ala Ala Gly Gln Glu Leu Ile Asp Arg Gly Ala Asp Val Leu Met
  180 185 190
Leu Asp Cys Leu Gly Phe His Gln Arg His Arg Asp Leu Leu Gln Lys
 195 200
                           205
Ala Leu Asp Val Pro Val Leu Leu Ser Asn Val Leu Met Ala Arg Leu
210 215
Ala Ser Glu Leu Leu Val
<210> 8789
<211> 399
<212> PRT
<213> Enterobacter cloacae
                            1.0
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<400> 8789 Ala Cys Arg Gly Ile Ser Pro Arg His Cys Val Thr Thr Leu Asp Cys Phe Ser Asp Val Gly Glu Lys Met Lys Phe Glu Leu Asp Thr Thr Asp 20 2.5 Gly Arg Ala Arg Arg Gly Arg Leu Val Phe Asp Arg Gly Val Val Glu 40 Thr Pro Ala Phe Met Pro Val Gly Thr Tyr Gly Thr Val Lys Gly Met 50 55 Thr Pro Glu Glu Val Glu Ala Thr Gly Ala Gln Ile Ile Leu Gly Asn 70 75 Thr Phe His Leu Trp Leu Arg Pro Gly Gln Glu Ile Met Lys Leu His 85 90 Gly Asp Leu His Asp Phe Met Gln Trp Lys Gly Pro Ile Leu Thr Asp 105 Ser Gly Gly Phe Gln Val Phe Ser Leu Gly Asp Ile Arg Lys Ile Thr 115 120 Glu Gln Gly Val His Phe Arg Asn Pro Ile Asn Gly Asp Pro Ile Phe 130 135 140 Leu Asp Pro Glu Lys Ser Met Glu Ile Gln Tyr Asp Leu Gly Ser Asp 150 155 Ile Val Met Ile Phe Asp Glu Cys Thr Pro Tyr Pro Ala Asp Trp Asp 165 170 Tyr Ala Lys Arg Ser Met Glu Met Ser Leu Arg Trp Ala Lys Arg Ser 185 Arg Asp Arg Phe Asp Ser Leu Gln Asn Lys Asn Ala Leu Phe Gly Ile

```
200
Ile Gln Gly Ser Val Tyr Glu Asp Leu Arg Asp Ile Ser Val Lys Gly
                   215
                                   220
Leu Val Glu Ile Gly Phe Asp Gly Tyr Ala Val Gly Gly Leu Ala Val
               230
                               235
Gly Glu Pro Lys Glu Asp Met His Arg Ile Leu Glu His Val Cys Pro
            245
                            250
Gln Ile Pro Ala Asp Lys Pro Arg Tyr Leu Met Gly Val Gly Lys Pro
         260
                        265
Glu Asp Leu Val Glu Gly Val Arg Arg Gly Ile Asp Met Phe Asp Cys
          280 285
Val Met Pro Thr Arg Asn Ala Arg Asn Gly His Leu Phe Val Thr Asp
   290
          295 300
Gly Val Val Lys Ile Arg Asn Ala Lys His Lys Ser Asp Thr Ser Pro
             310 315
Leu Asp Ser Glu Cys Asp Cys Tyr Thr Cys Arg Asn Tyr Ser Arg Ala
            325 330 335
Tyr Leu His His Leu Asp Arg Cys Asn Glu Ile Leu Gly Ala Arg Leu
         340 345 350
Asn Thr Ile His Asn Leu Arg Tyr Tyr Gln Arg Leu Met Ala Gly Leu
 355 360 365
Arg Lys Ala Ile Glu Glu Gly Lys Leu Glu Ser Phe Val Thr Asp Phe
 370 375 380
Tyr Gln Arg Gln Gly Arg Asp Val Pro Pro Leu Asn Val Asp
<210> 8790
<211> 473
<212> PRT
<213> Enterobacter cloacae
<400> 8790
Glu Gln Val Ser Leu Ala Met Pro His Ser Tyr Asp Tyr Asp Ala Ile
                         10
Val Ile Gly Ser Gly Pro Gly Gly Glu Gly Ala Ala Met Gly Leu Val
        20
                        25
                                         30
Lys Gln Gly Ala Arg Val Ala Val Ile Glu Arg Tyr His Asn Val Gly
  35 40
Gly Gly Cys Thr His Trp Gly Thr Ile Pro Ser Lys Ala Leu Arg His
                 55
Ala Val Ser Arg Ile Ile Glu Phe Asn Gln Asn Pro Leu Tyr Ser Asp
            70 75
His Ser Arg Leu Leu Arg Ser Ser Phe Ala Asp Ile Leu Asn His Ala
          85 90
Asp Thr Val Ile Asn Gln Gln Thr Arg Met Arg Gln Gly Phe Tyr Glu
        100
                        105
Arg Asn His Cys Glu Ile Leu Gln Gly Asn Ala His Phe Val Asp Glu
                     120
His Thr Leu Ala Leu Glu Cys His Asp Gly Ser Val Glu Thr Leu Thr
 130 135
                                  140
Ala Glu Lys Phe Val Ile Ala Cys Gly Ser Arg Pro Tyr His Pro Ala
145 150
                              155
Asp Val Asp Phe Ser His Pro Arg Ile Tyr Asp Ser Asp Ser Ile Leu
           165
                            170 175
Ser Leu His His Glu Pro Arg His Val Ile Ile Tyr Gly Ala Gly Val
        180
                        185
Ile Gly Cys Glu Tyr Ala Ser Ile Phe Arg Gly Met Glu Val Lys Val
     195 200
Asp Leu Ile Asn Thr Arg Asp Arg Leu Leu Ala Phe Leu Asp Gln Glu
        215
Met Ser Asp Ser Leu Ser Tyr His Phe Trp Asn Ser Gly Val Val Ile
```

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230
Arg His Asn Glu Glu Tyr Glu Lys Ile Glu Gly Cys Asp Asp Gly Val
      245
                       250
Ile Met His Leu Lys Ser Gly Lys Lys Leu Lys Ala Asp Cys Leu Leu
      260
                       265
                                      270
Tyr Ala Asn Gly Arg Thr Gly Asn Thr Asp Ser Leu Gln Leu Glu Asn
                    280
                           285
Ile Gly Leu Glu Thr Asp Ser Arg Gly Gln Leu Lys Val Asn Ser Met
                 295
                                300
Tyr Gln Thr Ala Leu Pro His Val Tyr Ala Val Gly Asp Val Ile Gly
      310
                       315
Tyr Pro Ser Leu Ala Ser Ala Ala Tyr Asp Gln Gly Arg Ile Ala Ala
           325
               330
Gln Ala Leu Val Lys Gly Glu Ala Thr Ala His Leu Ile Glu Asp Ile
      340
               345 350
Pro Thr Gly Ile Tyr Thr Ile Pro Glu Ile Ser Ser Val Gly Lys Thr
   355
         360
                        365
Glu Gln Gln Leu Thr Ala Met Lys Val Pro Tyr Glu Val Gly Arg Ala
 370 375 380
Gln Phe Lys His Leu Ala Arg Ala Gln Ile Val Gly Met Ser Val Gly
   390 395
Thr Leu Lys Ile Leu Phe His Arg Glu Thr Lys Glu Ile Leu Gly Ile
     405 410
His Cys Phe Gly Glu Arg Ala Ala Glu Ile Ile His Ile Gly Gln Ala
   420 425
Ile Met Glu Gln Lys Gly Gly Gly Asn Thr Ile Glu Tyr Phe Val Asn
435 440 445
Thr Thr Phe Asn Tyr Pro Thr Met Ala Glu Ala Tyr Arg Val Ala Ala
450 455
Leu Asn Gly Leu Asn Arg Leu Phe
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<210> 8791 <211> 388 <212> PRT

<213> Enterobacter cloacae

<400> 8791 Gly Val Ser Thr Met Lys Met Asn Leu Pro Pro Phe Ile Glu Ile Tyr 10 Arg Ala Leu Ile Ala Thr Pro Ser Ile Ser Ala Thr Glu Glu Ala Leu 20 2.5 3.0 Asp Gln Ser Asn Glu Ser Leu Ile Asn Leu Leu Ala Gly Trp Phe Ser 35 4.0 4.5 Asp Leu Gly Phe Asn Val Glu Val Gln Pro Val Pro Gly Thr Arg His 50 55 60 Lys Phe Asn Leu Leu Ala Ser Thr Gly His Gly Ala Gly Gly Leu Leu 65 70 8.0 Leu Ala Gly His Thr Asp Thr Val Pro Phe Asp Asp Gly Arg Trp Thr 85 90 Arg Asp Pro Phe Thr Leu Ser Glu His Asp Asn Lys Leu Tyr Gly Leu 100 105 110 Gly Thr Ala Asp Met Lys Gly Phe Phe Ala Phe Ile Leu Asp Ala Leu 115 120 Arg Asp Val Asp Val Thr Lys Leu Lys Lys Pro Leu Tyr Ile Leu Ala 135 140 Thr Ala Asp Glu Glu Thr Ser Met Ala Gly Ala Arg Tyr Phe Ser Glu 150 155 Asn Thr Ser Ile Arg Pro Asp Cys Ala Ile Ile Gly Glu Pro Thr Ser 165 170 Leu Gln Pro Ile Arg Ala His Lys Gly His Ile Ser Thr Ala Val Arg

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180
                          185
 Val Leu Gly Gln Ser Gly His Ser Ser Asp Pro Ala Arg Gly Val Asn
      195
                       200
                                 205
 Ala Ile Glu Leu Met His Asp Ala Ile Gly Arg Ile Met Thr Leu Arg
   210
                   215
                            220
Asp Asp Leu Lys Glu Arg Tyr His Tyr Glu Ala Phe Thr Val Pro Tyr
             230
                        235
 Pro Thr Leu Asn Leu Gly Ser Leu His Gly Gly Asp Ala Ser Asn Arg
        245
                   250 255
Ile Cys Ala Cys Cys Glu Leu His Met Asp Ile Arg Pro Leu Pro Gly
         260
              265
 Met Thr Leu Ser Asp Leu Asp Gly Leu Leu Asn Glu Ala Leu Ala Pro
      275
           280
Val Ser Glu Arg Trp Pro Gly Arg Leu Thr Val Ser Glu Leu His Pro
                 295 300
Pro Ile Pro Gly Tyr Glu Cys Pro Pro Asp His Gln Leu Val Gln Val
         310 315
Val Glu Lys Leu Leu Gly Glu Lys Thr Asp Val Val Asn Tyr Cys Thr
           325 330
Glu Ala Pro Phe Ile Gln Thr Leu Cys Pro Thr Leu Val Leu Gly Pro
       340
                          345
                               350
Gly Ser Ile Asn Gln Ala His Gln Pro Asp Glu Tyr Leu Glu Thr Arg
  355 360
                           365
Phe Ile Lys Pro Thr Arg Glu Leu Ile Thr Gln Val Val His His Phe
 370
                   375
Cys Trp His
385
<210> 8792
<211> 841
<212> PRT
<213> Enterobacter cloacae
<400> 8792
Gly Leu Ile Ser Gly Val Cys Met Ala Leu Val Val Glu Phe Thr Cys
                             10
Glu Leu Pro Asn Gly Val His Ala Arg Pro Ala Ser His Val Glu Thr
  20
                         2.5
Leu Cys Asn Thr Phe Ile Ser Gln Ile Glu Trp His Asn Leu Arg Thr
    35
                      40
Asp Arg Lys Gly Asn Ala Lys Ser Ala Leu Ala Val Ile Gly Thr Asp
                  5.5
Thr Leu Ala Gly Asp Ala Cys Arg Leu Val Ile Gln Gly Glu Asp Glu
               70
                                75
Gln Asn Ala Tyr Gln Gln Leu Glu Gln Trp Leu Arg Glu Glu Phe Pro
           85
                             90
His Cys Asp Ala Pro Leu Ala Glu Ala Ile Asn Asn Glu Arg Asp Pro
         100
                         105
                                          110
Leu Pro Glu Ser Leu Ala Arg Leu Asn Pro Thr Leu Phe Arg Ala Leu
     115
                      120
Pro Val Cys Ser Gly Ser Ala Gln Gly Val Leu Thr Leu Leu Ala Ser
                  135
                                   140
Leu Asp Leu Asn Ala Leu Ser Asp Leu Ala Glu Ala Lys Asp Glu Glu
               150
                                155
Asp Glu Gln Leu Ala Leu Asp Asn Gly Leu Thr Leu Leu Val Lys Asn
           165
                             170
                                    175
Ile Glu Leu Arg Ala Leu Asp Ser Asp Ser Thr Ala Ser Ala Ile Leu
        180 185
                                190
Glu Ala His Arg Ser Leu Ala Thr Asp Thr Ser Leu Arg Gln His Leu
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195 200 205 Leu Ser Gly Val Asn Arg Gly Leu Ser Cys Ala Gln Ala Ile Ile Ala

210 215 Thr Ala Asn His Phe Cys Glu Thr Phe Ser Arg Ser Ser Ser Thr Tyr 230 235 240 Leu Gln Glu Arg Val Leu Asp Val Arg Asp Val Cys Tyr Gln Leu Leu 245 250 255 Gln His Ile Tyr Gly Glu Ala Arg Phe Pro Ser Pro Gly Gln Leu Thr 260 265 Gln Pro Ser Val Cys Leu Ala Asp Asp Leu Thr Pro Gly Gln Phe Leu 280 285 Glu Leu Asp Lys Thr Leu Leu Lys Gly Leu Leu Leu Lys Ser Gly Gly 295 300 Thr Thr Ser His Thr Val Ile Leu Ala Arg Ser Phe Asn Ile Pro Thr 310 315 320 Leu Val Gly Val Asp Gly Glu Ser Leu Leu Gln Trp Arg Asn Gln Ser 325 330 335 Val Phe Ile Asp Gly Asn Ala Gly Ala Val Val Asp Ala Ser Asp 340 345 350 Ala Val Ala Arg Tyr Tyr Arg Gln Glu Ala Arg Val Gln Gln Ala Leu 355 360 365 Arg Glu Gln Gln Gly Ile Trp Leu Asp Arg Glu Ala Arg Thr Ala Asp 375 380 Gly Leu Arg Val Glu Ile Ala Ala Asn Ile Ala His Ala Val Glu Ala 390 395 Gln Ala Ala Phe Glu Asn Gly Ala Glu Gly Val Gly Leu Phe Arg Thr 405 410 415 Glu Met Leu Tyr Met Asp Arg Ser Ser Ala Pro Gly Glu Asn Glu Leu 420 425 430 Tyr Asn Ile Phe Cys Gln Ala Leu Glu Ser Ala Asn Gly Arg Ser Ile 435 440 445 Ile Val Arg Thr Met Asp Ile Gly Gly Asp Lys Pro Val Glu Tyr Leu 455 460 Lys Ile Pro Ala Glu Asn Asn Pro Phe Leu Gly Tyr Arg Ala Val Arg 470 475 Ile Tyr Glu Glu Tyr Ala Val Leu Phe Thr Thr Gln Leu Arg Ala Ile 485 490 Leu Arg Ala Ser Ala His Gly Ser Leu Lys Ile Met Ile Pro Met Ile 500 505 510 Ser Ser Met Glu Glu Ile Leu Trp Val Lys Glu Lys Leu Ala Glu Ala 515 520 525 Lys Gln Gln Leu Arg Ala Glu His Ile Pro Phe Asp Glu Lys Ile Pro 530 535 540 Leu Gly Ile Met Leu Glu Val Pro Ser Val Met Phe Ile Ile Asp Gln 545 550 555 560 Cys Cys Glu Glu Ile Asp Phe Phe Ser Ile Gly Ser Asn Asp Leu Thr 565 570 575 Gln Tyr Leu Leu Ala Val Asp Arg Asp Asn Ala Lys Val Thr Arg His 580 585 590 Tyr Asn Ser Leu Asn Pro Ala Phe Leu Arg Ala Leu Asp Tyr Ala Val 595 600 605 Gln Ala Val His Arg Gln Gly Lys Trp Ile Gly Leu Cys Gly Glu Leu 610 615 620 Gly Ala Lys Gly Ser Val Leu Pro Leu Leu Val Gly Leu Gly Leu Asp 625 630 635 Glu Leu Ser Met Gly Ser Pro Ala Ile Pro Ala Thr Lys Ala Arg Leu 645 650 655 Ala Gln Leu Asp Ser Arg Ala Cys Arg Gln Leu Leu Asn Gln Ala Met 660 665 Ala Cys Arg Thr Ser Leu Glu Val Glu His Leu Leu Ala Gln Phe Arg 675 680 Met Asn Gln Gln Asp Thr Pro Leu Val Thr Pro Arg Cys Ile Ser Leu 695 700

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Asp Asn Asp Trp Asn Ser Lys Glu Glu Val Met Lys Gly Met Thr Asp
       710
                      715
Asn Leu Leu Ala Gly Arg Cys Arg Tyr Pro Arg Lys Leu Glu Ala
            725
                            730
Asp Leu Trp Ala Arg Glu Ala Val Phe Ser Thr Gly Leu Gly Phe Ser
               745
                                  750
 Phe Ala Ile Pro His Ser Lys Ser Glu His Ile Glu Gln Ser Thr Ile
      755 760
                                     765
Ser Val Ala Arg Leu Lys Ala Pro Val Met Trp Gly Asp Glu Glu Ala
                  775
                                 780
Gln Phe Ile Ile Met Leu Thr Leu Asn Lys His Ala Ala Gly Asp Gln
               790
                   795
His Met Arg Ile Phe Ser Arg Leu Ala Arg Arg Ile Met His Glu Asp
          805
                  810 815
Phe Arg Asn Ala Leu Val Asn Ala Ser Ser Gly Glu Ala Ile Ala Ser
       820
             825
Leu Leu Gln His Glu Leu Glu Leu
   835
<210> 8793
<211> 890
<212> PRT
<213> Enterobacter cloacae
<400> 8793
Trp Gly Asp Trp Val Phe Met Asn Glu Gln Tyr Ser Ala Leu Arg Ser
                         1.0
Asn Val Ser Met Leu Gly Lys Val Leu Gly Asp Thr Ile Lys Asp Ala
       20
                  25
Leu Gly Glu Asn Ile Leu Asp Arg Val Glu Thr Ile Arg Lys Leu Ser
 35
               4.0
                                   4.5
Lys Ser Ser Arg Ala Gly Asn Glu Ala Asn Arg Gln Glu Leu Leu Thr
 50 55
Thr Leu Gln Asn Leu Ser Asn Asp Glu Leu Leu Pro Val Ala Arg Ala
            70
                              75
Phe Ser Gln Phe Leu Asn Leu Ala Asn Thr Ala Glu Gln Tyr His Ser
           85 90
Ile Ser Pro Lys Gly Glu Ala Ala Ser Asn Pro Glu Val Ile Ala Arg
        100 105 110
Thr Leu Arg Lys Leu Lys Asp Gln Pro Asp Leu Asn Glu Ala Thr Ile
 115 120 125
Lys Lys Ala Val Glu Ser Leu Ser Leu Glu Leu Val Leu Thr Ala His
 130 135 140
Pro Thr Glu Ile Thr Arg Arg Thr Leu Ile His Lys Met Val Glu Val
145 150
                              155 160
Asn Asn Cys Leu Lys Gln Leu Asp Asn Lys Asp Ile Ala Asp Tyr Glu
          165 170
                                          175
Arg Asn Gln Leu Met Arg Arg Leu Arg Gln Leu Ile Ala Gln Ser Trp
    180
                       185
                                        190
His Thr Asp Glu Ile Arg Lys His Arg Pro Ser Pro Val Asp Glu Ala
   195
                     200
Lys Trp Gly Phe Ala Val Val Glu Asn Ser Leu Trp Glu Gly Val Pro
  210 215
                                 220
Asn Tyr Leu Arg Glu Leu Asn Glu Gln Leu Glu Glu Asn Leu Gly Tyr
225
    230 235
Arg Leu Pro Val Asp Phe Val Pro Val Arg Phe Thr Ser Trp Met Gly
           245 250
Gly Asp Arg Asp Gly Asn Pro Asn Val Thr Ala Glu Ile Thr Arg His
      260 265
Val Leu Leu Ser Arg Trp Lys Ala Thr Asp Leu Phe Leu Lys Asp
                     280
                                     285
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Ile Gln Val Leu Ile Ser Glu Leu Ser Met Val Glu Ala Thr Pro Glu 295 300 Leu Arg Ala Leu Ala Gly Glu Glu Gly Ala Ser Glu Pro Tyr Arg Phe 310 315 Leu Met Lys Lys Leu Arg Gly Gln Leu Met Ala Thr Gln Ala Trp Leu 325 330 335 Glu Ala Arg Leu Lys Gly Gln Arg Leu Pro Lys Pro Glu Gly Leu Leu 340 345 350 Ser Gln Asn Glu Gln Leu Trp Glu Pro Leu Tyr Ala Cys Tyr Lys Ser 360 365 Leu Gln Ala Cys Gly Met Gly Ile Ile Ala Asn Gly Glu Leu Leu Asp 375 380 Thr Leu Arg Arg Val Lys Cys Phe Gly Val Pro Leu Val Arg Ile Asp 385 390 395 400 Val Arg Gln Glu Ser Thr Arg His Thr Glu Ala Leu Gly Glu Leu Thr 405 410 415 Arg Tyr Leu Gly Ile Gly Asp Tyr Glu Ser Trp Ser Glu Ala Asp Lys 420 425 430 Gln Ala Phe Leu Ile Arg Glu Leu Asn Ser Lys Arg Pro Leu Leu Pro 435 440 445 Arg Asn Trp Glu Pro Ser Asn Asp Thr Arg Glu Val Leu Asn Thr Cys 450 455 460 Lys Ala Ile Val Asp Ala Pro Lys Gly Ser Val Ala Ala Tyr Val Ile 465 470 475 Ser Met Ala Lys Thr Pro Ser Asp Val Leu Gly Val His Leu Leu Leu 485 490 Lys Glu Ala Gly Ile Asp Tyr Ala Leu Pro Val Ala Pro Leu Phe Glu 500 505 Thr Leu Asp Asp Leu Asn Asn Ala Asn Asp Val Met Thr Gln Leu Leu 515 520 Asn Ile Asp Trp Tyr Arg Gly Pne Ile Gln Gly Lys Gln Met Val Met 530 535 540 Ile Gly Tyr Ser Asp Ser Ala Lys Asp Ala Gly Val Met Ala Ala Ser 550 555 Trp Ala Gln Tyr Gln Ala Gln Asp Ala Leu Ile Lys Thr Cys Glu Lys 565 570 Ala Gly Ile Glu Leu Thr Leu Phe His Gly Arg Gly Gly Ser Ile Gly 580 585 590 Arg Gly Gly Ala Pro Ala His Ala Ala Leu Leu Ser Gln Pro Pro Gly 595 600 605 Ser Leu Lys Gly Gly Leu Arg Val Thr Glu Gln Gly Glu Met Ile Arg 610 615 620 Phe Lys Tyr Gly Leu Pro Glu Val Thr Ile Ser Ser Leu Ser Leu Tyr 630 635 Thr Ser Ala Ile Leu Glu Ala Asn Leu Leu Pro Pro Pro Glu Pro Lys 645 650 Glu Ser Trp Cys Arg Ile Met Asp Glu Leu Ser Asp Ile Ser Cys Asp 660 665 670 Leu Tyr Arg Gly Tyr Val Arg Glu Asn Lys Asp Phe Val Pro Tyr Phe 680 Arg Ser Ala Thr Pro Glu Gln Glu Leu Gly Lys Leu Pro Leu Gly Ser 695 700 Arg Pro Ala Lys Arg Arg Pro Thr Gly Gly Val Glu Ser Leu Arg Ala 710 715 Ile Pro Trp Ile Phe Ala Trp Thr Gln Asn Arg Leu Met Leu Pro Ala 725 730 Trp Leu Gly Ala Gly Ala Ala Leu Gln Lys Val Val Glu Asp Gly Lys 745 750 Gln Ser Glu Leu Glu Thr Met Cys Arg Asp Trp Pro Phe Phe Ser Thr 760 Arg Leu Gly Met Leu Glu Met Val Phe Ser Lys Ala Asp Leu Trp Leu

Ala Glu Tyr Tyr Asp Gln Arg Leu Val Lys Pro Glu Leu Trp Ala Leu 790 795 Gly Lys Glu Leu Arg Glu Leu Leu Glu Gly Asp Ile Lys Val Val Leu 805 810 815 Asp Ile Ala Asn Asp Ser His Leu Met Glu Asp Leu Pro Trp Ile Ala 820 825 830 Glu Ser Ile Gln Leu Arg Asn Ile Tyr Thr Asp Pro Leu Asn Val Leu 835 840 845 Gln Ala Glu Leu Leu His Arg Ser Arg Leu Ala Glu Glu Glu Gly Lys 850 855 860 Glu Pro Asp Pro Arg Val Glu Gln Ala Leu Met Val Thr Ile Ala Gly 870 875 Val Ala Ala Gly Met Arg Asn Thr Gly 885 <210> 8794 <211> 304 <212> PRT <213> Enterobacter cloacae <400> 8794 Asn Arg Leu Phe Val Gly Pro Ala Ser Thr Ser Ala Ala Gly Gln Tyr 10 Pro Gly Ile His Thr Met His His Asp Ile Thr Gln Ile Leu Thr Asn 20 25 30 Leu Ile Asn Gly Thr Thr Pro Leu Arg Gln Val His Phe Ala Asn Ser 35 4.0 4.5 Ala Thr Ser Ala Pro Glu Leu Ala Leu Gln Val Asp Phe Pro Arg Leu 5.5 60 Glu Ile Ala Ile Glu Gly Ser Met Lys Asp Gln Ala Gly Cys Val Leu 70 7.5 Gln Gln Gly Asp Val Leu Tyr Val Pro Ala Gly Gly Trp Asn Asn Pro 85 90 Gln Trp Gln Ala Pro Ala Thr Thr Leu Ser Ile Leu Phe Gly Lys Gln 100 105 110 Gln Leu Gly Phe Ser Leu Leu His Trp Asn Gly Ile Asp Val Arg Asn 115 120 Leu Thr Lys Gln His Val Ala Arg Arg Gly Pro Arg Ile Gly Ser Leu 130 140 Leu Leu Gln Thr Leu His Glu Met Gln Met Gln Pro His Glu Gln Gln 150 155 Thr Ala Arg Leu Ile Ile Ala Ser Leu Leu Ser His Cys Val Asp Leu 165 170 Leu Gly Ser Gln Ile Gln Thr Ala Ser Arg Ser Gln Ala Leu Phe Glu 180 185 190 Ala Ile Arg Val Tyr Ile Asp Glu His Tyr Ala Thr Pro Leu Thr Arg 200 205 Glu Ser Val Ala Gln Ala Phe Tyr Ile Ser Pro Asn Tyr Leu Ser His 215 220 Leu Phe Gln Lys Thr Gly Ala Val Gly Phe Asn Glu Tyr Leu Thr His 230 235 Thr Arg Leu Glu His Ala Arg Gln Leu Leu Lys Gly Tyr Asp Leu Lys 245 250 Val Lys Glu Val Ala His Ala Cys Gly Phe Val Asp Ser Asn Tyr Phe 260 265 Cys Arg Leu Phe Arg Lys Asn Thr Glu Arg Ser Pro Ser Glu Tyr Arg 275 280 285 Arg Gln Tyr His Ser Gln Leu Thr Gly Lys Val Ile Ser Pro Glu

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<210> 8795
 <211> 393
 <212> PRT
 <213> Enterobacter cloacae
<400> 8795
Leu Leu Ala Ile Lys Ser Gly His Pro Leu His Asn Pro Tyr Asn Pro
                        10
Arg Val Ile Leu Tyr His Ser Gly Arg Ile Met Thr Pro Glu His Leu
                        25
                                    3.0
Pro Thr Glu Gln Tyr Asp Ala Gln Leu Ala Glu Lys Val Val Arg Leu
                  40
                                  4.5
Gln Ser Met Met Thr Pro Phe Asn Ala Pro Val Pro Glu Val Phe Arg
                 55
                      60
Ser Pro Val Ser His Tyr Arg Met Arg Ala Glu Phe Arg Ile Trp His
                   75
               70
Asp Gly Asp Asp Leu Tyr His Ile Ile Phe Asp Gln Gln Thr Lys Ser
           85 90
Arg Ile Arg Val Asp Ser Phe Pro Ala Ala Ser Glu Leu Ile Asn Gln
      100 105 110
Leu Met Thr Leu Met Ile Asp Gly Val Arg Asn Asn Pro Val Leu Arg
     115 120 125
Asn Lys Leu Phe Gln Ile Asp Tyr Leu Thr Thr Gln Ser Asn Gln Ala
 130 135 140
Ile Val Ser Leu Leu Tyr His Lys Ala Leu Thr Asp Glu Trp Arg Glu
145
    150 155
Gln Ala Glu Ala Leu Arg Asp Ala Leu Arg Ala Gln Asn Ile Asn Val
         165 170 175
His Leu Ile Gly Arg Ala Thr Lys Thr Lys Ile Met Leu Asp Gln Asp
      180 185 190
Tyr Ile Asp Glu Arg Leu Pro Val Ala Gly Lys Glu Met Val Tyr Arg
   195 200
                                   205
Gln Val Glu Asn Ser Phe Thr Gln Pro Asn Ala Ala Met Asn Val Gln
 210 215
                                220
Met Leu Glu Trp Ala Leu Lys Ala Thr Glu Gly Ser Lys Gly Asp Leu
              230
                             235
Leu Glu Leu Tyr Cys Gly Asn Gly Asn Phe Ser Leu Ala Leu Ala Arg
         245
                          250 255
Asn Phe Glu Arg Val Leu Ala Thr Glu Ile Ala Lys Pro Ser Val Ala
        260 265 270
Ala Ala Gln Tyr Asn Ile Ala Ala Asn His Ile Asp Asn Val Gln Ile
     275 280 285
Ile Arg Met Ala Ala Glu Glu Phe Thr Gln Ala Met Asn Gly Val Arg
 290 295
                                300
Glu Phe Asn Arg Leu Gln Gly Ile Asp Leu Lys Ser Tyr Gln Cys Glu
305 310 315
Thr Ile Phe Val Asp Pro Pro Arg Ser Gly Leu Asp Ser Glu Thr Glu
         325
                          330 335
Lys Met Val Gln Ala Tyr Pro Arg Ile Leu Tyr Ile Ser Cys Asn Pro
        340
                       345
                           350
Glu Thr Leu Cys Lys Asn Leu Glu Thr Leu Ser Gln Thr His Lys Val
     355 360 365
Glu Arg Leu Ala Leu Phe Asp Gln Phe Pro Tyr Thr His His Met Glu
 370 375
                               380
Cys Gly Val Leu Leu Thr Ala Arg
<210> 8796
<211> 244
<212> PRT
<213> Enterobacter cloacae
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<210> 8797 <211> 372 <212> PRT <213> Enterobacter cloacae

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Val Ala Gly Ala Pro Ala Arg Leu Leu Ala Ala Gly Ile Gly Asp Ala
           165
                           170
Leu Ala Thr Trp Phe Glu Ala Arg Ala Cys Ser Arg Ser Gly Ala Thr
         180
                        185
                                      190
Thr Met Ala Gly Gly Lys Cys Thr Gln Ala Ala Leu Ala Leu Ala Glu
      195
                    200
                                  205
Leu Cys Tyr Asn Thr Leu Val Glu Glu Gly Glu Lys Ala Met Leu Ala
 210
                      220
Ala Glu Gln His Val Val Thr Pro Ala Leu Glu Arg Ile Ile Glu Ala
     230
                            235 240
Asn Thr Tyr Leu Ser Gly Val Gly Phe Glu Ser Gly Gly Leu Ala Ala
           245 250 255
Ala His Ala Ile His Asn Gly Met Thr Ala Val Pro Asp Ala His His
        260 265 270
Phe Tyr His Gly Glu Lys Val Ala Phe Gly Thr Leu Thr Gln Leu Val
                    280 285
     275
Leu Glu Asn Ala Pro Val Glu Glu Ile Glu Thr Val Ala Ala Leu Cys
 290
      295 300
His Ser Val Gly Leu Pro Ile Thr Leu Ala Gln Leu Asn Ile Lys Glu
305 310 315 320
Asp Ile Pro Ala Lys Met Arg Leu Ile Ala Glu Ala Ser Cys Ala Glu
     325 330 335
Gly Glu Thr Ile His Asn Met Pro Gly Gly Val Thr Pro Asp Gln Val
 340 345 350
Tyr Ala Ala Leu Leu Val Ala Asp Gln Tyr Gly Gln Arg Phe Leu Gln
355
                    360
Glu Trp Glu
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<210> 8798 <211> 307 <212> PRT

370

<213> Enterobacter cloacae

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```
Cys Phe Glu Ala Gly Ala Asp Glu Asp Thr His Phe Arg Ala Thr Ser
  210
                                220
Leu Glu Thr Leu Arg Asn Met Val Ala Ala Gly Ser Gly Ile Thr Leu
               230
                         235
Leu Pro Ala Leu Ala Val Pro His Glu Arg Lys Arg Asp Gly Val Val
           245 250 255
Tyr Leu Pro Cys Ile Lys Pro Glu Pro Arg Arg Thr Ile Gly Leu Val
        260 265 270
Tyr Arg Pro Gly Ser Pro Leu Arg Ser Arg Tyr Glu Gln Leu Ala Glu
     275
          280 285
Ala Ile Arg Gly Ala Met Asp Gly His Phe Asp Ser Ala Leu Lys Gln
 290
       295
                        300
Ala Val
305
<210> 8799
<211> 295
<212> PRT
<213> Enterobacter cloacae
<400> 8799
Pro Thr Cys Ser Ile Lys Ile Thr Arg Gln Phe Met Ala Thr Lys Leu
       5
                                          15
                        10
Gln Asp Gly Asn Thr Pro Cys Leu Ala Ala Thr Pro Ser Asp Pro Arg
 20 25
                                      3.0
Pro Thr Val Leu Leu Phe Asp Ser Gly Val Gly Gly Leu Ser Val Tyr
35 40
Asp Glu Ile Arg Gln Leu Leu Pro Asp Leu His Tyr Ile Tyr Ala Phe
            55 60
Asp Asn Val Ala Phe Pro Tyr Gly Glu Lys Ser Glu Asp Phe Ile Val
65 70
                           7.5
Glu Arg Val Val Glu Ile Val Thr Ala Val Gln Lys Arg Tyr Pro Leu
         85 90
Ala Leu Ala Val Ile Ala Cys Asn Thr Ala Ser Thr Val Ser Leu Pro
 100 105
Ala Leu Arg Glu Lys Phe Pro Phe Pro Val Val Gly Val Val Pro Ala
 115 120
Ile Lys Pro Ala Ala Arg Leu Tar Ala Asn Gly Ile Val Gly Leu Leu
 130 135
                                140
Ala Thr Arg Gly Thr Val Lys Arg Pro Tyr Thr Arg Glu Leu Ile Glu
145 150 155 160
Arg Phe Ala Asn Glu Cys Gln Ile Ala Met Leu Gly Ser Ala Glu Leu
           165 170
                                       175
Val Glu Met Ala Glu Ala Lys Leu His Gly Glu Thr Val Ser Leu Glu
        180 185
                                       190
Glu Leu Arg Arg Ile Leu Arg Pro Trp Leu Arg Met Gln Glu Pro Pro
 195 200
Asp Thr Val Val Leu Gly Cys Thr His Phe Pro Leu Leu Gln Glu Glu
 210 215
Leu Leu Lys Val Leu Pro Glu Gly Thr Arg Leu Val Asp Ser Gly Ala
225
    230
                              235
Ala Ile Ala Arg Arg Thr Ala Trp Leu Leu Glu His Glu Ala Pro Asp
           245
                          250
Ala Lys Ser Ala Asp Ala Asn Ile Ala Phe Cys Met Ala Ile Thr Lys
        260
                        265
                           270
Glu Thr Glu Gln Leu Leu Pro Val Leu Arg Arg Tyr Gly Phe Glu Thr
     275
                    280
Leu Glu Lys Leu Ala Leu
                 295
```

<211> 829 <212> PRT <213> Enterobacter cloacae <400> 8800 Arg Phe Asn Cys Arg Ser Gly Lys Trp Leu Pro Gly Arg Ser Gln Gly Val Ile Met Ser Val Ile Ala Gln Ala Gly Ala Lys Gly Arg Gln Leu 20 25 His Lys Phe Gly Gly Ser Ser Leu Ala Asp Val Lys Cys Tyr Leu Arg 4.0 45 Val Ala Gly Ile Met Thr Glu Tyr Ser Gln Pro Gly Asp Met Met Val 55 60 Val Ser Ala Ala Gly Ser Thr Thr Asn Gln Leu Ile Ser Trp Leu Lys 70 75 Leu Ser Gln Thr Asp Arg Leu Ser Ala His Gln Val Gln Gln Ser Leu 85 90 95 Arg Arg Tyr Gln Ser Glu Leu Ile Ala Gly Leu Leu Pro Ala Asp Val 100 105 110 Ala Asp Gly Leu Ile Ser Ala Phe Thr His Asp Leu Glu Arg Leu Ala 115 120 125 Ala Leu Leu Asp Ser Gly Ile Thr Asp Ala Val Tyr Ala Glu Val Val 130 135 140 Gly His Gly Glu Val Trp Ser Ala Arg Leu Met Ala Ala Val Leu Gln 150 155 His Leu Gly Val Glu Ala Ala Trp Leu Asp Ala Arg Asp Phe Leu Arg 165 170 175 Ala Glu Arg Ala Ala Gln Pro Gln Val Asp Glu Gly Leu Ser Tyr Pro 180 185 190 Leu Leu Gln Gln Leu Leu Val Gln His Pro Gly Lys Arg Ile Val Val 195 200 205 Thr Gly Phe Ile Ser Arg Ser Asn Ala Gly Glu Thr Val Leu Leu Gly 210 215 220 Arg Asn Gly Ser Asp Tyr Ser Ala Thr Gln Ile Gly Ala Leu Ala Gly 230 235 Val Ser Arg Val Thr Ile Trp Ser Asp Val Ala Gly Val Tyr Ser Ala 245 250 Asp Pro Arg Lys Val Lys Asp Ala Cys Leu Leu Pro Leu Leu Arg Leu 260 265 270 Asp Glu Ala Ser Glu Leu Ala Arg Leu Ala Ala Pro Val Leu His Ala 275 28Ĉ 285 Arg Thr Leu Gln Pro Val Ser Gly Ser Asp Ile Asp Leu Gln Leu Arg 290 295 300 Cys Ser Tyr Thr Pro Asp Gln Gly Ser Thr Arg Ile Glu Arg Val Leu 310 315 Ala Ser Gly Thr Gly Ala Arg Ile Val Thr Ser His Asp Asp Ile Cvs 325 330 Leu Ile Glu Phe Gln Val Pro Ala Gly Gln Asp Phe Lys Leu Ala His 340 345 Lys Asp Ile Asp Thr Ile Leu Lys Arg Ala Gln Val Arg Pro Leu Ala 355 360 365

Val Gly Val His Asn Asp Arg Gln Leu Leu Gln Phe Cys Tyr Thr Ala $_370$ $_375$ $_380$ Glu Val Val Asp Ser Ala Leu Lys Ile Leu Asp Glu Ala Gly Leu Pro

385 390 395 400 Gly Glu Leu Arg Leu Arg Gln Gly Leu Ala Leu Val Ala Met Val Gly 405 410 415

Ala Gly Val Thr Arg Asn Pro Leu His Cys His Arg Phe Trp Gln Gln 420 425 430 Leu Lys Gly Gln Pro Val Glu Phe Thr Trp Gln Ser Glu Glu Gly Ile

435

```
Ser Leu Val Ala Val Leu Arg Lys Gly Pro Thr Glu Ser Leu Ile Gln
                 455
Gly Leu His Thr Ser Leu Phe Arg Ala Glu Lys Arg Ile Gly Leu Val
             470
                             475
Leu Phe Gly Lys Gly Asn Ile Gly Ser Arg Trp Leu Glu Leu Phe Ala
           485
                           490
Arg Glu Gln Val Thr Leu Ser Ala Arg Thr Gly Phe Glu Phe Ile Leu
         500
                       505
Ala Gly Val Val Asp Ser Arg Arg Ser Leu Leu Asn Tyr Glu Gly Leu
      515
                    520 525
Asp Ala Ser Arg Ala Leu Ala Phe Phe Asn Asp Glu Ala Val Glu Gln
  530 535
                      540
Asp Glu Glu Ser Leu Phe Leu Trp Met Arg Ala His Pro Tyr Asp Asp
            550 555
Leu Val Val Leu Asp Val Thr Ala Ser Glu Gln Leu Ala Asp Gln Tyr
           565 570 575
Leu Asp Phe Ala Ser His Gly Phe His Val Ile Ser Ala Asn Lys Leu
      580
            585
Ala Gly Ala Ser Ser Thr Asp Lys Tyr Arg Gln Ile His Asp Ala Phe
 595 600 605
Glu Lys Thr Gly Arg His Trp Leu Tyr Asn Ala Thr Val Gly Ala Gly
 610 615 620
Leu Pro Val Asn His Thr Val Arg Asp Leu Ile Glu Ser Gly Asp Ser
625 630 635
Ile Leu Ala Leu Ser Gly Ile Phe Ser Gly Thr Leu Ser Trp Leu Phe
      645 650 <sup>^</sup> 655
Leu Gln Phe Asp Gly Thr Val Pro Phe Thr Asp Leu Val Asp Gln Ala
 660 665 670
Trp Gln Gln Gly Leu Thr Glu Pro Asp Pro Arg Val Asp Leu Ala Gly
675 680
                         685
Lys Asp Val Met Arg Lys Leu Val Ile Leu Ala Arg Glu Ala Gly Tyr
 690 695
                                700
Asp Ile Glu Pro Gly Gln Val Arg Val Glu Ser Leu Val Pro Ala Gly 705 710 715 720
Cys Glu Glu Gly Ser Val Asp His Phe Phe Glu Asn Gly Asp Glu Leu
           725 730 735
Asn Glu Gln Met Val Gln Arg Leu Glu Ala Ala Asn Glu Met Gly Leu
    740 745 750
Val Leu Arg Tyr Val Ala Arg Phe Glu Ala Asn Gly Lys Ala Arg Val
   755 760
                                  765
Gly Val Glu Ala Val Arg Pro Glu His Pro Leu Ala Ala Leu Leu Pro
  770 775
                                780
Cys Asp Asn Val Phe Ala Ile Glu Ser Arg Trp Tyr Arg Asp Asn Pro
785 790
                           795 800
Leu Val Ile Arg Gly Pro Gly Ala Gly Arg Asp Val Thr Ala Gly Ala
      805 810
Ile Gln Ser Asp Ile Asn Arg Leu Ala Lys Leu Leu
        820
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<210> 8801

<211> 113 <212> PRT

<213> Enterobacter cloacae

<400> 8801

Leu Ile Glu Glu Lys Asn Met Ala Arg Ile Ile Ala Val Thr Ala Cys I 5 10 15 Pro Ser Gly Val Ala His Thr Tyr Met Ala Ala Glu Ala Leu Glu Ser 20 25 30 Ala Ala Lys Ser Lys Gly Trp Glu Val Lys Val Glu Thr Gln Gly Ser 35 40 45

Ile Gly Leu Glu Asn Glu Leu Thr Ala Glu Asp Val Ala Ala Ala Ala Sp 50 60 60 60 Met Val Ile Leu Thr Lys Asp Ile Gly Ile Lys Phe Glu Glu Arg Phe 65 70 75 80 Ala Gly Lys Thr Ile Val Arg Val Asn Ile Ser Asp Ala Val Lys Arg 90 95 Ala Asp Ala His Leu Ala Gln Ile Ala 100 105 100 105 110

<210> 8802 <211> 783 <212> PRT <213> Enterobacter cloacae <400> 8802 Arg Ser Pro Ala Leu Arg Gly Gly Phe Val Phe Arg Tyr Arg Ser Ser 5 10 Leu Met Thr Asn Arg Ile Gln Arg Leu Lys Asp Ala Leu Phe Ala Ser 20 2.5 Pro Arg Glu Ile Ser Leu Glu Arg Ala Leu Leu Tyr Thr Ala Ser His 35 40 Gln Gln Thr Glu Gly Glu Pro Val Ile Leu Arg Arg Ala Lys Ala Thr 50 55 60 Ala Tyr Ile Leu Asp His Val Asn Ile Ala Ile Arg Asp Glu Glu Leu 70 75 Ile Ala Gly Asn Arg Thr Val Lys Pro Arg Ala Gly Ile Met Ser Pro 90 Glu Met Asp Pro Tyr Trp Leu Leu Lys Glu Leu Asp Gln Phe Ser Thr 100 105 110 Arg Pro Gln Asp Arg Phe Glu Ile Gly Glu Ala Asp Lys Gln Ile Tyr 115 120 125 Arg Asp Val Leu Tyr Pro Tyr Trp Glu Lys Arg Ser Met Lys Asp Phe 130 135 140 Ile Asn Ser Gln Met Thr Asp Glu Val Lys Ala Ala Val Gly Thr Gln 145 150 155 Ile Phe Ser Val Asn Gln Thr Asp Lys Gly Gln Gly His Ile Ile Ile 165 170 Asp Tyr Pro His Leu Leu Asn Asn Gly Leu Gly Ala Leu Val Glu Gln 180 185 190 Met Arg Glu Tyr Cys Ala Arg Asp Ala Gln Asn Thr Phe Tyr Ala Ala 200 Ala Leu Ile Leu Leu Glu Ala Ser Gln Arg His Ile Leu Arg Tyr Ala 215 220 Ala Leu Ala Glu Thr Leu Ala Thr Val Cys Asp Asp Ala Ser Arg Arg 230 235 Glu Glu Leu Arg Lys Ile Ala Glu Ile Ser Arg His Asn Ala Glu His 245 250 Lys Pro Gln Thr Phe Trp Gln Ala Cys Gln Leu Phe Trp Tyr Met Asn 260 265 270 Val Ile Leu Gln Tyr Glu Ser Asn Ala Ser Ser Leu Ser Ile Gly Arg 280 285 Phe Asp Gln Tyr Met Leu Pro Phe Tyr Gln Ala Ser Leu Thr Gln Gly 295 300 Asp Asp Pro Ala Phe Leu Lys Glu Leu Leu Glu Ser Leu Trp Val Lys 305 310 315 Cys Asn Asp Val Val Leu Leu Arg Ser Thr Ser Ser Ala Arg Tyr Phe 325 330 335 Ala Gly Phe Pro Thr Gly Tyr Thr Ala Leu Leu Gly Gly Leu Thr Glu

345

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Ser Gly Arg Asn Ala Val Asn Val Leu Ser Phe Leu Cys Leu Asp Ala
 355
                   360
Tyr Gln Ser Val Gln Leu Pro Gln Pro Asn Leu Gly Val Arg Val Asn
                 375
                        380
Glu Leu Ile Asp Arg Pro Phe Leu Leu Lys Thr Ala Glu Thr Ile Arg
              390
                  395
Leu Gly Thr Gly Ile Pro Gln Ile Phe Asn Asp Glu Val Val Val Pro
               410 415
          405
Ala Phe Leu Asn Arg Gly Val Ser Leu Glu Asp Ala Arg Asp Tyr Ala
        420
            425 430
Val Val Gly Cys Val Glu Leu Ser Ile Pro Gly Lys Thr Tyr Gly Leu
     435
         440 445
His Asp Ile Ala Met Phe Asn Leu Leu Lys Val Met Glu Ile Ala Met
 450 455 460
Leu Glu Asn Glu Gly Asn Ser Thr Leu Ser Tyr Glu Gly Leu Leu Asp
    470 475
His Ile Arg Ala Lys Ile Asn His Tyr Ile Ala Leu Met Val Glu Gly $485$
Ser Asn Ile Cys Asp Ile Gly His Arg Asp Trp Ala Pro Val Pro Leu
  500 505 510
Leu Ser Ser Phe Ile Ser Asp Cys Leu Glu Ser Gly Lys Asp Ile Thr
 515 520 525
Asp Gly Gly Ala Arg Tyr Asn Phe Ser Gly Val Gln Gly Ile Gly Ile
530 535
                               540
Ala Asn Leu Ser Asp Ser Leu His Ala Leu Lys Gly Leu Val Phe Glu 545 550 555
Gln His Arg Leu Ser Phe Asp Glu Leu Leu Ala Val Leu Lys Ala Asn
     565 570 575
Phe Ala Thr Pro Glu Gly Glu Lys Val Arg Ala Arg Leu Ile Asn Arg
       580
                      585 590
Phe Glu Lys Tyr Gly Asn Asp Ile Asp Asp Val Asp Asn Ile Ser Ala
595 600 605
Arg Gly Gly Gln Phe Thr Pro Gly Ser Tyr Thr Val Ser Ala His Val
625 630
                            635
Pro Leu Gly Ala Val Val Gly Ala Thr Pro Asp Gly Arg Phe Ala Gly
          645
                         650 655
Glu Gln Leu Ala Asp Gly Gly Leu Ser Pro Met Leu Gly Gln Asp Met
       660
                      665 670
Gln Gly Pro Thr Ala Val Leu Lys Ser Val Ser Lys Leu Asp Asn Tyr
 675
                   680 685
Leu Leu Ser Asn Gly Thr Leu Leu Asn Val Lys Phe Thr Pro Ala Thr
 690 695
                               700
Leu Glu Gly Asp Ala Gly Leu Gln Lys Leu Ala Asp Phe Leu Arg Ala
             710
                            715
Phe Thr Gln Leu Lys Leu Gln His Ile Gln Phe Asn Val Val Asn Ala
                         730
          725
Glu Thr Leu Arg Glu Ala Gln Gln Arg Pro Gln Asp Phe Ala Gly Leu
       740
                      745
Val Val Arg Val Ala Gly Tyr Ser Ala Phe Phe Val Glu Leu Ser Lys
    755 760 765
Glu Ile Gln Asp Asp Ile Ile Arg Arg Thr Ala His Gln Leu
                775
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<210> 8803

<211> 140

<212> PRT

<213> Enterobacter cloacae

Gly Val Ser Asp Ala Ser Thr Gly Arg Ala Arg Arg Phe Gln Cys Tyr 10 Arg Gly Arg Leu Asn Met Thr Val Ile Thr Gly Arg His Leu Val Ala 25 Val Thr Ala Cys Val Ser Gly Val Ala His Thr Tyr Met Ala Ala Glu 4.5 Arg Leu Glu Lys Leu Cys Gln Gln Glu Lys Trp Ser Val Asn Ile Glu 5.5 60 Thr Gln Gly Ala Leu Gly Val Glu Cys Glu Leu Thr Glu Asp Asp Ile 7.5 Arg Arg Ala Asp Val Val Leu Leu Ile Thr Asp Ile Glu Leu Ala Gly 8.5 90 Ser Glu Arg Phe Glu His Ala Arg Tyr Val Lys Cys Gly Ile Ser Ala 100 105 110 Phe Leu Arg Asp Pro Gln Lys Val Met Gly Ala Val Arg Lys Met Leu 115 120 Ala Ala Pro Gln His Thr Gln Val Ile Leu Asp 135

<210> 8804 <211> 338 <212> PRT <213> Enterobacter cloaca

<213> Enterobacter cloacae <400> 8804 Arg Asn Pro Met Leu Asn Thr Leu Ile Val Gly Ala Ser Gly Tyr Ala 10 Gly Ala Glu Leu Val Ser Tyr Val Asn Arg His Pro His Met Thr Ile 20 25 Thr Ala Leu Thr Val Ser Ala Gln Ser Asn Asp Ala Gly Lys Leu Ile 35 40 Ser Asp Leu His Pro Gln Leu Lys Gly Val Val Asp Leu Pro Leu Gln 55 Pro Met Ser Asp Ile Ser Glu Phe Thr Asp Gly Val Asp Val Val Phe 70 75 Leu Ala Thr Ala His Glu Val Ser His Asp Leu Ala Pro Gln Phe Leu 85 90 Ala Ala Gly Cys Val Val Phe Asp Leu Ser Gly Ala Phe Arg Val Asn 100 105 110 Asp Gly Ala Phe Tyr Glu Lys Tyr Tyr Gly Phe Thr His Gln His Pro 115 120 125 Asp Leu Leu Glu Lys Ala Val Tyr Gly Leu Ala Glu Trp Ser Ala Asp 130 135 140 Lys Leu Lys Glu Ala Asn Leu Ile Ala Val Pro Gly Cys Tyr Pro Thr 150 155 160 Ala Ala Gln Leu Ser Leu Lys Pro Leu Ile Asp Ala Gly Leu Leu Asp 165 170 Leu Asn Gln Trp Pro Val Ile Asn Ala Thr Ser Gly Val Ser Gly Ala 180 185 190 Gly Arg Lys Ala Ala Ile Ser Asn Ser Phe Cys Glu Val Ser Leu Gln 195 200 Ala Tyr Gly Val Phe Asn His Arg His His Pro Glu Ile Thr Thr His 215 220 Leu Gly Ala Asp Val Ile Phe Thr Pro His Leu Gly Ser Phe Pro Arg 230 235 Gly Ile Leu Glu Thr Ile Thr Cys Arg Leu Lys Pro Gly Val Thr Lys 245 250 Glu Gln Val Asn Glu Val Phe Thr Gln Ala Tyr Ala Asp Lys Pro Leu 265 270 Val Arg Leu Tyr Asp Lys Gly Val Pro Ala Leu Lys Asn Val Val Gly 280

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Leu Pro Phe Cys Asp Ile Gly Phe Ala Val Gln Gly Glu His Leu Ile
                 295
Val Val Ala Ala Glu Asp Asn Leu Leu Lys Gly Ala Ala Ala Gln Ala
                                315
Met Gln Cys Ala Asn Ile Arg Phe Gly Phe Pro Glu Thr Gln Ala Leu
                     330
Ile
<210> 8805
<211> 261
<212> PRT
<213> Enterobacter cloacae
<400> 8805
Gly Val Met Met Asn Pro Leu Ile Ile Lys Leu Gly Gly Val Leu Leu
             5
                              10
Asp Ser Glu Glu Ala Leu Glu Arg Leu Phe Asn Ala Leu Val Asn Tyr
       20
                           25
Arg Glu Ser His Gln Arg Pro Leu Val Ile Val His Gly Gly Gly Cys
  35
                       40
Val Val Asp Glu Leu Met Lys Gly Leu Asn Leu Pro Val Lys Lys
 50
                    55
Asn Gly Leu Arg Val Thr Pro Ala Asp Gln Ile Asp Ile Ile Thr Gly
              70
                                                   80
Ala Leu Ala Gly Thr Ala Asn Lys Thr Leu Leu Ala Trp Ala Lys Lys
             85
                              90
                                                95
His His Ile Ala Ser Val Gly Leu Tyr Leu Gly Asp Gly Asp Ser Val
         100
                          105
Lys Val Thr Gln Leu Asp Glu Glu Leu Gly His Val Gly Leu Ala Gln
 115
           120
                                         125
Pro Gly Ser Pro Lys Leu Ile Asn Thr Leu Leu Glu Gly Gly Phe Leu
 130 135
                                     140
Pro Val Val Ser Ser Ile Gly Val Thr Glu Glu Gly Glu Leu Met Asn
         150
                                  155
Val Asn Ala Asp Gln Ala Ala Thr Ala Leu Ala Ala Thr Leu Gly Ala
            165 170
Asp Leu Ile Leu Leu Ser Asp Val Ser Gly Ile Leu Asp Gly Lys Gly
          180 185
Gln Arg Ile Ala Glu Met Thr Ala Ala Lys Ala Glu Gln Leu Ile Asp
      195 200
                             205
Gln Gly Ile Ile Thr Asp Gly Met Ile Val Lys Val Asn Ala Ala Leu
  210
                  215
                                    220
Asp Ala Ala Arg Thr Leu Gly Arg Pro Val Asp Ile Ala Ser Trp Arg
225 230
                                  235
                                                   240
His Ala Glu Gln Leu Pro Ala Leu Phe Asn Gly Thr Pro Ile Gly Thr
                              250
                                                255
Arg Ile Leu Ala
         260
<210> 8806
<211> 473
<212> PRT
<213> Enterobacter cloacae
<400> 8806
Ala Gln Arg His Arg Ala Lys Ile Ser Ser Leu Arg Lys Phe Val Met
                              10
Ala Leu Trp Gly Gly Arg Phe Thr Gln Ala Ala Asp Gln Arg Phe Lys
                           25
Gln Phe Asn Asp Ser Leu Arg Phe Asp Tyr Arg Leu Ala Glu Gln Asp
```

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4.0
Ile Val Gly Ser Val Ala Trp Ser Lys Ala Leu Val Thr Val Gly Val
Leu Thr Ala Asp Glu Gln Gln Gln Leu Glu Glu Ala Leu Asn Asn Leu
              7.0
Leu Glu Glu Val Arg Leu Asp Pro Gln Gln Ile Leu Gln Ser Asp Ala
                   90
Glu Asp Ile His Ser Trp Val Glu Gly Lys Leu Ile Asp Lys Val Gly
        100
             105 110
Gln Leu Gly Lys Lys Leu His Thr Gly Arg Ser Arg Asn Asp Gln Val
     115 120 125
Ala Thr Asp Leu Lys Leu Trp Cys Lys Glu Thr Val Gly Glu Leu Leu
      135 140
Ala Ala Asn Arg Gln Leu Gln Gly Ala Leu Val Asp Thr Ala Gln Asn
145 150 155 160
Asn Gln Asp Ala Val Met Pro Gly Tyr Thr His Leu Gln Arg Ala Gln
      165 170 175
Pro Val Thr Phe Ala His Trp Cys Leu Ala Tyr Val Glu Met Leu Ala
  180 185 190
Arg Asp Glu Ser Arg Leu Gln Asp Thr Leu Lys Arg Leu Asp Val Ser
195 200 205
Pro Leu Gly Ser Gly Ala Leu Ala Gly Thr Ala Tyr Glu Ile Asp Arg
210 215 220
Glu Gln Leu Ala Gly Trp Leu Gly Phe Ala Ser Ala Thr Arg Asn Ser 225 \phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}
Leu Asp Ser Val Ser Asp Arg Asp His Val Leu Glu Leu Leu Ser Asn
      245 250 255
Ala Ser Ile Gly Met Val His Leu Ser Arg Phe Ala Glu Asp Leu Ile
 260 265 270
Phe Phe Asn Ser Gly Glu Ala Gly Phe Val Glu Leu Ser Asp Arg Val
275 280 285
Thr Ser Gly Ser Ser Leu Met Pro Gln Lys Lys Asn Pro Asp Ala Leu
290 295 300
Glu Leu Ile Arg Gly Lys Cys Gly Arg Val Gln Gly Ala Leu Thr Gly
305 310 315 320
Met Met Met Thr Leu Lys Gly Leu Pro Leu Ala Tyr Asn Lys Asp Met
         325 330 335
Gln Glu Asp Lys Glu Gly Leu Phe Asp Ala Leu Asp Thr Trp Leu Asp
       340 345 350
Cys Leu His Met Gly Ala Leu Val Leu Asp Gly Ile Gln Val Lys Arg
355 360
                                   365
Pro Arg Cys Gln Glu Ala Ala Gln Gln Gly Tyr Ala Asn Ser Thr Glu
  370 375
                                380
Leu Ala Asp Tyr Leu Val Ala Lys Gly Val Pro Phe Arg Glu Ala His
385 390 395
His Ile Val Gly Glu Ala Val Val Glu Ala Ile Arg Gln Gly Lys Ala
           405 410
                                         415
Leu Glu Glu Leu Ala Leu Ala Asp Leu Gln Lys Phe Ser Ala Val Ile
     420 425
Gly Asp Asp Val Tyr Pro Ile Leu Ala Leu Gln Ser Cys Leu Asp Lys
   435 440
Arg Ala Ala Lys Gly Gly Val Ser Pro Lys Gln Val Ala Gln Ala Ile
450 455
                               460
Ala Asp Ala Lys Asn Arg Leu Val
              470
```

<210> 8807

<211> 269 <212> PRT

<213> Enterobacter cloacae

```
<400> 8807
Lys Gln Gln Asn His Asn Ile Ile Ala Arg Val Thr Gln Leu Ser Leu
Cys Phe Phe Arg Ala Val Glu His Lys Pro Arg Val Asn Asn His Ser
      20
                         25
Gln Ser Gln Val Asn Arg Leu Ile Leu Phe Ser Gly Ile Val Pro Thr
                    40
Gly Leu Trp Lys Asp Ser Thr Ile Val Met Gly Val Arg Ala Gln Gln
                   55
                                60
Lys Glu Lys Thr Arg Arg Ser Leu Val Glu Ala Ala Phe Ser Gln Leu
               70
                               75
Ser Ala Glu Arg Ser Phe Ala Ser Leu Ser Leu Arg Glu Val Ala Arg
            8.5
                 90
Glu Ala Gly Ile Ala Pro Thr Ser Phe Tyr Arg His Phe Arg Asp Val
         100 105
Asp Glu Leu Gly Leu Thr Met Val Asp Glu Ser Gly Leu Met Leu Arg
 115 120 125
Gln Leu Met Arg Gln Ala Arg Gln Arg Ile Ala Lys Gly Gly Ser Val
  130 135 140
Ile Arg Thr Ser Val Ser Thr Phe Met Glu Phe Ile Gly Asn Asn Pro
145 150 155
Asn Ala Phe Arg Leu Leu Leu Arg Glu Arg Ser Gly Thr Ser Ala Ala
      165 170 175
Phe Arg Ala Ala Val Ala Arg Glu Ile Gln His Phe Ile Ala Glu Leu
 180 185 190
Ala Asp Tyr Leu Glu Leu Glu Asn His Met Pro Arg Ala Phe Thr Glu
195 200 205
Ala Gln Ala Glu Ala Met Val Thr Ile Val Phe Ser Ala Gly Ala Glu
210 215 220
Ala Leu Asp Val Ser Ile Glu Gln Arg Lys Gln Leu Glu Glu Arg Leu
225 230 235
Val Leu Gln Leu Arg Met Ile Ser Lys Gly Ala Tyr Tyr Trp Tyr Arg
   245 250
Arg Glu Gln Glu Lys Leu Ala His Gln Asn Asp Glu
<210> 8808
<211> 126
<212> PRT
<213> Enterobacter cloacae
<400> 8808
Val Met Lys Gln Ser Gly Gln Asp Lys Gly Thr Leu Leu Leu Ala Leu
                            10
Ile Ala Gly Leu Ser Ile Asn Gly Thr Phe Ala Ala Val Phe Ser Ser
                2.5
                                         3.0
Ile Val Pro Phe Ser Ile Phe Pro Ile Ile Ala Leu Val Leu Thr Val
          40
Tyr Cys Leu His Gln Arg Tyr Leu Asn Arg Thr Met Pro Val Gly Leu
                  55
Pro Gly Leu Ala Ala Ala Cys Phe Ile Leu Gly Val Leu Leu Tyr Ser
                              75
Thr Val Val Arg Ala Glu Tyr Pro Asp Ile Gly Ser Asn Phe Leu Pro
           85
                           90
Ala Val Leu Ser Val Ala Leu Val Phe Trp Ile Gly Ser Arg Met Arg
               105
        100
Ser Arg Lys Ser Glu Leu Pro Glu Tyr Arg Arg Val Leu
                     120
```

<210> 8809 <211> 208 <212> PRT <213> Enterobacter cloacae

<400> 8809 Arg Gly Ser Leu Arg Ser Gly Glu Asp Ala Asp Leu Val Leu His Ser Cys Thr Lys Tyr Leu Asn Gly His Ser Asp Val Val Ala Gly Val Val 25 Ile Ala Lys Asp Pro Asp Val Val Thr Glu Leu Ala Trp Trp Ala Asn 4.0 Asn Ile Gly Val Thr Ala Gly Ala Phe Asp Ser Tyr Leu Leu Leu Arg 55 60 Gly Ile Arg Thr Leu Ser Pro Arg Met Asp Val Ala Gln Arg Asn Ala 75 70 Gln Ala Ile Val Asp Phe Leu Lys Thr Gln Pro Leu Val Lys Lys Leu 85 90 Tyr His Pro Ser Leu Pro Glu Asn Gln Gly His Glu Ile Ala Ala Arg 100 105 Gln Gln Lys Gly Phe Gly Ala Met Leu Ser Phe Glu Leu Asp Gly Asp 115 120 125 Glu Gln Thr Leu Arg Arg Phe Leu Ser Gly Leu Ser Leu Phe Thr Leu 130 135 140 Ala Glu Ser Leu Gly Gly Val Glu Ser Leu Ile Ser His Ala Ala Thr 145 150 155 Met Thr His Ala Gly Met Ala Pro Glu Ala Arg Ala Ala Ala Gly Ile 165 170 Ser Glu Thr Leu Leu Arg Ile Ser Thr Gly Ile Glu Asp Ser Glu Asp 180 185 190 Leu Ile Ala Asp Leu Glu Asn Gly Phe Arg Val Ala Ala Lys Gly

200

<210> 8810 <211> 298 <212> PRT

<213> Enterobacter cloacae

<400> 8810 Gly Met Ser Phe Phe His Ala Asn Gln Arg Glu Ala Leu Asn Gln Ser 10 Leu Ala Glu Val Asn Gly Gln Ile Asn Val Ser Phe Glu Phe Phe Pro 20 25 3.0 Pro Arg Thr Ser Glu Met Glu Gln Thr Leu Trp Ser Ser Ile Asp Arg 35 40 Leu Ser Ser Leu Lys Pro Lys Phe Val Ser Val Thr Tyr Gly Ala Asn 55 Ser Gly Glu Arg Asp Arg Thr His Ser Ile Ile Lys Gly Ile Lys Asp 70 7.5 80 Arg Thr Gly Leu Glu Ala Ala Pro His Leu Thr Cys Ile Asp Ala Thr 85 90 Arg Asp Glu Leu Arg Ala Ile Ala Gln Asp Tyr Trp Asn Asn Gly Ile 100 105 Arg His Ile Val Ala Leu Arg Gly Asp Leu Pro Pro Gly Ser Gly Lys 120 125 Pro Glu Met Phe Ala Ala Asp Leu Val Gly Leu Leu Lys Asp Val Ala 135 140 Asp Phe Asp Ile Ser Val Ala Ala Tyr Pro Glu Val His Pro Glu Ala 150 155 Lys Ser Ala Gln Ala Asp Leu Leu Asn Leu Lys Arg Lys Val Glu Ala 165 170 Gly Ala Asn Arg Ala Ile Thr Gln Phe Phe Phe Asp Val Glu Ser Tyr 185

Leu Arg Phe Arg Asp Arg Cys Val Ser Ala Gly Ile Asp Val Glu Ile 195 200 Ile Pro Gly Ile Leu Pro Val Ser Asn Phe Lys Gln Ala Lys Lys Phe 215 Ala Asp Met Thr Asn Val Arg Ile Pro Leu Trp Met Ser Lys Met Tyr 230 235 Glu Gly Leu Asp Asp Pro Glu Thr Arg Lys Leu Val Gly Ala Asn 245 250 255 Ile Ala Met Asp Met Val Lys Ile Leu Ser Arg Glu Gly Val Lys Asp 260 265 Phe His Phe Tyr Thr Leu Asn Arg Ala Glu Met Ser Tyr Ala Ile Cys 280 285 275 His Thr Leu Gly Val Arg Pro Ala Leu <210> 8811 <211> 734 <212> PRT <213> Enterobacter cloacae <400> 8811 His Cys Lys Gly Ser Ile Ala Met Ser Met Ser Asp Glu Thr Asn Asn 10 Ala Ala Ser Ala Gly Lys Cys Pro Phe His Gln Gly Gly Val Asp His 20 25 Ser Ala Gly Ala Gly Thr Gly Ser Lys Asp Trp Trp Pro Lys Gln Leu 35 40 45 Arg Ile Asp Leu Leu Asn Gln His Ser Asn Arg Ser Asn Pro Leu Gly 50 55 Glu Asp Phe Asp Tyr Arg Lys Glu Phe Ser Lys Leu Asp Tyr Ser Ala 70 75 Leu Lys Gly Asp Leu Lys Ala Leu Leu Thr Asp Ser Gln Pro Trp Trp 85 90 95 Pro Ala Asp Trp Gly Ser Tyr Ala Gly Leu Phe Ile Arg Met Ala Trp 100 105 110 His Gly Ala Gly Thr Tyr Arg Ser Val Asp Gly Arg Gly Ala Gly 115 120 125 Arg Gly Gln Gln Arg Phe Ala Pro Leu Asn Ser Trp Pro Asp Asn Val 130 135 140 Ser Leu Asp Lys Ala Arg Arg Leu Leu Trp Pro Val Lys Gln Lys Tyr 145 150 155 160 Gly Gln Lys Ile Ser Trp Ala Asp Leu Phe Ile Leu Ala Gly Asn Val 165 170 175 Ala Leu Glu Asn Ser Gly Phe Arg Thr Phe Gly Phe Gly Ala Gly Arg 180 185

Glu Asp Val Trp Glu Pro Asp Leu Asp Val Asn Trp Gly Asp Glu Lys
195
200
Ala Trp Leu Thr His Arg Asp Pro Glu Ala Leu Ala Lys Arg Pro Leu
210
215
Ala Ala Trp Glu Met Gly Leu Ile Tyr Val Asn Pro Glu Gly Pro Asp
225
230
230
235
240

Ala Ser Gly Glu Pro Leu Ser Ala Ala Ala Ala Ile Arg Ala Thr Phe 245 250 Gly Asn Met Gly Met Asn Asp Glu Glu Thr Val Ala Leu Ile Ala Gly

260 265 270 Gly His Thr Leu Gly Lys Thr His Gly Ala Gly Glu Ala Thr His Val

275 280 285

Gly Thr Asp Pro Glu Ala Ser Pro Ile Glu Ala Gln Gly Leu Gly Trp
290 295 300

Ala Ser Thr His Gly Thr Gly Ile Gly Ala Asp Ala Ile Thr Ser Gly

05 310 315 315 320

```
Leu Glu Val Ile Trp Ser Gln Thr Pro Thr Gln Trp Ser Asn Tyr Phe
            325
Phe Glu Asn Leu Phe Lys Tyr Glu Trp Val Gln Thr Arg Ser Pro Ala
         340
                        345
Gly Ala Ile Gln Phe Glu Ala Val Asp Ala Pro Glu Ile Met Pro Asp
                    360
                                    365
Pro Phe Asp Pro Ser Lys Lys Arg Lys Pro Thr Met Leu Val Thr Asp
               375 380
Leu Thr Leu Arg Phe Asp Pro Glu Phe Glu Lys Ile Ser Arg Arg Phe
     390 395
Leu Asn Asp Pro Gln Ala Phe Asn Glu Ala Phe Ala Arg Ala Trp Phe
         405 410 415
Lys Leu Thr His Arg Asp Met Gly Pro Lys Ala Arg Tyr Ile Gly Pro
       420 425 430
Glu Val Pro Lys Glu Asp Leu Ile Trp Gln Asp Pro Leu Pro Gln Pro
   435 44C 445
Val Phe His Pro Thr Gln Glu Asp Ile Glu Ser Leu Lys Ala Glu Ile
 450 455 460
Ala Ala Ser Gly Leu Ser Val Ser Glu Leu Val Ser Val Ala Trp Ala
465 470 475 480
Ser Ala Ser Thr Phe Arg Gly Gly Asp Lys Arg Gly Gly Ala Asn Gly
     485 490 495
Ala Arg Leu Ala Leu Ala Pro Gln Arg Asp Trp Asp Val Asn Ala Ala
                       505
Ala Val Arg Ala Leu Pro Ala Leu Glu Ala Ile Gln Arg Thr Thr Asn
                    520
Lys Ala Ser Leu Ala Asp Ile Ile Val Leu Ala Gly Val Val Gly Val
                 535
                                 540
Glu Gln Ala Ala Lys Aia Ala Gly Val Tyr Val Asn Val Pro Phe Thr
545 550
                            555 560
Pro Gly Arg Val Asp Ala Arg Gln Asp Gln Thr Asp Ile Glu Met Phe
       565
                          570
Asn Leu Leu Glu Pro Val Ala Asp Gly Phe Arg Asn Tyr Arg Ala Gln
                        585
                                       590
Val Asp Val Ser Thr Thr Glu Ser Leu Leu Ile Asp Lys Ala Gln Gln
                    600 605
Leu Thr Leu Thr Ala Pro Glu Leu Thr Val Leu Ile Gly Gly Leu Arg
  610 615 620
Val Leu Gly Ala Asn Phe Asp Gly Ser Lys Asn Gly Val Phe Thr Asn
              630
                             635
Arg Glu Gly Val Leu Ser Asn Asp Phe Phe Val Asn Leu Leu Asp Met
           645
                          650 655
Asn Thr Gln Trp Lys Ala Thr Asp Asp Ser Asn Glu Leu Phe Ala Gly
        660
                        665
Ser Asp Arg Ala Ser Gly Glu Val Lys Tyr Thr Ala Thr Arg Ala Asp
     675
                     680
                                    685
Leu Val Phe Gly Ser Asn Ala Val Leu Arg Ala Leu Ala Glu Val Tyr
                 695
                                 700
Ala Ser Ser Asp Ala His Glu Lys Phe Val Arg Asp Phe Val Ala Ala
                     715
              710
Trp Ala Arg Val Met Asp Leu Asp Arg Phe Asp Val Lys
            725
                           730
<210> 8812
```

<211> 377 <212> PRT <213> Enterobacter cloacae

-ELD- Enteropated Clouda

<400> 8812

Leu Pro Ile Val Cys His Asn Ile Phe Met Val Leu Gly Gln Glu Arg

1 10 15

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His Met Lys Glu Leu Val His Ile Leu Lys Asn Thr Arg Gln His Leu
Met Thr Gly Val Ser His Met Ile Pro Phe Val Val Ser Gly Gly Ile
      35
                                     4.5
Leu Leu Ala Val Ser Val Met Leu Tyr Gly Lys Gly Ala Val Pro Asp
                  55
Ala Ala Thr Asp Pro Asn Leu Lys Lys Leu Phe Asp Ile Gly Val Ala
               70
                        7.5
Gly Leu Thr Leu Met Val Pro Phe Leu Ala Ala Tyr Ile Gly Tyr Ser
          8.5
                90
Ile Ala Glu Arg Ala Ala Leu Ala Pro Cys Ala Ile Ala Ala Trp Val
    100 105
Gly Asn Ser Phe Gly Ala Gly Phe Phe Gly Ala Ile Ile Ala Gly Ile
    115 120 125
Phe Gly Gly Ile Val Val Trp Tyr Leu Lys Lys Leu Pro Val Pro Lys
 130 135
                                 140
Val Leu Arg Ser Val Met Pro Ile Phe Ile Ile Pro Ile Ile Gly Thr
               150 155
Phe Ile Thr Ala Gly Ile Met Met Trp Gly Leu Gly Glu Pro Val Gly
     165 170 175
Ala Leu Thr Thr Gly Leu Thr Gln Trp Leu Gln Gly Met Gln Gly
 180 185 190
Ser Ile Val Val Leu Ala Ile Ile Ile Gly Leu Met Leu Ala Phe Asp
     195
                     200 205
Met Gly Gly Pro Val Asn Lys Val Ala Tyr Ala Phe Met Leu Ile Cys
210 215
                                  220
Val Ala Gln Gly Val Tyr Thr Val Val Ala Ile Ala Ala Val Ala Ile
225 230
                               235
Cys Ile Pro Pro Leu Gly Leu Gly Leu Ala Thr Leu Ile Asn Arg Lys
           245
                           250 255
Ser Phe Thr Gly Glu Glu Arg Glu Ala Gly Lys Ala Ala Leu Val Met
         260
                        265
                                        270
Gly Cys Val Gly Val Thr Glu Gly Ala Ile Pro Phe Ala Ala Ala Asp
   275 280
                             285
Pro Leu Arg Val Ile Pro Ser Ile Met Leu Gly Ser Ala Cys Gly Ala
                295
                                  300
Val Thr Ala Ala Val Met Gly Ala Gln Cys Tyr Ala Gly Trp Gly Gly
              310
                               315
                                              320
Leu Ile Val Leu Pro Val Val Glu Gly Lys Leu Gly Tyr Ile Val Ala
            325
                           330
Val Ala Val Gly Ala Val Val Thr Ala Ile Ser Val Asn Val Leu Lys
         340
                        345
                                        350
Ser Phe Ala Arg Lys Asn Ala Lys Gln Val Glu Glu Lys Glu Asp Asp
     355 360
                                    365
Leu Asp Leu Asp Phe Glu Ile Asn
  370
                  375
<210> 8813
<211> 329
<212> PRT
<213> Enterobacter cloacae
<400> 8813
Thr Arg Lys His Cys Val Lys Arg Asn Ser Val His Arg Ile Leu Pro
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Arg Tyr Ser Leu Asn Asp Gly Arg Gly Ile Arg Thr Val Val Phe Phe 7.0 Lys Gly Cys Pro His Arg Cys Pro Trp Cys Ala Asn Pro Glu Ser Ile 85 Ser Pro Lys Ile Glu Thr Val Arg Arg Glu Ser Lys Cys Leu His Cys 105 Ala Pro Cys Leu Arg Asp Val Asp Glu Cys Pro Ser Gly Ala Phe Glu 125 Pro Ile Gly Arg Asp Val Thr Leu Glu Glu Leu Val Ser Glu Val Met 135 140 Lys Asp Asp Val Phe Phe Arg Ser Ser Gly Gly Gly Val Thr Leu Ser 150 155 Gly Gly Glu Val Leu Leu His Ala Pro Phe Ala Thr Lys Phe Leu Gln 165 170 175 Gly Leu Arg Arg Phe Gly Val His Thr Ala Ile Glu Thr Ala Gly Asp 180 185 190 Ala Pro Leu Ser Arg Leu Met Pro Leu Ala Arg Gln Cys Asp Glu Val 195 200 205 Leu Phe Asp Leu Lys Ile Met Asp Ala Asp Leu Ala Gln Ser Ile Val 210 215 220 Ala Met Asn Leu Pro Arg Val Leu Asp Asn Phe Arg Gin Leu Val Ala 225 230 235 Asp Gly Ile Asn Val Ile Pro Arg Val Pro Leu Ile Pro Gly Tyr Thr 245 250 255 Leu Asn Glu Thr Asn Met Ala Arg Val Leu Ala Phe Leu Leu Pro Ser 260 265 270 Gly Ile Arg Gln Leu His Leu Leu Pro Phe His Gln Tyr Gly Glu Pro 275 280 285 Lys Tyr Arg Leu Leu Gly Gln Glu Trp Gly Met Arg Gln Ala Thr Pro 290 295 300 Pro Thr Glu Asp Glu Val Ser Ala Met Arg Gln Leu Ala Glu Arg Glu 305 310 315 Gly Phe Asn Val Thr Val Glv Glv

<210> 8814 <211> 630 <212> PRT <213> Enterobacter cloacae

325

<400> 8814 Gly Leu Arg His Pro Ser Tyr Ile Val Asp Ala Leu Thr Met Ile Lys Lys Val Ser Leu Leu Thr Val Phe Ser Val Thr Ala Phe Ser Gly Trp 3.0 Ala Gln Glu Ser Ala Asp Ser Leu Val Val Thr Ala Asn Arg Phe Glu 40 Gln Pro Ala Lys Thr Val Leu Ala Pro Thr Ser Val Val Thr Arg Glu 55 Asp Ile Glu Arg Trp Gln Ala Thr Ser Val Val Glu Ile Met Ser Arg 70 75 Leu Pro Gly Val Asp Ile Ala Gln Ser Gly Gly Met Gly Ser Thr Ser 90 85 Ser Thr Phe Ile Arg Gly Thr Glu Ser Arg His Val Leu Val Leu Ile 100 105 110 Asp Gly Ile Pro Leu Asn Asn Ala Gly Ile Ser Asn Val Pro Asp Leu 115 120 Ser Gln Ile Pro Thr Ser Leu Ile Gln Arg Ile Glu Tyr Ile Arg Gly 135 Pro Arg Ser Ala Leu Tyr Gly Ser Asp Ala Ile Gly Gly Val Ile Asn

155

Ile Ile Thr Gly Arg Asp Lys Pro Gly Ala Glu Ile Ser Ala Gly Val 165 170 Gly Ser Lys Gly Tyr Gln Asn Tyr Asn Gly Ala Phe Gln Gln Val Phe 180 185 Asp Lys Thr Lys Ile Thr Met Ala Gly Asp Tyr Thr Tyr Thr Arg Gly 200 205 195 Phe Asp Ile Ala Ala Lys Asp Ala Pro Arg Gln Pro Asp Arg Asp Gly 215 220 Phe Met Ser Lys Ser Leu Phe Gly Ser Val Glu Gln Gln Phe Thr Asp 230 235 240 Ser Val Ser Gly Phe Val Arg Gly Phe Gly Tyr Asp Asn Arg Ser Ala 245 250 Tyr Asp Gly Tyr Asp His Tyr Gly Ala Thr Gly Ile Asp Gly Arg Pro 260 265 270 Asp Thr Arg Gln Val Tyr Ser Gln Asn Trp Asp Thr Gly Leu Arg Tyr 275 280 285 Asn Gln Gly Ile Phe Gln Ser Gin Leu Val Ala Gly Tyr Gly Arg Ser 290 295 300 Lys Asp Gln Asn Tyr Asp Pro Lys Lys Gly Arg Tyr Ala Asp Ser Ala 305 310310315 Thr Met Asp Asp Val Lys Gln Tyr Thr Thr Gln Trp Leu Asn Thr Val 325 330 335 Glu Val Gly His Gly Asn Ile Gly Ala Gly Leu Asp Trp Gln Lys Gln 340 345 350 Lys Thr Gln Ala Gly Thr Gly Tyr Leu Glu Lys Gly Tyr Glu Gln Arg 355 360 365 Asn Thr Gly Val Phe Leu Ser Ala Met Gln Gln Phe Asn Ser Val Thr 370 375 380 Leu Glu Ala Ala Ala Arg Asn Asp Asp Asn Ser Asn Phe Gly Asn His 385 390 395 Ala Thr Trp Gln Thr Ser Ala Ala Trp Glu Phe Ile Asp Gly Tyr Arg 405 410 415 Ile Ile Gly Ser Tyr Gly Thr Ala Tyr Lys Ala Pro Thr Met Ser Gln 420 425 430 Ile His Ser Lys Asp Tyr Gly Asn Pro Asp Leu Lys Pro Glu Glu Ser 435 440 445 Lys Glm Trp Glu Gly Gly Phe Glu Gly Leu Thr Gly Pro Val Asn Trp 450 455 460 Arg Val Thr Gly Tyr Arg Asn Asp Ile Asp Asn Leu Ile Asn Ser Asp 465 470 475 Pro Arg Thr Tyr Arg Tyr Tyr Asn Val Asp Glu Ala Arg Ile Lys Gly 485 490 495 Ile Glu Ala Thr Ala Gln Phe Asp Thr Gly Pro Val Gly His Gln Ile 500 505 510 Ser Tyr Asp Tyr Val Asp Pro Arg Asn Ala Lys Thr Asn Glu Val Leu 515 520 Ala Arg Arg Ser Lys Gln Gln Val Lys Tyr Gln Leu Asp Trp Gln Val 530 535 540 Trp Asp Leu Asp Trp Asn Leu Ala Tyr Arg Tyr Leu Gly Thr Arg Tyr 550 555 560 Asp Val Ala Val Asp Pro Asn Thr Tyr Ala Thr Glu Arg Val Lys Met 565 570 575 Gly Gly Val Ser Leu Trp Asp Val Ala Val Ser Tyr Pro Val Thr Ser 580 585 590 His Leu Thr Val Arg Gly Lys Ile Ala Asn Leu Phe Asp Lys Asp Tyr 595 600 605 Glu Thr Val Tyr Gly Tyr Gln Thr Ala Gly Arg Glu Tyr Thr Leu Ser 615 Gly Ser Tyr Thr Phe 630

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<210> 8815
<211> 328
<212> PRT
<213> Enterobacter cloacae
<400> 8815
Arg Gln Ile Phe Leu Ser Arg Val Asn Leu Met Thr Thr Gln Arg Leu
                     10
Gln Arg Asp Trp Arg Leu Pro Thr Ala Gly Leu Ala Val Leu Val Leu
      20 25
                                        30
Leu Met Ala Gly Phe Ala Leu His Glu His Trp Asn Ala Phe Ile Gln
 35 40
                            45
Trp Cys Leu Ala Thr Gln Ile Thr Leu His Arg Tyr Leu Val Met Tyr
 50 55 60
Leu Leu Gln Leu Asn Asn His Gln Tyr Arg Gly Gly Leu Trp Leu Leu
65 70 75
Thr Gly Ala Phe Leu Tyr Gly Val Leu His Ala Val Gly Pro Gly His
          85 90
                                           9.5
Gly Lys Phe Ile Val Thr Thr Tyr Leu Thr Thr Asn Lys Glu Ser Gln
    100 105 110
Leu Ala Ala Arg Val Val Pro Phe Ile Gly Ser Leu Met Gln Gly Val
115 120 125
Ser Ala Ile Ala Phe Val Phe Ile Leu Ala Val Gly Leu Asn Leu Ala
 130 135
                                 140
Ser Gly Asp Ile Ser Thr Ser Arg Trp Tyr Val Glu Lys Ile Ser Ala
               150
                             155
Leu Leu Ile Ala Ala Phe Gly Ala Phe Ile Ile Tyr Gln Ala Leu Ser
            165
                            170
                                  175
Ser Leu Arg Pro Arg Lys Met Ala Ile Ser Ala Ile Lys Pro Leu His
                        185
                                        190
Gln His Asn Glu His Cys Gly Cys Gly His His Gly Val Gly Val Asp
                     200 205
Leu Ala Lys Ser Asp Trp Lys Thr Arg Leu Gly Val Val Leu Ala Ile
                 215
                                  220
Gly Ala Arg Pro Cys Ser Gly Ala Ile Met Ile Leu Met Phe Ser Asn
225
             230
                              235 240
Ala Leu Gly Ile Ile Ser Trp Gly Ile Ala Ala Val Met Thr Met Ser
           245
                           250
Leu Gly Thr Ala Leu Ser Ile Met Gly Leu Ser Leu Ala Val Arg Tyr
        260
                        265
                                        270
Ala Arg Glu Arg Thr Val Ala Trp Phe Gly Gly Gly Thr Ser Leu Asn
                     280
                                     285
Trp Ile Met Pro Met Val Lys Ile Ala Gly Gly Val Val Leu Ile Leu
 290 295 300
Phe Ala Thr Val Leu Phe Leu Thr Val Ile Pro Val Ser Ala Gly Gly
             310
                               315
                                              320
Asp Tyr Ile Ala Ala Gly Cys
            325
<210> 8816
<211> 334
<212> PRT
<213> Enterobacter cloacae
<400> 8816
Gly Leu Met Met Asn Ile Lys Ala Thr Ile Glu Arg Ile Pro Gly Gly
Met Met Leu Val Pro Leu Val Leu Gly Ala Ile Leu Asn Thr Leu Ala
      20
                        25
                                  30
Pro Asn Thr Gly Ala Tyr Phe Gly Gly Phe Thr Lys Gly Met Ile Thr
                     4.0
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Gly Thr Val Pro Ile Leu Ala Val Trp Phe Phe Cys Ile Gly Ala Ser
                 55
Ile Asn Leu Arg Ala Thr Gly Thr Val Leu Arg Lys Ser Gly Thr Leu
              70
                            7.5
Val Ile Thr Lys Ile Ala Val Ala Trp Val Val Ala Met Ile Cys Ala
          85
               90
                                       95
Met Phe Ile Pro Glu Asn Gly Ile Gln Thr Gly Phe Phe Ala Gly Leu
      100
                    105 110
Ser Val Leu Ala Ile Val Ser Ala Met Asp Met Thr Asn Gly Gly Leu
 115 120 125
Tyr Ala Ser Leu Met Asn Gln Tyr Gly Thr Lys Glu Glu Ser Gly Ala
 130 135 140
Phe Val Leu Met Ser Leu Glu Ser Gly Pro Leu Met Thr Met Leu Ile
145 150 155 160
Leu Gly Ser Ala Gly Leu Ala Ser Phe Glu Leu His His Phe Val Gly
     165 170 175
Ala Ile Leu Pro Phe Leu Ile Gly Phe Ala Leu Gly Asn Leu Asp His
     180 185 190
Asp Leu Arg Asp Phe Phe Ser Lys Ala Thr Pro Val Leu Ile Pro Phe
 195 200 205
Phe Gly Phe Ala Leu Gly Asn Thr Ile Asn Leu Asn Val Ile Leu Glu
210 215
                    220
Thr Gly Leu Leu Gly Ile Val Leu Gly Val Ala Val Ile Val Ile Thr
225 230 235
Gly Ile Pro Leu Ile Ile Ala Asp Arg Val Ile Gly Gly Asn Gly
     245 250 255
Thr Ala Gly Val Ala Ala Ser Ser Ala Ala Gly Ala Ala Val Ala Asn
        260 265 270
Pro Val Ile Ile Ala Gln Ile Asn Pro Ala Phe Glu Pro Val Ala Ala
                 280 285
Ser Ala Thr Ala Leu Val Ala Ala Ser Val Ile Val Thr Ala Ile Leu
290 295
                              300
Val Pro Ile Ile Thr Ala Leu Tyr Ala Arg Arg Phe Gly His Val Pro
305 310 315
Glu Ser Arg Thr Glu His Glu Ala Val Glu Met His His
           325
                         330
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<210> 8817
<211> 177
<212> PRT
<213> Enterobacter cloacae
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<213> Enteropacter Cloacas

<400> 8817 Val Arg Glu Lys Glu Leu Ile Val Pro Pro Gly Asp Ala Ser Leu Thr 10 15 Gly Arg Ser Gly Thr Thr Leu Asn Gly Leu Phe Leu Arg Glu Val Lys 20 25 Ile Met Pro Leu Ser Pro Tyr Ile Ser Phe Ala Gly Asn Cys Ala Glu 35 40 Ala Thr Ala Phe Tyr Gln Gln Ala Val Gly Ala Glu Leu Leu Tyr Lys 50 55 60 Ile Thr Phe Gly Glu Met Pro Lys Asp Glu Asn Ser Glu Glu Gly Cys 75 7.0 Pro Ser Gly Met Asn Phe Pro Asp Thr Ala Ile Ala His Ser Asn Val 85 90 Arg Ile Ala Gly Ser Asp Ile Met Met Ser Asp Gly Leu Pro Pro Gly 100 105 Ser Ser Thr Gln Tyr Ala Gly Phe Thr Leu Val Leu Asp Thr Gln Asp 115 120 125 Val Asp Glu Gly Lys Arg Trp Phe Asp Asn Leu Ser Asp Gly Gly Asn 135 140

Val Glu Met Ala Trp Gln Glu Thr Phe Trp Ala His Gly Phe Gly Lys 145 \$150\$ \$155\$ \$160\$ Val Thr Asp Lys Tyr Gly Val Pro Trp Met Ile Asn Val Val Lys Ser \$165\$ \$170\$

<211> 343 <212> PRT <213> Enterobacter cloacae <400> 8818 Arg Gly Met Glu Met Ser Tyr Lys Thr Val Ala Ala Leu Ala Phe Thr 10 Ser Met Phe Ser Ile Ser Thr Leu Leu Ser Pro Ala His Ala Glu Glu 20 25 30 Gln Glu Lys Ala Leu Asn Phe Gly Ile Ile Ser Thr Glu Ser Gln Gln 35 40 Asn Leu Lys Pro Gln Trp Glu Pro Phe Leu Lys Asp Met Glu Thr Lys 50 55 Leu Gly Ile Lys Val Asn Ala Phe Phe Ala Pro Asp Tyr Ala Gly Ile 70 75 Ile Gln Gly Met Arg Phe Asn Lys Val Asp Ile Ala Trp Tyr Gly Asn 85 90 Leu Ser Ala Met Glu Ala Val Asp Arg Ala Asn Gly Gln Val Phe Ala 100 105 110 Gln Thr Val Ala Ala Asp Gly Ser Pro Gly Tyr Trp Ser Val Leu Ile 115 120 Val Asn Lys Asp Ser Pro Ile Asn Asn Leu Asn Asp Met Leu Ala Lys 135 140 Arg Lys Glu Leu Thr Phe Gly Asn Gly Asp Pro Asn Ser Thr Ser Gly 145 150 155 160 Phe Leu Val Pro Gly Tyr Tyr Val Phe Ala Lys Asn Asn Val Ser Ala 165 170 175 Ser Asp Phe Lys Arg Thr Val Asn Ala Ser His Glu Thr Asn Ala Leu 180 185 190 Ala Val Ala Asn Lys Gln Val Asp Val Ala Thr Asn Asn Thr Glu Asn 195 200 205 Leu Asp Lys Leu Lys Thr Ser Ala Pro Asp Lys Leu Lys Glu Ile Lys 210 215 220 Val Ile Trp Lys Ser Pro Leu Ile Pro Gly Asp Pro Ile Val Trp Arg 225 230 235 240 Lys Asn Leu Ser Glu Asn Thr Lys Asp Lys Val Tyr Asp Phe Phe Met 245 250 255 Asn Tyr Gly Lys Thr Pro Glu Glu Lys Ala Val Leu Ala Arg Leu Gly 260 265 270 Trp Ala Pro Phe Arg Ala Ser Ser Asp Leu Gln Leu Val Pro Ile Arg 275 280 285 Gln Leu Ala Leu Phe Lys Gln Met Gln Gly Val Lys Asp Asn Lys Gly 295 300 Leu Lys Asp Glu Glu Lys Thr Ser Lys Val Ser Glu Ile Gln Ala Gln 310 315 Leu Asp Asp Leu Asp Arg Leu Thr Ala Ala Leu Gly Ala Met Thr Ser

325 330

<210> 8819 <211> 223 <212> PRT

Val Asn Lys Ala Val Gln 340

<210> 8818

<213> Enterobacter cloacae

<400> 8819 Pro Arg Arg Thr Pro Cys Arg Ala Ser Gly Arg Ser Lys Tyr Gln Pro Gly Arg Leu Leu Tyr Ala Arg Ser Arg Arg Gln Arg Met Thr Leu Gln 20 25 Pro Ala Phe Thr Leu Ala Val Gln Asp Ala Gln Gln Ser Phe Arg Arg 35 40 4.5 Leu Leu Lys Ala Met Ser Glu Pro Gly Val Ile Val Ser Leu His Gln 55 60 Leu Ser Gln Gly Trp Leu Pro Leu Asn Leu Ala Ser Thr Ser Val Leu 7.0 7.5 Leu Thr Leu Ala Asp Asn Asp Thr Pro Val Trp Leu Ser Gly Ala Leu 85 90 Leu Asn Asp Ile Ala Ser Gln Asn Leu Arg Phe His Thr Asn Ala Pro 100 105 110 Leu Val Glu Gln Pro Gln Gln Ala Val Phe Ala Val Ala Asp Glu Gln 115 120 125 Ile Ser His Glu Gln Leu Asn Ala Leu Ser Glu Gly Ser Ala Val Ala 130 135 140 Pro Glu Thr Ser Ala Thr Leu Ile Leu Gln Val Ser Ser Leu Ser Glv 145 150 155 160 Gly Arg Met Leu Arg Leu Thr Gly Ala Gly Ile Ala Asp Glu Arg Met 165 170 175 Val Ala Pro Gln Leu Pro Glu Cys Ile Ile His Glu Leu Thr Glu Arg 180 185 Pro His Pro Phe Pro Leu Gly Ile Asp Leu Ile Leu Thr Cys Gly Glu 195 200 205 Arg Leu Leu Ala Ile Pro Arg Thr Thr His Val Glu Val Cys 215 210

<210> 8820 <211> 290 <212> PRT

<213> Enterobacter cloacae

<400> 8820 Asn Ala Cys Asn Gly Ser Ala Pro Met Ala Asn Leu Ser Gly Tyr Asn 10 Phe Ala Tyr Leu Asp Glu Gln Thr Lys Arg Met Ile Arg Arg Ala Ile 25 Leu Lys Ala Val Ala Ile Pro Gly Tyr Gln Val Pro Phe Gly Gly Arg 40 Glu Met Pro Met Pro Tyr Gly Trp Gly Thr Gly Gly Ile Gln Ile Thr 5.5 60 Ala Ser Val Ile Gly Glu Ala Asp Val Leu Lys Val Ile Asp Gln Gly 75 7.0 Ala Asp Asp Thr Thr Asn Ala Val Ser Ile Arg Asn Phe Phe Lys Arg 90 Val Thr Gly Val Asm Thr Thr Glu Lys Thr Glu Asp Ala Thr Leu Ile 100 105 110 Gln Thr Arg His Arg Ile Pro Glu Thr Pro Leu Thr Glu Asp Gln Ile 115 120 Leu Ile Phe Gln Val Pro Ile Pro Glu Pro Leu Arg Phe Ile Glu Pro 130 135 140 Arg Glu Thr Glu Thr Arg Thr Met His Ala Leu Glu Glu Tyr Gly Ile 150 155 Met Gln Val Lys Leu Tyr Glu Asp Ile Ala Arg Phe Gly His Ile Ala 165 170 Thr Thr Tyr Ala Tyr Pro Val Lys Val Asn Gly Arg Tyr Val Met Asp

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185
Pro Ser Pro Ile Pro Lys Phe Asp Asn Pro Lys Met Asp Met Met Pro
       195
                        200
                                          205
Ala Leu Gln Leu Phe Gly Ala Gly Arg Glu Lys Arg Ile Tyr Ala Val
                    215
                                       220
Pro Pro Tyr Thr Arg Val Glu Ser Leu Asp Phe Asp Asp His Pro Phe
              230
                             235
Thr Val Gln Glu Trp Asp Glu Pro Cys Ala Ile Cys Gly Ser Lys His
           245 250
                                                255
Ser Tyr Leu Asp Glu Val Val Leu Asp Asp Thr Gly Lys Arg Met Phe
        260 265
Val Cys Ser Asp Thr Asp Tyr Cys Arg Gln Gln Ser Glu Ala Asn Ser
                       280
   290
<210> 8821
<211> 216
<212> PRT
<213> Enterobacter cloacae
<400> 8821
Asp Cys Arg Arg Gln Thr Gly Arg Pro Gly Ala Gly Ala Pro Gln Gly
Arg Ala Arg Ser Tyr Arg Pro Arg Leu Ala Ser Gly Lys Lys Gly Val
                            25
Leu Met Gly Arg Leu Ile Trp Leu Met Gly Pro Ser Gly Ser Gly Lys
                        40
Asp Ser Leu Leu Ser Ala Leu Arg Gln Arg Glu His Ser Gln Leu Leu
                    5.5
                                      60
Val Ala His Arg Tyr Ile Thr Arg Ala Ala Asn Ala Gly Ser Glu Asn
                 70
                                   75
His Ile Ala Leu Ser Glu Gln Glu Phe Phe Thr Arg Thr Gly Gln Asn
             85
                               90
Leu Leu Ala Leu Ser Trp His Ala Asn Gly Tyr Tyr Tyr Gly Val Gly
          100
                           105
                                              110
Ile Glu Ile Asp Leu Trp Leu His Ala Gly Phe Asp Val Leu Val Asn
     115
                        120
                                         125
Gly Ser Arg Ala His Leu Pro Gln Ala Arg Ala Arg Tyr Glu Ala Ala
                    135
                                      140
Leu Leu Pro Val Cys Leu Gln Val Ser Pro Asp Val Leu Arg Ser Arg
                 150
                                   155
                                                     1.60
Leu Gln Lys Arg Gly Arg Glu Asn Ala Arg Glu Ile Asp Gln Arg Leu
              165
                               170 175
Glu Arg Ala Ala Arg Tyr Thr Pro Ser Gly Cys His Leu Leu Asn Asn
          180
                           185
Asp Gly Ser Leu Leu Gln Ser Val Glu Thr Phe Leu Ser Leu Ile Arg
      195
                        200
Gln Lys Glu Lys Gln His Ala
  210
                     215
<210> 8822
<211> 360
<212> PRT
<213> Enterobacter cloacae
<400> 8822
Thr Ala Arg Ala Arg His Leu Ser Gly Lys His His Asp Ala Gly Asn
                               10
                                              15
Arg Arg Glu Arg His Thr Ser Ser Gly Gly Val Ile Met Thr Thr Pro
                            25
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Thr His Pro Gln Gln Val Ala Lys Ser Ala Ser Ala Lys Lys Met Leu
      35
Met Ser Asp Leu Met Gln Thr Ile Gly Ile Leu Pro Ile Leu Ile Leu
                    5.5
                                     60
Ile Val Ala Val Phe Gly Phe Ile Ala Pro Asn Phe Phe Thr Glu Ser
                70
                    75
Asn Leu Leu Asn Ile Thr Arg Gln Ala Ser Ile Asn Ile Val Leu Ala
       85
                  90
Ala Gly Met Thr Phe Ile Ile Leu Thr Gly Gly Ile Asp Leu Ser Val
      100 105 110
Gly Ser Ile Leu Gly Thr Thr Ala Val Ala Ala Met Val Val Ser Leu
  115 120 125
Ile Pro Glu Phe Ala Met Leu Ser Ile Pro Ala Ala Leu Met Leu Gly
 130 135 140
Met Val Leu Gly Leu Phe Asn Gly Ala Leu Val Ala Phe Ala Gly Leu 145 150 155 160
Pro Pro Phe Ile Val Thr Leu Gly Thr Tyr Thr Ala Leu Arg Gly Ala 165 170 175
Ala Tyr Leu Leu Ala Asp Gly Thr Thr Val Ile Asn Ser Asn Ile Asn 180 185 190
Phe Glu Trp Ile Gly Asn Asn Tyr Leu Gly Pro Ile Pro Trp Leu Val
195 200 205
Val Ile Ala Leu Ala Val Ile Val Val Cys Trp Phe Ile Leu Arg Arg
210
                   215
                                     220
Thr Thr Leu Gly Val His Ile Tyr Ala Val Gly Gly Asn Met Gln Ala
                230 235
Ala Arg Leu Thr Gly Ile Lys Val Trp Leu Val Leu Leu Phe Val Tyr
             245 250 255
Gly Met Ser Gly Leu Leu Ser Gly Leu Gly Gly Val Met Ser Ala Ser
 260 265 270
Arg Leu Tyr Ser Ala Asn Gly Asn Leu Gly Thr Gly Tyr Glu Leu Asp 275 \hspace{1.5cm} 280 \hspace{1.5cm} 285
Ala Ile Ala Ala Val Ile Leu Gly Gly Thr Ser Phe Val Gly Gly Ile
290 295 300
                                     300
Gly Thr Ile Thr Gly Thr Leu Val Gly Ala Leu Ile Ile Ala Thr Leu
305 310
                               315
Asn Asn Gly Met Thr Leu Met Gly Val Ser Tyr Phe Trp Gln Leu Val
            325 330 335
Ile Lys Gly Ala Val Ile Ile Ile Ala Val Leu Ile Asp Lys Tyr Arg
       340
Thr Arg His His Gln Ser Ala
<210> 8823
<211> 288
<212> PRT
<213> Enterobacter cloacae
<400> 8823
Met Met Pro Leu Ile Ser Leu Ala Asp Gly Leu Ala His Ala Arg Glu
                              10
His Arg Tyr Ala Leu Gly Ala Phe Asn Val Leu Asp Ser His Phe Leu
        20
                                            3.0
Arg Ala Leu Phe Ala Ala Ala Lys Gln Glu Arg Ser Pro Phe Ile Ile
   35
                                 4.5
Asn Ile Ala Glu Val His Phe Lys Tyr Val Ser Leu Glu Ser Leu Val
50
                    55
Glu Ala Val Lys Phe Glu Ala Ala Arg His Asp Ile Pro Val Val Leu
             70
Asn Leu Asp His Gly Leu His Phe Glu Ala Val Val Arg Ala Leu Arg
```

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Leu Gly Phe Ser Ser Val Met Phe Asp Gly Ser Thr Leu Ser Tyr Glu
                        105
Glu Asn Ile Arg Gln Thr Arg Glu Val Val Lys Met Cys His Ala Val
      115
                       120
Gly Val Ser Val Glu Ala Glu Leu Gly Ala Val Gly Gly Asp Glu Gly
   130
                   135
                                   140
Gly Ala Leu Tyr Gly His Ala Asp Glu Ala Phe Phe Thr Asp Pro Gln
               150
                                155
Leu Ala Arg Glu Phe Val Asp Leu Thr Gly Ile Asp Ala Leu Ala Val
            165
                 170
Ala Ile Gly Asn Ala His Gly Lys Tyr Lys Gly Glu Pro Lys Leu Asp
         180 185
                               190
Phe Pro Arg Leu Asp Ala Ile Arg Gln Gln Thr Gly Leu Pro Leu Val
    195
                      200
                          205
Leu His Gly Gly Ser Gly Ile Ser Asp Thr Asp Phe Arg Arg Ala Ile
 210 215 220
Glu Leu Gly Ile His Lys Ile Asn Phe Tyr Thr Gly Met Ser Gln Ala
                    235
225
               230
Ala Leu Ala Ala Val Glu Gln Arg Met Ala Asn Arg Gln Pro Leu Tyr
            245 250 255
Asp Glu Phe Ala Glu Leu Leu Gly Ile Glu Glu Ala Ile Thr Asp
  260 265 270
Thr Val Ala Glu Gln Met Arg Ile Phe Gly Ser Ala Gly Gln Ala
                      280
<210> 8824
<211> 164
<212> PRT
<213> Enterobacter cloacae
<400> 8824
Glu Ser Met Lys Ile Leu Phe Leu Met Leu Leu Phe Leu Thr Ala Phe
                           10
                                  1.5
Ala His Ala Asp Glu Ile Gly Ser Gln Tyr Lys Lys Gln Ala Glu Ala
         20
                         25
                                         30
Gly Asp Ala Arg Ala Gln Tyr Tyr Leu Ala Asp Thr Trp Phe Ser Ser
                      40
                                      4.5
Gly Asp Ser Ala Gln Ala Ala Leu Trp Ala Glu Lys Ala Ala Lys Gly
                  55
Gly Asp Val Asp Ala Met Ala Leu Leu Ser Gln Ile His Phe Ser Gln
               70
                              7.5
Gly Asp Tyr Ala Gln Ala Lys Ala Leu Ala Gln Gln Ala Asn Ile Ala
            85
                             90
Gly Ser Lys Arg Gly Ala Ile Met Leu Ala Arg Val Leu Val Asn Thr
         100 105 110
Gln Ala Gly Lys Thr Asp Tyr Pro Gln Ala Ile Ala Leu Leu Gln Ser
      115
                      120
                                      125
Ala Thr Glu Asp Ile Asp Ser Asp Ser Ala Val Asp Ala Gln Gln Leu
                              140
               135
Leu Gly Leu Ile Tyr Ala Asn Gly Val Glu Val Pro Gln Asp Asp Val
                150
                                155
Gln Ala Ala
```

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<210> 8825
<211> 63
<212> PRT
<213> Enterobacter cloacae
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<400> 8825

Trp Phe Lys Arg Ser Ser Ala Leu Ser Arg Thr Gly Tyr Ala Glu Tyr

<210> 8826 <211> 164 <212> PRT

<213> Enterobacter cloacae

<400> 8826

Gln Phe Val Ser Ser Leu Ala His Leu Cys Ala Ile Phe Ile Lys Gln 1.0 Tyr His Arg Gln Lys Trp Gly Phe Ala Leu Tyr Ser Leu Pro Phe Ser 20 25 3.0 Ala His Cys Arg His Leu Ala Gly Val Phe Gln Arg Val Asn Thr Phe 35 40 45 Glu Asp Thr His Met Gln Leu Pro His Cys Pro Lys Cys Asn Ser Glu 50 55 60 Tyr Thr Tyr Glu Asp Asn Gly Met Phe Val Cys Pro Glu Cys Ala His 75 7.0 Glu Trp Asn Asp Ala Glu Pro Ala Gln Asp Ser Asp Ala Leu Ile Val 8.5 9.0 Lys Asp Ala Asn Gly Asn Leu Leu Ala Asn Gly Asp Ser Val Thr Val 105 Val Lys Asp Leu Lys Val Lys Gly Ser Ser Ser Met Leu Lys Ile Gly

115 120 125

Thr Lys Val Lys Asn Ile Arg Leu Val Glu Gly Asp His Asn Ile Asp
130 140 140

Cys Lys Ile Asp Gly Phe Gly Pro Met Lys Lys Ser Glu Phe Val
145 150 150 155 160

Lys Lys Asn

<210> 8827 <211> 253 <212> PRT

<213> Enterobacter cloacae

<400> 8827

130

Ala Leu His Leu Arg Ser Glu Ala Leu Ile Gly Met His Leu Ser Arg 10 His Pro Thr Ser Tyr Pro Thr Arg Trp Gln Glu Ile Ala Ala Lys Leu 20 25 Glu Val Glu Leu Arg Thr His Tyr Arg Cys Gly Asp Tyr Leu Pro Ala 3.5 4.0 4.5 Glu Gln Gln Leu Ala Asp Arg Tyr Glu Val Asn Arg His Thr Leu Arg 55 Arg Ala Ile Asp Gln Leu Val Glu Arg Gly Trp Val Gln Arg Arg Gln 75 7.0 Gly Val Gly Val Leu Val Leu Met Arg Pro Phe Asp Tyr Pro Leu Asn 90 85 Ala Gln Ala Arg Phe Ser Gln Asn Leu Leu Asp Gln Gly Ser His Pro 100 105 Thr Ser Glu Lys Leu Leu Ser Val Leu Arg Pro Ala Ser Arg His Val 120 Ala Asp Ala Leu Gly Ile Gln Glu Gly Asp Asn Val Val His Leu Arg

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Thr Leu Arg Arg Val Asn Gly Val Ala Val Cys Gln Ile Asp His Tyr
                            155
Phe Ala Asp Leu Thr Leu Trp Pro Val Leu Gln His Phe Ala Ser Gly
         165
                      170
Ser Leu His Asp Phe Leu Gln Asp Ala Thr Gly Ile Val Leu Lys Arg
        180 185
Thr Gln Thr Arg Ile Ser Ala Arg Arg Ala Gln Ala Lys Glu Ser Lys
 195 200
                                    205
Val Leu Glu Ile Pro Asn Met Ala Pro Leu Leu Cys Val Arg Thr Leu
 210 215 220
Asn His Arg Asp Gly Asp Val Asn Ala Thr Glu Tyr Ser Val Ser Leu
225 230 235
Thr Arg Ala Asp Met Ile Glu Phe Thr Met Glu His
      245
                           250
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<210> 8828 <211> 151 <212> PRT

<213> Enterobacter cloacae

<400> 8828

Met His Phe Asp Thr Ser Thr Arg Gln Arg Trp Met Arg Val Leu Ala 10 His Ser Gln Pro Ala Ala Leu Ala Ala Arg Met Asn Ala Leu Gly Leu 25 Thr Pro Asp Tyr Asp Thr Ile Arg Ala Pro Glu Ile Gly Leu Val Gln 35 Ile Gln Ala Arg Met Gly Gly Thr Gly Glu Arg Phe Phe Ala Gly Asp Ala Thr Leu Thr Arg Ala Val Ile Arg Leu Lys Ser Gly Thr Leu Gly 75 70 Tyr Gly Tyr Val Leu Gly Arg Asp Lys Thr His Ala Glu Arg Cys Ala Ala Ile Asp Ala Leu Leu Gln Glu Gln Pro His Phe Gln Thr Leu Met 100 105 Glu Thr Leu Ile Ala Pro Leu Glu Ala Asp Arg Ala Ala Arg Leu Ala 115 120 125 Ala Arg Gln Ala Glu Val Asn Thr Ser Arg Val Asp Phe Phe Thr Leu

130 Val Arg Gly Asp Asn Ala 145

<210> 8829 <211> 422 <212> PRT

<213> Enterobacter cloacae

<400> 8829

Lys Gln Arg Ser Gly Asp Arg Thr Asp Arg Thr Gly Gln Ser Ala Arg 10 Arg Gly Asp Arg Arg Asp Leu Pro Arg Arg Arg Thr Pro Ser Arg 20 25 30 Gly Gly Gln Thr Ala Pro Asp Gly Asp Lys Arg Met Ile Ile Asn Asn 45 35 4.0 Val Arg Leu Val Leu Glu Asn Glu Val Val Asn Gly Ser Val Glu Val 60 50 55 Arg Asp Gly Val Ile Arg Ala Phe Ala Glu Thr Gln Ser Arg Ser Pro 70 75 Asp Ala Met Asp Gly Glu Gly Gly Trp Leu Leu Pro Gly Leu Ile Glu 85 90 Leu His Thr Asp Asn Leu Asp Lys Phe Phe Thr Pro Arg Pro Lys Val

```
105
Asp Trp Pro Ala His Ser Ala Met Ser Ser His Asp Ala Leu Met Val
   115
                 120 125
Ala Ser Gly Ile Thr Thr Val Leu Asp Ala Val Ala Ile Gly Asp Val
      135 140
 130
Arg Asp Gly Gly Asp Arg Leu Glu Asn Leu Glu Lys Met Ile Lys Ala
145 150 155
Val Glu Glu Thr Gln Lys Arg Gly Leu Asn Arg Ala Glu His Arg Leu
        165 170 175
His Leu Arg Cys Glu Leu Pro His His Thr Thr Leu Pro Leu Phe Glu
     180 185 190
Lys Leu Val Gly Arg Glu Pro Val Ser Leu Val Ser Leu Met Asp His
 195 200 205
Ser Pro Gly Gln Arg Gln Phe Ala Asn Ile Glu Lys Tyr Arg Glu Tyr
210 215 220
Tyr Gln Gly Lys Tyr Ser Leu Ser Asp Ala Glu Met Ala Arg Tyr Glu
225 230 235 240
Glu Glu Gln Leu Ala Leu Ala Ala Gln Trp Ser Gln Pro Asn Arg Leu
           245 250 255
Ser Ile Ala Ala Met Cys Arg Asp Arg Asn Ile Ala Leu Ala Ser His
260 265 270
Asp Asp Ala Thr His Asp His Val Arg Glu Ser His Gln Leu Gly Ser
   275 280 285
Val Ile Ala Glu Phe Pro Thr Thr Phe Glu Ala Ala Glu Ala Ser Arg
 290 295 300
Lys His Gly Met Asn Val Leu Met Gly Ala Pro Asn Ile Val Arg Gly
305 310 315
Gly Ser His Ser Gly Asn Val Ala Ala Ser Lys Leu Ala Ser Leu Gly
325 330 335
Leu Leu Asp Ile Leu Ser Ser Asp Tyr Tyr Pro Ala Ser Leu Leu Asp 340 345 350
Ala Ala Phe Arg Val Ala Asp Asp Glu Gly Asn Ser Phe Thr Leu Pro
355 360 365
Gin Ala Ile Arg Leu Val Thr Lys Asn Pro Ala Ser Ala Leu Asn Leu
370 375 380
His Asp Arg Gly Glu Ile Ala Glu Gly Lys Arg Ala Asp Leu Val Leu
385 390 395 400
Ala His Arg Lys Gly Glu His Val His Ile Asp His Val Trp Arg Gln
           405
Gly Lys Arg Val Phe
```

<210> 8830 <211> 258 <212> PRT

<213> Enterobacter cloacae

420

<400> 8830 Ala Gly Met Pro Thr Val Thr Thr Met Ala Ser Ala Ser Arg Ser Thr 10 Ser Gly Cys Thr Arg Ala Leu Thr Cys Trp Ser Thr Ala Arg Gly Arg 20 25 30 Ile Ser Arg Arg Leu Ala Pro Gly Thr Lys Arg Arg Cys Ser Arg Ser 35 40 Val Cys Arg Phe Pro Arg Thr Phe Cys Val Ala Gly Cys Lys Ser Gly 50 55 Gly Ala Lys Thr Arg Ala Arg Ser Thr Ser Gly Trp Asn Gly Arg Arg 70 75 Val Thr Pro Arg Arg Val Ala Ile Ser Ser Ile Thr Thr Glu Val Cys 8.5 90 Tyr Ser Gln Ser Arg Pro Phe Tyr Pro Leu Ser Ala Arg Arg Arg Asn

105 Ser Met Pro Asp Cys Gln Leu Arg Pro Ala Thr Ala Asp Asp Ala Pro 120 115 Ile Val Tyr Ala Leu Ile Cys Glu Leu Lys Gln Ala Glu Phe Asp His 130 135 140 Gln Ala Phe His Ala Gly Tyr Leu Ala Asn Leu Gln Asp His Asn Met 150 155 Arg Tyr Gln Leu Ala Glu Leu Asp Gly Gln Ile Ile Gly Met Ile Gly 165 170 175 Leu His Met Gln Phe His Leu His His Ala Arg Trp Ile Gly Glu Ile 180 185 190 Gln Glu Leu Val Val Met Pro Gln Ala Arg Gly Leu Lys Val Gly Ser 200 205 195 Gln Leu Leu Ala Trp Ala Glu Asp Val Ala Arg Gln Ala Gly Ala Glu 210 215 220 Leu Thr Glu Leu Ser Thr Ser Val Lys Arg Val Asp Ala His Arg Phe 225 230 235 Tyr Val Arg Glu Gly Tyr Thr Gln Ser His Phe Arg Phe Thr Lys Pro 245 250 Leu

<210> 8831 <211> 256 <212> PRT

<213> Enterobacter cloacae

<400> 8831 Arg Gly Val Met Ser Leu Thr Ile Thr Leu Thr Gly Thr Gly Gly Ala 10 Gln Leu Val Pro Val Phe Gly Cys Asp Cys Ala Ala Cys Arg Arg Ala 20 25 Arg Leu Gln Glu Asn Tyr Arg Arg Pro Cys Ser Ala Ala Val Lys 35 40 Phe Asn Asp Ala Val Thr Leu Leu Asp Ala Gly Ile Pro His Leu Met 50 55 Asp Asp Trp Pro Ala Gly Ser Phe Arg Gln Phe Leu Leu Thr His Tyr 70 75 80 His Met Asp His Val Gln Gly Leu Phe Pro Leu Arg Trp Gly Val Gly 85 90 Ala Thr Ile Pro Val Tyr Gly Pro Pro Asp Asp Ala Gly Cys Asp Asp 100 105 110 Leu Leu Lys His Pro Gly Leu Leu Asp Phe Ser His Thr Val Glu Pro 115 120 125 Phe Val Thr Phe Glu Leu Gln Gly Leu Arg Val Thr Pro Leu Pro Leu 135 140 Asn His Ser Lys Leu Thr Phe Gly Tyr Leu Leu Glu Ser Ala His Ser 150 155 Arg Val Ala Trp Leu Ser Asp Thr Ala Gly Leu Pro Asp Lys Thr Val 165 170 175 Thr Phe Leu Leu Asn Asn Gln Pro Gln Ala Met Ile Val Asp Cys Ser 180 185 190 His Glu Pro Arg Pro Glu Thr Pro Arg Asn His Cys Asp Leu Asn Thr 200 205 Val Val Ala Leu Asn Glu Val Ile Gly Cys Pro Gln Val Ile Leu Thr 215 220 His Ile Ser His Gln Phe Asp Val Trp Met Met Asp Asn Pro Leu Pro 230 235 Ser Gly Ile Glu Ala Gly Tyr Asp Gly Met Val Met Val Leu Asp 245 250

<210> 8832 <211> 516 <212> PRT <213> Enterobacter cloacae

<400> 8832 Ser Ala Asp Ile Asp Ile His Arg Arg Ser Ala Met Ser Arg Thr Pro Val Leu Glu Met Arg His Ile Ala Lys Thr Phe Gly Asn Phe His Ala Leu Lys Gly Val Asp Leu Thr Val Phe Pro Gly Glu Ile His Ala Leu 40 Met Gly Glu Asn Gly Ala Gly Lys Ser Thr Leu Met Lys Ile Leu Ala 50 55 Gly Ala Tyr Thr Ala Ser Ser Gly Asp Ile Leu Ile Asp Gly Gln Pro 70 75 Phe His Ile Lys Gly Pro Lys Asp Ala Leu Ala Ala Gly Ile Thr Leu 90 8.5 Ile Tyr Gin Glu Met Gin Leu Ala Pro Asn Leu Thr Val Ala Glu Asn 100 105 110 Ile Phe Leu Gly Ser Glu Leu Ser Arg Gly Gly Leu Val Gln Arg Lys 115 120 125 Glu Met Ala Ala Gln Ala Gln Ala Val Ile Asp Arg Leu Gly Ala Gln 130 135 140 Phe Ser Ala Thr Asp Leu Val Met Lys Leu Thr Ile Ala Glu Gln Gln 145 150 155 160 Gln Val Glu Ile Ala Arg Ala Leu His Arg Asn Ser Arg Ile Leu Val 165 170 175 Met Asp Glu Pro Thr Ala Ala Leu Ser Ser Arg Glu Thr His Arg Leu 180 185 190 Phe Glu Leu Ile Leu Arg Leu Arg Asp Glu Gly Met Ala Ile Ile Tyr 195 200 205 Ile Ser His Arg Met Ala Glu Val Tyr Glu Leu Ser Asp Arg Val Ser 210 215 220 Val Leu Arg Asp Gly Gln Tyr Val Gly Ser Leu Thr Arg Asp Lys Leu 225 230 235 Asn Ala Ser Glu Leu Val Arg Met Met Val Gly Arg Pro Leu Ser Asp 245 250 255 Leu Phe Asn Lys Glu Arg Asp Ile Pro Leu Gly Ser Pro Arg Leu Asn 260 265 270 Val His His Leu Thr Asp Gly Lys Lys Val Gln Pro Cys Ser Leu Gln 275 280 Val Arg Ser Gly Glu Ile Val Gly Leu Ala Gly Leu Val Gly Ala Gly 290 295 300 Arg Ser Glu Leu Ala Gln Leu Ile Phe Gly Val Arg Lys Ala Thr Gly 310 315 Gly Met Ile Glu Val Asp Gly Glu Pro Val Val Ile His Ser Pro Arg 325 330 335 Ala Ala Ile Glu Asn Gly Ile Gly Phe Leu Thr Glu Asn Arg Lys Glu 340 345 350 Gln Gly Leu Phe Leu Glu Leu Ala Ala Gln Glu Asn Ile Thr Met Ala 355 360 365 Thr Leu Glu Arg Asp Ala Thr Phe Gly Trp Leu Asn Arg Lys Lys Ala 375 380 Gln Ser Ile Ser Asp Asp Ala Ile Ala Leu Leu Asn Ile Arg Val Pro 390 395 His Ser Gln Val Arg Ala Gly Gly Leu Ser Gly Gly Asn Gln Gln Lys 405 410 Leu Leu Ile Ser Arg Trp Val Ala Ile Gly Pro Arg Ile Leu Ile Leu 425 Asp Glu Pro Thr Arg Gly Val Asp Val Gly Ala Lys Ser Glu Ile Tyr

440 Arg Ile Met Asn Gln Met Ala Arg Lys Gly Val Ala Ile Leu Met Ile 460 455 Ser Ser Glu Leu Pro Glu Val Val Gly Met Ser Asp Arg Val Tyr Val 470 475 Met Arg Glu Gly Ser Ile Ala Gly Glu Leu His Gly Arg Asp Ile Ser 485 490 495 Gln Glu Asn Ile Met Thr Leu Ala Thr Gly Val Asn Asp Thr His His 505 Gln Ala Val 515 <210> 8833 <211> 336 <212> PRT <213> Enterobacter cloacae <400> 8833 Ser Thr Asn Thr Val Pro Asp Thr Ile Lys Val His Asn Asn Asn Thr Leu Arg Glu Glu Tyr Ser Met Arg Leu Lys Pro Leu Val Thr Ala Leu 20 25 3.0 Cys Ala Gly Ala Leu Leu Ala Ala Thr Pro Phe Ala Gln Ala Lys Asp 40 4.5 35 Leu Lys Ser Ile Gly Val Thr Val Gly Asp Leu Ala Asn Pro Phe Phe 50 55 60 Val Gln Ile Thr Lys Gly Ala Glu Leu Glu Ala Arg Lys Leu Ala Gly 65 70 75 80Asp Asn Val Lys Val Thr Leu Val Ser Ser Gly Tyr Asp Leu Gly Gln 85 90 95 Gln Val Ser Gln Ile Asp Asn Phe Ile Ala Ala Lys Val Asp Met Ile 100 105 110 Ile Leu Asn Ala Ala Asp Ser Lys Gly Ile Gly Pro Ala Val Lys Arg 115 120 125 Ala Lys Glu Ala Gly Ile Val Val Val Ala Val Asp Val Ala Ala Glu 130 135 140 Gly Ala Asp Ala Thr Ile Thr Ser Asp Asn Thr Gln Ala Gly Glu Met 150 155 Ala Cys Lys Tyr Ile Thr Asp Arg Leu Lys Gly Lys Gly Asn Val Val 165 170 175 Ile Ile Asn Gly Pro Pro Val Ser Ala Val Gln Asn Arg Val Glu Gly 180 185 Cys Gln Thr Glu Phe Arg Arg His Pro Asp Ile Lys Val Leu Ser Asp 200 205 Asn Gln Asn Ala Lys Gly Ser Arg Glu Gly Gly Leu Glu Val Met Thr 210 215 220 Ser Leu Leu Ala Ala Asn Pro Lys Ile Asp Gly Val Phe Ala Ile Asn 230 235 Asp Pro Thr Ala Ile Gly Ala Asp Leu Ala Ala Lys Gln Ala Gln Arg 245 Asn Glu Phe Phe Ile Val Gly Val Asp Gly Ser Pro Asp Gly Glu Glu 260 265 Ala Leu Lys Arg Glu Asn Ser Leu Phe Val Ala Thr Pro Ala Gln Asp 275 280 285 Pro Gln Val Met Ala Ala Lys Ala Val Glu Ile Gly Tyr Asp Ile Leu 300 295 Gln Gly Lys Pro Ala Pro Lys Glu Pro Val Leu Ile Pro Val Thr Met 310 315 Ile Asp Lys Lys Asn Val Gly Thr Tyr Lys Gly Trp Thr Val Lys 325 330

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<210> 8834
<211> 272
<212> PRT
<213> Enterobacter cloacae
<400> 8834
Gly His Ile Tyr Arg Glu Ala Gly His Met Gln Thr Val Ile Arg Val
                           10
Glu Lys Leu Ser Lys Thr Phe His His Asn Lys Ala Leu His Ala Val
 20
                        25
Asp Leu Thr Val Gln Gln Gly Glu Met Val Ala Leu Leu Gly Pro Ser
 35 40
                          4.5
Gly Ser Gly Lys Ser Thr Leu Leu Arg His Leu Ser Gly Leu Ile Thr
 50 55 60
Cys Asp Lys Thr Pro Glu Ser Arg Val Glu Leu Leu Gly Asn Thr Val
65 70 75
Gln His Ala Gly Arg Leu Ala Ser Asp Ile Arg Lys Ser Arg Ala Gln
           85
                90
Thr Gly Tyr Ile Phe Gln Gln Phe Asn Leu Val Asn Arg Leu Thr Val
      100 105 110
Leu Glu Asn Val Leu Ile Gly Ala Leu Gly Ser Thr Pro Phe Trp Arg
115 120 125
Thr Cys Leu Arg Trp Phe Ser Leu Ser Gln Lys Gln Glu Ala Leu Gln
130 135 140
Ala Leu Thr Arg Val Gly Met Ala His Phe Ala His Gln Arg Val Ser
              150 155
Thr Leu Ser Gly Gly Gln Gln Gln Arg Val Ala Ile Ala Arg Ala Leu
          165 170 175
Met Gln Lys Ala Lys Ile Ile Leu Ala Asp Glu Pro Ile Ala Ser Leu
180 185 190
Asp Pro Glu Ser Ala Arg Ile Val Met Glu Thr Leu Arg Asp Ile Asn
195 200 205
Gln Asn Asp Gly Ile Thr Val Val Val Thr Leu His Gln Val Asp Tyr
210 215
                                 220
Ala Leu Arg Tyr Cys Glu Arg Ile Val Ala Leu Arg Gln Gly His Val
             230
                              235 240
Phe Phe Asp Gly Ala Ser His Gln Phe Asp Asn Glu Arg Phe Asp His
    245 250 255
Leu Tyr Arg Ser Val Asn Arg Val Glu Glu Arg Ala Gln Ala Ala
<210> 8835
<211> 282
<212> PRT
<213> Enterobacter cloacae
<400> 8835
Ser Gly Ala Val Thr Pro Phe Ser Leu Ser Leu Lys Gly Glu Gly Thr
                     10
Lys Pro Lys Gly Ala Asn Met Gln Thr Ile Thr Leu Pro Pro Pro Lys
                        25
Arg Ser Trp Phe Ser Leu Ile Ser Trp Ala Val Leu Leu Ala Val Leu
                    4.0
Val Ile Ser Trp Lys Gly Ala Glu Met Asp Pro Leu Leu Leu Phe Arq
                 55
Asp Ser Gly Asn Met Ala Thr Phe Ala Ala Asp Phe Phe Pro Pro Asp
               70
                           75
Phe Ser Gln Trp Gln Asp Tyr Leu Val Glu Met Ala Ile Thr Leu Gln
           8.5
                         90
Ile Ala Val Trp Gly Thr Ala Leu Ser Val Ile Leu Ser Ile Pro Phe
```

```
Gly Leu Met Ser Ala Glu Asn Ile Val Pro Trp Trp Val Tyr Gln Pro
                      120
   115
Met Arg Arg Leu Met Asp Ala Cys Arg Ala Ile Asn Glu Met Val Phe
 130
Ala Met Leu Phe Val Val Ala Val Gly Leu Gly Pro Phe Ala Gly Val
145 150
                               155
Met Ala Leu Phe Ile His Thr Thr Gly Val Leu Ser Lys Leu Leu Ser
       165 170
                                           175
Glu Ala Val Glu Ala Ile Glu Pro Gly Pro Val Glu Gly Ile Arg Ala
        180 185
                                         190
Thr Gly Ala Asn Lys Ile Glu Glu Ile Leu Tyr Gly Val Leu Pro Gln
 195 200 205
Val Met Pro Leu Leu Ile Ser Tyr Ser Leu Tyr Arg Phe Glu Ser Asn
 210 215 220
Val Arg Ser Ala Thr Val Val Gly Met Val Gly Ala Gly Gly Ile Gly
225
    230 235
Val Thr Leu Trp Glu Ala Ile Arg Gly Phe Gln Phe Gln Gln Thr Cys
       245 250 255
Ala Leu Met Val Leu Ile Ile Val Thr Val Ser Leu Leu Asp Phe Leu
  260 265
Ser Gln Arg Leu Arg Lys His Phe Ile
<210> 8836
<211> 390
<212> PRT
<213> Enterobacter cloacae
<400> 8836
Ala Asp Arg Ala Pro Ala Ser Val Pro Ala Arg Tyr Arg Pro Asp Pro
                          10
Asp Leu Arg Arg Ala Pro Ala Gly Asp Pro Glu Asn His Ser Arg Gly
        2.0
Gly Val Leu Met Tyr Val Ala Val Lys Gly Gly Glu Lys Ala Ile Ala
35
                      40
Ala Ala His Ala Leu Gln Glu His Arg Arg Arg Gly Asp Asp Ala Leu
                  55
Pro Glu Leu Ser Val Ala Gln Ile Glu Gln Gln Leu Asn Leu Ala Val
               7.0
                   75
Asp Arg Val Met Thr Glu Gly Gly Ile Ala Asp Arg Glu Leu Ala Ala
Leu Ala Leu Lys Gln Ala Ser Gly Asp Asn Val Glu Ala Ile Phe Leu
         100
                        105 110
Leu Arg Ala Tyr Arg Thr Thr Leu Ala Lys Leu Ala Val Ser Glu Pro
                      120
      115
Val Lys Thr Ala Glu Met Arg Leu Glu Arg Arg Ile Ser Ala Val Tyr
  130
                  135 140
Lys Asp Ile Pro Gly Gly Gln Leu Leu Gly Pro Thr Tyr Asp Tyr Thr
                150 155
145
His Arg Leu Leu Asp Phe Thr Leu Leu Ala Asn Gly Glu Thr Pro Gln
                            170
            165
Leu Ser Val Ser Asp Ala Glu Gln Asp Ala Ser Pro His Val Phe Ser
                         185
         180
Leu Leu Ala Asn Gln Gly Leu Ala Lys Ala Glu Glu Asp Thr Gly Ser
                     200
                          205
      195
Thr Pro Asp Asp Ile Thr Arg Thr Pro Pro Val Tyr Pro Cys Ser Arg
                       220
                   215
Ser Ser Arg Leu Gln Gln Leu Met Arg Gly Asp Glu Gly Tyr Leu Leu
               230 235
Ala Leu Ala Tyr Ser Thr Gln Arg Gly Tyr Gly Arg Asn His Pro Phe
```

```
Ala Ala Glu Ile Arg Ser Gly Tyr Leu Asp Val Glu Ile Val Pro Glu
                        265
     260
Glu Leu Gly Phe Ala Val Asn Ile Gly Glu Leu Leu Met Thr Glu Cys
                     280
Glu Met Val Asn Gly Phe Val Ala Pro Glu Asn Glu Asp Pro His Phe
               295
                                 300
Thr Arg Gly Tyr Gly Leu Val Tyr Gly Leu Ser Glu Arg Lys Ala Met
                              315
               310
Ala Met Ala Leu Val Asp Arg Ala Leu Gln Ala Pro Asp Tyr Gly Glu
            325 330
                                          335
His Ile Ala Gly Pro Ala Gln Asp Glu Glu Phe Val Leu Ala His Ala
                        345 350
        340
Asp Asn Val Glu Ala Ala Gly Phe Val Ser His Leu Lys Leu Pro His
 355 360 365
Tyr Val Asp Phe Gln Ala Glu Leu Glu Leu Leu Lys Arg Leu Gln Arg
 370 375
Glu Arg Ala Asn Gly
<210> 8837
<211> 280
<212> PRT
<213> Enterobacter cloacae
<400> 8837
Ser Gly Ala Gly Arg His Gly Gln Thr Asp Val Cys Leu Leu Arg His
                      10
Arg Leu Leu Pro Pro Thr Glu Arg Gly Glu Gln Pro Met Lys Pro Leu
     20 25
Leu Ser Val Asn Asn Leu Thr His Leu Tyr Ala Pro Gly Lys Gly Phe
35 40
                                   4.5
Ser Asp Val Ser Phe Glu Leu Trp Pro Gly Glu Val Leu Gly Ile Val
50 55 60
Gly Glu Ser Gly Ser Gly Lys Thr Thr Leu Leu Lys Ser Ile Ser Ala
             70
                              7.5
Arg Leu Thr Pro Gln Asn Gly Asp Ile Leu Tyr Glu Gly Val Ser Leu
           85
                90
Tyr Gly Met Ser Glu Ala Glu Arg Arg Arg Leu Leu Arg Thr Glu Trp
        100 105 110
Gly Val Val His Gln His Pro Met Asp Gly Leu Arg Arg Gln Val Ser
                    120 125
Ala Gly Gly Asn Ile Gly Glu Arg Leu Met Ala Thr Gly Ala Arg His
  130 135 140
Tyr Gly Asn Ile Arg Ala Thr Ala Gln His Trp Leu Glu Glu Val Glu
   150 155
Ile Pro Ala Ser Arg Ile Asp Asp Leu Pro Thr Thr Phe Ser Gly Gly
            165 170 175
Met Gln Gln Arg Leu Gln Ile Ala Arg Asn Leu Val Thr His Pro Lys
       180 185 190
Leu Val Phe Met Asp Glu Pro Thr Gly Gly Leu Asp Val Ser Val Gln
                     200 205
      195
Ala Arg Leu Leu Asp Leu Leu Arg Gly Leu Val Val Glu Leu Asn Leu
                  215
 210
Ala Val Val Ile Val Thr His Asp Leu Gly Val Ala Arg Leu Leu Ala
225
               230
                              235
Asp Arg Leu Leu Val Met Lys Gln Gly Gln Val Val Glu Ser Gly Leu
                           250
            245
Thr Asp Arg Val Leu Asp Asp Pro His His Pro Tyr Thr Gln Leu Leu
                         265
         260
Val Ser Ser Val Leu Gln Asn
```

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<210> 8838
<211> 230
<212> PRT
<213> Enterobacter cloacae
<400> 8838
Glu Ala Asn Met Ile His Val Glu Asn Val Ser Lys Thr Phe Val Leu
His Gln Gln Asn Gly Val Arg Leu Pro Val Leu Gln Asn Ala Ser Leu
        20
                          25
Glu Val Ser Asn Gly Glu Cys Val Val Leu His Gly His Ser Gly Ser
                     4.0
     35
                                        4.5
Gly Lys Ser Thr Leu Leu Arg Ser Leu Tyr Ala Asn Tyr Leu Pro Asp
  50 55
                                     60
Glu Gly His Ile His Ile Arg His Asn Asn Glu Trp Val Asp Leu Val
                                 7.5
65 70
Gln Ala Pro Ala Arg Lys Val Leu Glu Val Arg Arg Ser Thr Ile Gly
           85
                            90
Trp Val Ser Gln Phe Leu Arg Val Ile Pro Arg Ile Ser Ala Leu Asp
         100 105 110
Val Val Met Gln Pro Leu Leu Asp Leu Gly Val Pro Arg Glu Thr Cys
      115 120 125
Ala Ala Lys Ala Ala Ser Leu Leu Thr Arg Leu Asn Val Pro Glu Arg
       135 140
Leu Trp His Leu Ala Pro Ser Thr Phe Ser Gly Gly Glu Gln Gln Arg
               150 155
Val Asn Ile Ala Arg Gly Phe Ile Val Asp Tyr Pro Ile Leu Leu
            165 170
Asp Glu Pro Thr Ala Ser Leu Asp Ser Lys Asn Ser Ala Ala Val Ile
              185
Glu Leu Ile Glu Gln Ala Lys Ala Arg Gly Ala Ala Ile Val Gly Ile
   195
                     200 205
Phe His Asp Asp Ala Val Arg His Arg Val Ala Asp Arg Leu His Pro
 210
                    215
Met Gly Thr Asn Val
225
<210> 8839
<211> 361
<212> PRT
<213> Enterobacter cloacae
<400> 8839
Arg Gly His Tyr Arg Tyr Gly Cys Gly Thr Asp Ala His Leu Arg Gln
                              10
Arg Gly Ala Gly Ile Met Glu Arg Lys Gly Ile Ile Ala Ala Gly Asn
                           25
Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg Gly
      35
                       40
Trp Leu Ala Glu Ile Thr His Ser Glu Arg Ser Thr Gly Gly Ala Pro
   50
                    55
                                     60
Leu Asn Val Leu Leu Thr Leu Ala Lys Met His Val Gly Leu Pro Leu
                7.0
                                 75
Gln Ala Val Gly Leu Ile Gly Glu Asp Ser Asp Gly Asp Tyr Ile Leu
             8.5
                              90
Ala Met Leu Asp Gln Tyr His Val Asn Arg Gln Arg Val Gln Arg Thr
         100
                          105
                                           110
Thr Phe Ala Pro Thr Ser Met Ser Gln Val Met Thr Asp Pro Ser Gly
```

Gln Arg Thr Phe Phe His Ser Pro Gly Ala Asn Arg Leu Leu Asp Leu

125

```
135
Pro Ala Phe Asp Arg Leu Asp Gly Ser Leu Lys Ile Phe His Leu Gly
145
         150
                   155
Tyr Leu Leu Leu Asp Ser Leu Asp Met Pro Asp Glu Glu Phe Gly
          165 170 175
Thr Arg Ser Ala Arg Leu Leu Ala Gln Met Arg Asp Gln Gly Tyr Glu
       180 185 190
Thr Ser Leu Asp Leu Val Ser Arg Lys Gly Asp Pro Arg Tyr Gln Pro
   195 200 205
Leu Val Leu Pro Ala Leu Arg His Leu Asp Tyr Leu Val Ile Asn Glu
 210 215 220
Leu Glu Ala Gly Glu Phe Ser Gly Leu Glu Ile Arg Asp Gly His Asp
    230 235
Ala Leu Asn Met Ala His Ile Ala Asp Ala Ala Thr Gln Leu Leu Ala
        245 250 255
Ala Gly Val Arg Gln Arg Val Val Ile His Cys Pro Glu Gly Ala Trp
        260 265 270
Gly Glu Ala Pro Gly Glu Lys Gly Gln Trp Val Pro Ser Trp Lys Leu
     275 280
Thr Gln Asp Glu Ile Ile Gly Ser Val Gly Ala Gly Asp Ala Phe Cys
                  295 300
Ala Gly Phe Leu Tyr Gly Cys His Glu Ser Leu Pro Leu Thr Glu Ser
                   315
               310
Ile Tyr Leu Ala His Ala Cys Ala Arg Ala Ser Leu Leu Ala Ala Asn
            325 330 335
Ala Ile Asp Gly Ala Lys Thr Leu Ala Glu Leu Gln Thr Phe Ile Gln
        340
             345
Glu Asn Gly Gln Ala Ala Phe Ser
      355
<210> 8840
<211> 148
<212> PRT
<213> Enterobacter cloacae
<400> 8840
Glu Leu Phe Asn Trp Ser Lys Val Met Lys Lys Val Val Thr Val Cys
                            1.0
Pro Tyr Cys Ala Ser Gly Cys Lys Ile His Leu Val Val Asp Asn Gly
                                        30
Lys Ile Val Arg Ala Glu Ala Ala Gln Gly Lys Thr Asn Gln Gly Thr
     3.5
                                     4.5
Leu Cys Leu Lys Gly Tyr Tyr Gly Trp Asp Phe Ile Asn Asp Thr Gln
                  5.5
                            60
Ile Leu Thr Pro Arg Leu Lys Thr Pro Met Ile Arg Arg Glu Arg Gly
                      75
Gly Lys Leu Glu Ala Val Ser Trp Asn Glu Ala Leu Asp Tyr Val Ala
            8.5
                           90
Thr Arg Leu Ser Ala Ile Lys Ala Lys Tyr Gly Pro Asp Ala Ile Gln
                        105
        100
                                        110
Thr Thr Gly Ser Ser Arg Gly Thr Gly Asn Glu Thr Asn Tyr Val Met
                           125
                     120
Gln Lys Phe Ala Arg Ala Val Ile Gly Thr Asn Asn Val Asp Cys Cys
                135
                                  140
 130
Ala Arg Val
145
<210> 8841
<211> 576
<212> PRT
<213> Enterobacter cloacae
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<400> 8841 His Gly Pro Ser Val Ala Gly Leu His Gln Ser Val Gly Asn Gly Ala 10 Met Ser Asn Ala Ile Asn Glu Ile Asp Asn Thr Asp Leu Val Phe Ile 25 Phe Gly Tyr Asn Pro Ala Asp Ser His Pro Ile Val Ala Asn His Val 45 Ile Arg Ala Lys Gln Asn Gly Ala Lys Ile Ile Val Cys Asp Pro Arg 55 Lys Ile Glu Thr Ala Arg Ile Ala Asp Met His Ile Ala Leu Lys Asn 70 75 Gly Ser Asn Ile Ala Leu Leu Asn Ala Met Gly His Val Ile Ile Glu 85 90 Glu Asn Leu Tyr Asp Gln Ala Phe Val Ala Ser Arg Thr Glu Gly Phe 100 105 110 Glu Glu Tyr Arg Lys Ile Val Glu Gly Tyr Thr Pro Glu Ser Val Glu 115 120 125 Ala Ile Thr Gly Val Ser Ala Gin Glu Ile Arg Gln Ala Ala Arg Met 130 135 140 Tyr Ala Gly Ala Lys Thr Ala Ala Ile Leu Trp Gly Met Gly Val Thr 145 150 155 160 Gln Phe Tyr Gln Gly Val Glu Thr Val Arg Ser Leu Thr Ser Leu Ala 165 170 175 Met Leu Thr Gly Asn Leu Gly Lys Ala His Val Gly Val Asn Pro Val 180 185 190 Arg Gly Gln Asn Asn Val Glr Gly Ala Cys Asp Met Gly Ala Leu Pro 195 200 205 Asp Thr Tyr Pro Gly Tyr Gln Tyr Val Lys Phe Pro Glu Asn Arg Glu 210 215 220 Lys Phe Ala Lys Ala Trp Gly Val Glu Ser Leu Pro Ala His Thr Gly 225 230 235 240 Tyr Arg Ile Ser Glu Leu Pro His Arg Ala Ala His Gly Glu Val Arg 245 250 255 Ala Ala Tyr Ile Met Gly Glu Asp Pro Leu Gln Thr Asp Ala Glu Leu 260 265 270 Ser Ala Val Arg Lys Gly Phe Glu Asp Leu Glu Leu Val Ile Val Gln 275 280 285 Asp Ile Phe Met Thr Lys Thr Ala Ala Ala Ala Asp Val Ile Leu Pro 290 295 300 Ser Thr Ser Trp Gly Glu His Glu Gly Val Tyr Thr Ala Ala Asp Arg 305 310 315 Gly Phe Gln Arg Phe Phe Lys Ala Val Glu Pro Lys Trp Asp Leu Lys 325 330 Thr Asp Trp Gln Ile Ile Ser Glu Ile Ala Thr Arg Met Gly Tyr Pro 340 345 Met His Tyr Asn Asn Thr Gln Glu Ile Trp Asp Glu Leu Arg His Leu 355 360 365 Cys Pro Asp Phe Tyr Gly Ala Thr Tyr Glu Lys Met Gly Glu Leu Gly 370 375 380 Tyr Ile Gln Trp Pro Cys Arg Asp Glu Ser Glu Ser Asp Gln Gly Thr 385 390 395 Ser Phe Leu Phe Lys Glu Lys Phe Asp Thr Pro Asn Gly Leu Ala Gln 405 410 415 Phe Phe Thr Cys Asp Trp Val Ala Pro Ile Asp Lys Leu Thr Asp Glu 420 425 430 Tyr Pro Met Val Leu Ser Thr Val Arg Glu Val Gly His Tyr Ser Cys 440 445 435 Arg Ser Met Thr Gly Asn Cys Ala Ala Leu Ala Ala Leu Ala Asp Glu 450 460 Pro Gly Tyr Ala Gln Ile Asn Thr Ala Asp Ala Glu Arg Leu Gly Ile

```
470
                                  475
Glu Asp Glu Ala Leu Val Trp Val Asn Ser Arg Lys Gly Arg Ile Ile
                               490
             485
Thr Arg Ala Gln Val Ser Asp Arg Pro Asn Lys Gly Ala Val Tyr Met
         500
                           505
Thr Tyr Gln Trp Trp Ile Gly Ala Cys Asn Glu Leu Val Thr Glu Asn
      515 520
                                525
Leu Ser Pro Ile Thr Lys Thr Pro Glu Tyr Lys Tyr Cys Ala Val Asn
 530 535 540
Val Glu Pro Ile Ala Asp Gln His Ala Ala Glu Gln Tyr Val Ile Asp
545 550 555
Glu Tyr Asn Lys Leu Lys Ala Arg Leu Arg Glu Ser Ala Met Gly
<210> 8842
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 8842
Asp Val Leu Leu Ser Ser Arg Leu Val Lys Thr Arg Ile Leu Asp Met
                               10
Ala Arg Thr Ala Leu Asn Val Val Gly Asn Ala Leu Ala Val Leu Val
       20
                            25
Ile Ala Lys Trp Glu His Lys Phe Asp Arg Lys Lys Ala Leu Ala Tyr
 35 40
Glu Arg Glu Val Leu Gly Arg Phe Asp Lys Thr Ala Asp Gln
  50
<210> 8843
<211> 770
<212> PRT
<213> Enterobacter cloacae
<400> 8843
Gly His Gln Thr Ala Glu Glu Pro Lys Pro Met Pro Ser Arg Pro Pro
                             10
Phe Phe Thr Ser Ala Arg Gly Arg Leu Leu Ile Phe Asn Leu Leu Val
                           25
          20
Val Ala Val Thr Leu Met Val Ser Gly Val Ala Val Leu Gly Phe Arg
    3.5
                        4.0
                                          4.5
His Ala Ser Gln Ile Gln Glu Gln Val Gln Gln Gln Thr Leu Asp Asp
                  55
Met Thr Gly Ser Met Asn Leu Ala Arg Asp Thr Ala Asn Val Ala Thr
                 7.0
                                   75
Ala Ala Val Arg Leu Ser Gln Val Val Gly Ala Leu Glu Tyr Lys Gly
             85
                               90
Glu Ala Glu Arg Leu Lys Gln Thr Gln Met Ala Leu Arg His Ser Leu
              105 110
          100
Glu Gln Leu Ala Asp Ala Pro Leu Ala Gln Gln Glu Pro Ala Leu Val
      115 120
                                          125
Thr Arg Ile Ile Arg Arg Ser Asn Glu Leu Gln Gln Ser Val Thr Gly
                     135
 130
                                       140
Met Leu Glu Arg Gly Gln Lys Arg His Leu Glu Arg Asn Ala Leu Leu
145
                 150
                                   155
Ser Ala Leu Tyr Gln Ser Gln Ser Tyr Leu Arg His Leu Gln Asp Ile
              165
                                170
Asn Arg Arg Tyr Ala Ser Asn Val Pro Asp Ala Arg Gln Leu Ala Glu
          180
                            185
                                  190
Met Asp Arg Leu Ile Val Ala Ala Ile Asp Thr Pro Ser Pro Arg Ala
```

Thr Val Gln Gln Leu Asp Ala Val Thr Ala Met Leu Pro Ala Ser Ala 210 215 Leu Gln Pro Val Val Asn Leu Val Leu Pro Asp Phe Asn Asp Glu Leu 230 235 Arg Lys Leu Ala Pro Leu Ser Lys Gln Leu Glu Glu Ser Asp Leu Ser 245 250 Ile Ser Trp Tyr Met Phe His Ile Lys Ala Leu Val Ala Ile Leu Asn 265 Arg Asp Ile Asn Gln Tyr Val Glu Gln Val Ala Gln Ala Ser Arg Leu 280 275 285 Arg Thr Ala Gln Ser His Gln Glu Leu Arg Ser Ile Ser Val Phe Ile 295 300 Ser Val Phe Ala Val Leu Ala Leu Ile Ile Thr Gly Cys Ala Cys Trp 305 310 315 Tyr Ile Tyr Arg Asn Leu Gly Ser Asn Leu Thr Ala Ile Ser Arg Ala 325 330 335 Met Ser Arg Leu Ala His Gly Glu Gln Asn Val Ser Val Pro Ala Leu 340 345 350 Gln Arg Arg Asp Glu Leu Gly Glu Leu Ala Arg Ala Phe Asn Val Phe 355 360 365 Ala Arg Asn Thr Ala Ser Leu Glu His Thr Thr Arg Leu Leu Lys Glu 370 375 380 Lys Thr Ser Gln Met Glu Val Asp Arg Ile Glu Arg Gln Gly Leu Glu 385 390 395 Glu Ala Leu Leu His Ser Gln Lys Met Lys Ala Val Gly Gln Leu Thr 405 410 415 Gly Gly Leu Ala His Asp Phe Asn Asn Leu Leu Ala Val Ile Ile Gly 420 425 430 Ser Leu Glu Leu Thr Asp Ser Ala Ser Pro Asp Ala Pro Arg Ile Thr 435 440 Arg Ala Leu Lys Ala Ala Glu Arg Gly Ala Met Leu Thr Gln Arg Leu 450 455 460 Leu Ala Phe Ser Arg Lys Gln Ser Leu Gln Pro His Ala Val Glu Met 465 470 475 Lys Pro Leu Leu Glu Asn Leu Ser Glu Leu Met Arg His Ser Leu Pro 485 490 495 Ala Thr Leu Thr Leu Asp Ile Glu Ala Gln Thr Pro Ala Trp Pro Ala 505 510 500 Trp Ile Asp Val Ser Gln Leu Glu Asn Ala Ile Ile Asn Leu Val Met 515 520 525 Asn Ala Arg Asp Ala Met Glu Gly Gln Asn Gly Val Ile Lys Ile Arg 530 535 540 Thr Trp Asn Gln Arg Val Thr Arg Ser Asp Gly Arg Arg Gln Asp Met 550 555 Val Ala Leu Glu Val Ile Asp His Gly Cys Gly Met Ser Gln Glu Val 565 570 Lys Ser Gln Val Phe Glu Pro Phe Phe Thr Thr Lys Gln Thr Gly Ser 585 590 Gly Ser Gly Leu Gly Leu Ser Met Val Tyr Gly Phe Val Arg Gln Ser 595 600 605 Gly Gly Arg Val Glu Ile Glu Ser Ala Pro Gly Gln Gly Thr Thr Val 610 615 620 Arg Leu Gln Leu Pro Arg Ser Thr Leu Pro Ala Phe Ser Asn Asp Ala 630 635 Ala Leu Ala Thr Thr Ala Pro Thr Glu Ser Glu Leu Leu Val Leu Val 645 650 Leu Glu Asp Glu Ala Gly Val Arg Gln Thr Leu Cys Glu Gln Leu His 660 665 Gln Leu Gly Tyr Leu Thr Leu Glu Ala Glu Asn Gly Glu Gln Ala Leu 680 Asn Met Leu Asp Ala Ser Pro Asp Ile Gly Met Phe Ile Ser Asp Leu

```
695
Met Leu Pro Gly Gly Leu Ser Gly Ala Glu Val Ile Gly His Val Arq
                  710
                                   715
Ser His Tyr Pro Gln Leu Pro Val Leu Leu Ile Ser Gly Gln Asp Leu
              725
                                 7.3.0
Arg Pro Ala His Asn Pro Gln Leu Pro Asp Val Gln Leu Leu Arg Lys
                745
        740
Pro Phe Thr Arg Ala Gln Leu Ala Gln Ala Leu Arg Lys Val Met Val
    755
                760
Ile
   770
<210> 8844
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 8844
Met Met His Ser Gly Ser Trp Gly Ala Thr Ile Arg Ser Ser Ala Ile
                               10
Pro Ala Pro Val Arg Arg Ser Met Arg Pro Pro Leu Arg Leu Glu Thr
20
                             25
Cys Lys Ile Ser Val Ala Leu Val Ser Gly Ala Thr Ala Leu Pro Ser
35
                        40
Leu Arg Ala Leu Ser Cys Ser Trp Leu Ile Cys Ser Ser Ala Thr Ala
                     55
Lys Thr Ala Cys Trp Gly Cys Ser Thr Ser Gly Ala Leu Val
                  7.0
<210> 8845
<211> 139
<212> PRT
<213> Enterobacter cloacae
<400> 8845
Leu Ile Ser Ile Pro Arg Tyr Gly Ser Leu Cys Ser Leu Arg Ala Leu
                                 1.0
Phe Asp Ala Val Tyr Ala Ala Val Glu Met Val Lys Thr Phe Val Ile
          20
                             25
Lys Leu Val Ala Cys Ala Ile Lys Glu His Met Ser Leu Thr Gln Gly
                         40
Asp Asp Ala Leu Ala Val Ala Gln Gly Val Ile His Leu Met Gln Arg
  50
                      55
His His His Gly Asp Ala Val Val Leu Ile Asp Val Ala Gln Gly Phe
                 7.0
                                     75
His His Asp Ala Gly Gly Leu Arg Ile Gln Arg Gly Asp Arg Phe Ile
              85
                                 90
Gly Gln Asp Asn Phe Gly Phe Leu His Gln Gly Ala Gly Asn Gly Asp
          100
                             105
Ala Leu Leu Ser Ala Gly Glu Arg Gly Asp Ala Leu Val Gly Glu
                        120
Met Arg His Ala Asp Ala Gly Gln Arg Leu
<210> 8846
<211> 303
<212> PRT
<213> Enterobacter cloacae
<400> 8846
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Tyr Ser Asn Leu Ile Arg Gly Arg Ala Thr Met Thr Thr Gln Leu Leu

```
Asp Gly Pro Gly Arg Thr Leu Glu Cys Ile His Pro Lys Phe Met Val
        20
                       25
Asp Leu Val Gln Gly Ala Asp Ala Ala Arg His Ala Leu Leu Gly Pro
     35
                     40
Gln Gln Leu Gln Phe Arg Glu Arg Leu Thr Gln Glu Ile Ile Thr Gln
Thr Arg Leu Arg Pro Trp Ala Met Ala Gly Met Leu Asn Glu Asn Ala
            70
                            7.5
Ala Leu Arg Leu Gly Leu Ala Glu Lys Leu Ala Gly Met Leu Asp Pro
                         90
Gly His Leu Ala Leu Thr Arg Met Ser Asp Arg Leu Val Ala Leu Arg
        100
             105 110
Gln Gln Val Asn Pro Arg Leu Pro Gln Pro Pro Gly Leu Leu Gln Gln
     115
         120 125
Tyr Glu Glu Leu Ser Ala His Phe Asn Gln Arg Ala Ala Tyr Lys Glu
 130 135 140
Lys Ala Leu Ala Gln Arg Gly Leu Thr Val Gln Ala Gly Glu His Ser
145 150 155
Glu Gln Ile Phe Thr Arg Trp Arg Ala Gly Gln Tyr Asp Gly Trp Ser 165 170 175
Leu Ala Gly Arg Cys Phe Ile Val Leu Glu Glu Leu Arg Trp Gly Ala
   180 185 190
Phe Gly Asp Ala Cys Arg Leu Ala Asn Ser Asp Val Ala Ala Met Leu
195 200 205
Lys Asp Asn Leu Arg Ser Met Ala Ala Asn Tyr Leu Ala Gln Glu Ile
210 215
Asn Ala Ser Pro Thr Thr Arg His Phe Tyr His Gln Trp Leu Thr Thr
225 230 235
Pro Ala Ser Pro Gly Leu Ile Asp Tyr Lys Asp Met Leu Gly Trp Leu
      245 250
Gly Asp Trp Cys Gln Ala Glu Lys His Pro Val Ser Trp Ser Val Thr
 260 265 270
Gln Ser Trp Gln Thr Val Ala Leu Gly Met Pro Arg Leu Cys Ser Ala
275 280
Lys Arg Leu Val Asp Gly Met Val Glu Glu Ile Phe Gly Thr
```

<210> 8847 <211> 529 <212> PRT

<213> Enterobacter cloacae

<400> 8847

Gly Asp Ser His Gly Ala Asp Leu Trp Phe Thr Ala Cys Lys Met Arg 1.0 Cys Glu Thr Asp Gly Ala Glu Ser Thr Arg Lys Ala Met Leu Arg Arg 20 25 30 Lys Lys Val Lys Pro Ile Thr Leu Arg Asp Val Thr Ile Ile Asp Asp 40 Ala Lys Leu Arg Lys Ala Ile Thr Ala Ala Ser Leu Gly Asn Ala Met 50 55 60 Glu Trp Phe Asp Phe Gly Val Tyr Gly Phe Val Ala Tyr Ala Leu Gly 70 75 Lys Val Phe Phe Pro Gly Ala Asp Pro Ser Leu Gln Met Ile Ala Ala 85 90 Leu Gly Thr Phe Ser Val Pro Phe Leu Ile Arg Pro Leu Gly Gly Leu 100 105 110 Phe Phe Gly Met Leu Gly Asp Lys Tyr Gly Arg Gln Lys Ile Leu Ala 120 125 Ile Thr Ile Val Ile Met Ser Ile Ser Thr Phe Cys Ile Gly Leu Ile

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135
Pro Ser Tyr Ala Thr Ile Gly Ile Trp Ala Pro Ile Leu Leu Leu Ile
      150
                       155
Cys Lys Met Ala Gln Gly Phe Ser Val Gly Gly Glu Tyr Thr Gly Ala
         165
                 170
Ser Ile Phe Val Ala Glu Tyr Ser Pro Asp Arg Lys Arg Gly Phe Met
       180
                   185
                                    190
Gly Ser Trp Leu Asp Phe Gly Ser Ile Ala Gly Phe Val Met Gly Ala
     195
         200
Gly Val Val Val Leu Ile Ser Thr Val Val Gly Glu Glu Asn Phe Leu
 210
                215
                       220
Asp Trp Gly Trp Arg Ile Pro Phe Phe Leu Ala Leu Pro Leu Gly Ile
        230 235 240
Ile Gly Leu Tyr Leu Arg His Ala Leu Glu Glu Thr Pro Ala Phe Gln
          245 250 255
Gln His Val Glu Lys Leu Glu Gln Gly Asp Arg Glu Gly Leu Gln Asp
      260 265 270
Gly Pro Lys Val Ser Phe Lys Glu Ile Ala Thr Lys His Trp Arg Ser
   275 280 285
Leu Leu Thr Cys Ile Gly Leu Val Ile Ser Thr Asn Val Thr Tyr Tyr
290 295 300
Met Leu Leu Thr Tyr Met Pro Ser Tyr Leu Ser His Asn Leu His Tyr
305 310 315
Ser Glu Asp His Gly Val Leu Ile Ile Ile Ala Ile Met Val Gly Met
   325 330 335
Leu Phe Val Gln Pro Ile Met Gly Leu Leu Ser Asp Arg Phe Gly Arg
340 345 350
Lys Pro Phe Ile Ile Leu Gly Ser Val Ala Leu Phe Ala Leu Ala Ile
355 360 365
Pro Ala Phe Ile Leu Ile Asn Ser Asn Val Leu Glv Leu Ile Phe Ala
370 375 380
Gly Leu Leu Met Leu Ala Val Ile Leu Asn Cys Phe Ile Gly Val Met
385 390 395 400
Val Ser Thr Leu Pro Ala Met Phe Pro Thr His Ile Arg Tyr Ser Ala
      405 410
Leu Ala Ala Ala Phe Asn Tle Ser Val Leu Ile Ala Gly Leu Thr Pro
  420 425 430
Thr Leu Ala Ala Ser Leu Val Glu Ser Thr Gln Asn Leu Met Met Pro
435 440 445
Ala Tyr Tyr Leu Met Val Ile Ala Val Val Gly Leu Ile Thr Gly Ile
450 455 460
Thr Met Lys Glu Thr Ala Asn Arg Pro Leu Lys Gly Ala Thr Pro Ala
465 470 475 480
Ala Ser Asp Ile Gln Glu Ala Lys Glu Ile Leu Arg Glu His Tyr Asp
          485 490
                                      495
Asn Val Glu Gln Lys Ile Glu Asp Ile Asp Ala Glu Ile Glu Ala Leu
      500 505
Gln Lys Lys Arg Ser Arg Leu Val Asp Gln His Pro Arg Ile Asn Glu
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<210> 8848
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<211> 248

<212> PRT

<213> Enterobacter cloacae

<400> 8848

Ala Val Cys Glu Leu Leu Gln Asp Val Leu Ser Glu His Val Phe Thr

25 Val Leu Thr Cys His Ser Gly Gln Asp Ala Val Asn Arg Val Gln Gln 40 Asp Ser Gly Ile Ala Leu Val Leu Leu Asp Met Ile Leu Pro Asp Ile 55 Asn Gly Leu Gln Val Leu Leu Gln Leu Gln Lys Gln Arg Pro Ser Leu 70 Pro Val Val Met Leu Thr Gly Leu Gly Ser Glu Ser Asp Val Val Val 90 Gly Leu Glu Met Gly Ala Asp Asp Tyr Ile Gly Lys Pro Phe Asn Pro 100 105 Arg Val Val Val Ala Arg Val Lys Ala Val Leu Arg Arg Thr Gly Ala 115 120 125 Leu Asp Ala Glu Pro Ala Ala Pro Arg Val Glu Gly Ile Ala Phe Asn 130 135 140 Gly Trp Thr Leu Asp Thr Thr Arg Cys Glu Leu Ser Asp Pro Gln Arg 145 150 155 Asn Thr Val Pro Leu Thr Gln Gly Glu Tyr Gly Leu Leu Ala Leu 165 170 Thr Gln Asn Ala Arg Arg Val Leu Ser Arg Glu Gln Leu Leu Lys Leu 180 185 Thr His Ser Glu Ser Ala Glu Val Phe Asp Arg Thr Ile Asp Val Leu 195 200 205 Ile Met Arg Leu Arg Arg Lys Ile Glu Val Asn Pro His Gln Pro Leu 215 220 Leu Ile Lys Thr Ile Arg Gly Leu Gly Tyr Val Phe Ala Thr Asp Val 230 Ser His His Glu Lys Ala Ala 245

<210> 8849 <211> 80 <212> PRT

<213> Enterobacter cloacae

<400> 8849

Gin Vel Val Thr Ala Cys Val Val Arg Arg Thr Val Asn Arg Asn Gly 1 1 5 10 15 Arg Pro His Ala Pro Ala Gln Arg Lys Gln Pro Leu Asn Val Ile His 20 30 Met Ile Met Gly Lys Gln Lys Leu Pro Glu Thr Pro Arg Gly Pro Val

35

Val His Gin Val Trp Asn Thr Arg Val Gin Gin Giy Asp Arg Ile Val
50

Glu Phe His Nog Arg 115 Club 15 The 150

Glu Phe His Arg Arg Ala Thr Gly Ala Thr Ala Ile Ile Phe Leu 65 70 75

<210> 8850 <211> 341

<212> PRT <213> Enterobacter cloacae

<400> 8850

Lys Arg Val Asp Arg Cys Ala Ala Leu Gly Val Arg Phe Val Ala Ala la 1 5 10 15 Lys Tyr Val Ala Val Ala Gln Arg Ala Ala Phe Gln Ala Asp His Arg 20 25 30 Ala Gly Glu Gly Gly Ile Ala Giy Glu Glu Ala Leu Ala Gly Ala Ala 35 40 His Ala Cys Leu Asp Leu His Gin Ala Asp Leu Arg Arg Ala Asp Arg

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Val Val Ile Arg Arg Gln Ala Glu Arg Val His Ala Gly Ser Gln Arg
Ser Arg Leu Ala Val Gly Gln His Ala His Pro Ala Leu Thr Ser Gly
             85
                              90
Gly Val Glu Val His Ser Val Leu His Gly Lys Phe Asn His Val Gly
         100
                          105
                                          110
Ala Gly Gln Ala Asp Gly Val Phe Arg Cys Val Asp Val Ala Val Thr
                      120 125
Val Val Glu Gly Ala His Ala Glu Gln Arg Gly His Val Gly Asp Leu
        135 140
Gln His Leu Ala Leu Phe Arg Leu Arg Ala Ala Gly Ala Asp Ala Arg
      150 155 160
Leu Gly Ala Phe Glu His Asp Thr Arg Arg Val Leu Lys Lys Ile Met
           165 170 175
Gln Gly Thr Ala Gly Glu Met Leu Gln Asn Gly Pro Glu Gly Glu Val
      180 185 190
Arg Glu Val Val Asp Leu Thr Asp Arg His Ala Val His Pro Ala
 195 200 205
Gln Arg Ala Gln Val Asn Asp Val Val Ala Leu Leu Asn Pro Gln Arg
 210
       215 220
Val Arg His Val Ala Gly Gly Arg Ala Gln Asp Arg Gln Gln Leu Phe 225 \phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}
Ala Gly Gly Val Ala Ala Leu Ile Glu Lys Val Leu Ala Lys Thr Arg
            245 250
Leu Gly Ile Lys Arg Val Val Lys Arg Thr His Gln His Gln His Ala
        260 265
Asp Ala Leu Thr Thr Leu Asp Pro Ala Ala Leu His Gln Leu Ile Asp
275 280
                                       285
Gly Thr Thr Gln Gly Val Thr Ile His Phe Val Ala Val Gly Lys Leu
 290 295 300
Leu Leu Gly Arg Gln Val Val Ser Ala Ala Ile Val Arg Ala Gln Leu
305 310 315
His Phe Glu Leu Cys Arg Asn Leu Leu Pro Ala Gly Gly Val Thr Gly
Arg Met Ser Glv
<210> 8851
<211> 790
<212> PRT
<213> Enterobacter cloacae
<400> 8851
Gly Lys Ala Phe Ile Met His Thr Gln Thr Ile Phe Glu Leu Ser Gln
                          10
Glu Ala Glu Arg Leu Leu Gln Leu Ala Leu Asn Asn Leu Asp Ser Leu
                        2.5
                                          30
Lys Ser Met Pro Ile Ala Lys Leu Asp Ser Thr Thr Ala Ala Met Ser
                    4.0
                           45
Gly Val Asn Asn Asn Val Leu Pro Leu His Phe Ser Ala Arg Gly Val
                   55
Asp Ala Gln Gln Ala Met Leu Asn Asn Glu Leu Arg Lys Ile Thr Arg
                                75
                70
Leu Glu Met Val Leu Ala Ile Val Gly Thr Met Lys Ala Gly Lys Ser
            8.5
                             90
Thr Thr Ile Asn Ala Ile Val Gly Thr Glu Val Leu Pro Asn Arg Asn
      100
                          105
Arg Pro Met Thr Ala Leu Pro Thr Leu Ile Arg His Thr Pro Gly Gln
    115 120
Lys Glu Pro Val Leu His Phe Leu His Val Ser Pro Ile Asp Thr Leu
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Ile Thr Gln Leu Gln Lys Lys Leu Cys Asp Lys Asp Arg Gly Lys Leu 150 155 Ala Arg Arg Leu Glu Ile Asp Lys Asp Met Asn Thr Leu Leu Glu Arg 165 170 Ile Glu Arg Gly Glu Ala Phe Glu Lys His His Leu Gly Ala Glu Pro 180 185 190 Ile Phe His Cys Leu Lys Ser Leu Asn Asp Leu Val Arg Leu Ser Gln 195 200 205 Ala Leu Gly Val Glu Phe Pro Phe Ser Glu Tyr Ala Ala Ile Glu His 220 215 Ile Pro Val Ile Glu Val Glu Phe Val His Leu Ala Gly Leu Asp Ala 230 235 His Leu Gly Gln Leu Thr Leu Leu Asp Thr Pro Gly Pro Asn Glu Ala 245 250 255 Gly Gln Pro His Leu Gln Lys Met Leu Asn Glu Gln Leu Ala Arg Ala 260 265 270 Ser Ala Val Leu Ala Val Met Asp Tyr Thr Gln Leu Lys Ser Ile Ser 275 280 285 Asp Ala Glu Val Arg Gln Ala Ile Ser Ala Ala Gly Lys Ser Val Pro 290 295 300 Leu Tyr Ala Leu Val Asn Lys Phe Asp Gln Lys Asp Arg Asn Ser Asp 310 315 Asp Glu Glu Gln Val Arg Ala Met Ile Ser Gly Thr Leu Met Lys Gly 325 330 335 Asn Ile Ser Pro Gly Gln Ile Tyr Pro Val Ser Ser Met Trp Ala Tyr 340 345 350 Leu Ala Asn Arg Ala Arg Tyr Glu Met Asn Val His Gly Arg Leu Pro 355 360 365 Asp His Gln Asp Gln Arg Trp Val Gln Asp Phe Ala Glu Ala Ala Leu 375 380 Gly Arg Arg Trp Arg Thr Ala Asp Leu Asp Asp Ile Asp His Ile Arg 385 390 395 His Ala Ala Asp Leu Leu Trp Glu Asp Ser Leu Phe Glu Gln Pro Ile 405 410 415 Arg Lys Leu Ile Tyr Ala Ala Tyr Ala Asn Ala Ser Leu Phe Ala Leu 420 425 430 Arg Ser Ala Ser His Lys Leu Leu Asn Tyr Ala Gln Asn Ala Arg Glu 435 440 445 Tyr Leu Asp Phe Arg His Gln Gly Leu Thr Val Ala Phe Asp Glu Leu 455 460 Glu Leu Asn Ile Ala Arg Leu Glu Glu Asp Met Thr Met Leu Arg Lys 470 475 Arg Gln Ser Val Val Ser Asp Glu Val Gln His Glu Val Glu Glu Ala 485 490 495 Leu Asn Ala Thr Asp Ala Phe Leu Leu Arg Gln Lys Asp Glu Leu His 500 505 510 Gln Ala Leu Gly Asp Ile Phe Ser Arg Pro Ser Ile Leu Asp Leu Ala 520 525 Gly Arg Glu Pro Ser Ser Leu Arg Glu Asp Asp Ala Asp Ala Ile Gln 535 540 Gln Leu Val Leu Asp Asp Glu Gly Gln Ala Gln Ile Val Leu Ser Lys 550 555 Ile Arg Ser Ser Cys Glu Gln Ile Met Leu Asn Ala Gln Ser Arg Ile 565 570 Gly Arg Glu Leu Ala Leu Arg Phe Asp Gln Leu Glu Ser Thr Leu Ala 585 590 Arg Ser Leu Asn Glu Ala Met Arg Pro Ile Glu Thr Arg Ile Lys Glu 600 605 Gln Leu Ser His Ala Gly Phe Arg Ala Arg Ile Ser Phe Pro Ala Phe 615 620 Gln Ala Asn Gln Leu Asn Phe Asn Thr Arg Gly Leu Phe Asn Asp Ala

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630
                              635
Ile Val Gln Asp Thr Pro Pro Ala Ser Gln Pro Ala Gly Ala Gly Ser
                   650
       645
Val Arg Asn Thr Val Ser Arg Trp Leu Asn Asn Pro Gly Trp Gly Trp
       660
                        665
Glu Glu Tyr Val Val Thr Arg Thr Arg Tyr Val Ile Asp Ile Ala Gln
                     680
Leu His Gly Lys Phe Thr Gln His Thr Asp Gln Phe Cys Asp Gln Ile
                695
                         700
Arg Lys Ala Leu Ala Ala Gln Val Asp Val Ser Val Thr Ala Gly Met
705
         710 715
Ala Thr Phe Phe Ala Glu Phe Ser Leu Cys Leu Thr Gly Leu Gln Glu
       725 730 735
Ser Leu Arg Asp Ser Leu Ala Val Arg Gln Gln Asn Glu His Ser Thr
       740
             745 750
Arg Ala Leu Ser Gln Leu Leu Lys Gln Ser Met Thr Thr Ala Ala Trp
 755 760 765
Ile Gln Glu Asp Thr Arg Leu Leu Arg Asp Asp Ile Gln Thr Leu Phe
 770 775 780
Ala Ala Glu Gln Pro
<210> 8852
<211> 297
<212> PRT
<213> Enterobacter cloacae
<400> 8852
Arg Ile Gln His Val Asn Ala Gly Trp Phe Asp Gly Ala Asp Asp Asp
1 5
                         10
Leu Ala Ser Ala Gly Ser Pro Ala Asp Asp Pro Ser Thr Ala Glu Ala
 20
                     2.5
Glu Thr His Thr Gly Glu Arg Arg Ala Gly Met Lys Pro Leu Leu Ser
35
               4.0
Val Asn Gly Leu Met Met Arg Phe Gly Gly Leu Leu Ala Val Asn Asn
50 55
                                60
Val Asn Leu Asp Leu His Lys Lys Glu Ile Val Ser Leu Ile Gly Pro
65 70
                      7.5
Asn Gly Ala Gly Lys Thr Thr Val Phe Asn Cys Leu Thr Gly Phe Tyr
           85
                          90
Lys Pro Thr Gly Gly Thr Ile Met Leu Arg Asp Gln His Leu Glu Gly
        100 105
                                       110
Leu Pro Gly Gln Gln Ile Ala Arg Met Gly Val Val Arg Thr Phe Gln
 115 120
                                    125
His Val Arg Leu Phe Arg Glu Met Thr Val Ile Glu Asn Leu Leu Val
 130 135
                                 140
Ala Gln His Gln Gln Leu Lys Tnr Gly Leu Phe Ser Gly Leu Leu Lys
              150
                              155
                                  160
Thr Pro Ala Phe Arg Arg Thr Gln Glu Glu Ala Leu Asp Arg Ala Ala
         165
                           170 175
Thr Trp Leu Asp Arg Ile Gly Leu Leu Gln His Ala Asn Arg Gln Ala
                       185
                            190
Ser Asn Leu Ala Tyr Gly Asp Gln Arg Arg Leu Glu Ile Val Arg Cys
                    200
Met Val Thr Gln Pro Glu Ile Leu Met Leu Asp Glu Pro Ala Ala Gly
                 215
                                 220
Leu Asn Pro Lys Glu Thr Lys Glu Leu Asp Glu Leu Ile Ala Glu Leu
            230 235
Arg Asp His His Asp Thr Thr Ile Leu Leu Ile Glu His Asp Met Lys
           245
                  250 255
```

Leu Val Met Gly Ile Ser Asp Arg Ile Tyr Val Val Asn Gln Gly Thr

260 265 270
Pro Leu Ala Asn Gly Thr Fro Glu Glu Ile Arg Asn Asn Pro Asp Val
275 280 285

Ile Arg Ala Tyr Leu Gly Glu Ala
290 295

<210> 8853 <211> 450

<212> PRT <213> Enterobacter cloacae

<400> 8853 Tyr Arg Ala Ser Gly Thr Ile Arg Glu Met Thr Met Thr Ser Leu Arg 10 His Thr Ala Leu Gly Leu Ala Leu Gly Leu Ala Phe Ala Thr Asn Ala 20 25 Met Ala Val Thr Thr Ile Pro Phe Trp His Ser Met Glu Gly Glu Leu 35 40 Gly Lys Glu Val Asp Ser Leu Ala Gln Arg Phe Asn Asp Thr His Pro 50 55 Asp Tyr Lys Ile Val Pro Val Tyr Lys Gly Asn Tyr Glu Gln Ser Leu 70 75 Ser Ala Gly Ile Ala Ala Phe Arg Thr Gly Asn Ala Pro Ala Leu Leu 85 90 Gln Val Tyr Glu Val Gly Thr Ala Thr Met Met Ala Ser Lys Ala Ile 100 105 110 Lys Pro Val Tyr Glu Val Phe Lys Glu Ala Gly Ile Asn Phe Asp Glu 115 120 125 Ser Gln Phe Val Pro Thr Val Ala Gly Tyr Tyr Thr Asp Ser Lys Ser 130 135 140 Gly His Leu Leu Ser Gln Pro Phe Asn Ser Ser Thr Pro Val Leu Tyr 145 150 155 Tyr Asn Lys Asp Ala Phe Arg Lys Ala Gly Leu Asp Pro Glu Gln Pro 165 170 Pro Lys Thr Trp Gln Asp Leu Ala Glu Tyr Thr Ala Lys Leu Lys Ala 180 185 190 Ala Gly Met Lys Cys Gly Tyr Ala Ser Gly Trp Gln Gly Trp Ile Gln 195 200 205 Ile Glu Asn Phe Ser Ala Trp His Gly Leu Pro Val Ala Thr Lys Asn 210 215 220 Asn Gly Phe Asp Gly Thr Asp Ala Val Leu Glu Phe Asn Lys Pro Glu 230 235 Gln Val Lys His Ile Ala Leu Leu Glu Glu Leu Asn Lys Lys Gly Asp 245 250 Phe Ser Tyr Phe Gly Arg Lys Asp Glu Ser Thr Glu Lys Phe Tyr Asn 260 265 270 Gly Asp Cys Ala Ile Thr Thr Ala Ser Ser Gly Ser Leu Ala Asp Ile 280 285 Arg His Tyr Ala Lys Phe Asn Tyr Gly Val Gly Met Met Pro Tyr Asp 295 300 Ala Asp Val Lys Gly Ala Pro Gln Asn Ala Ile Ile Gly Gly Ala Ser 310 315 Leu Trp Val Met Gln Gly Lys Asp Asn Gly Thr Tyr Lys Gly Val Ala 325 330 Glu Phe Leu Asp Phe Leu Ala Lys Pro Glu Asn Ala Ala Glu Trp His 340 345 Gln Lys Thr Gly Tyr Leu Pro Ile Thr Lys Ala Ala Tyr Asp Leu Thr 360 Arg Glu Gln Gly Phe Tyr Ser Lys Asn Pro Gly Ala Asp Ile Ala Thr 375 380 Arg Gln Met Leu Asn Lys Pro Pro Leu Pro Phe Thr Lys Gly Leu Arg

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390
Leu Gly Asn Met Pro Gln Ile Arg Thr Ile Val Asp Glu Glu Leu Glu
            405
                             410
Ser Val Trp Thr Gly Lys Lys Thr Pro Gln Gln Ala Leu Asp Ser Ala
         420
                    425
                              430
Val Glu Arg Gly Asn Gln Leu Leu Arg Arg Phe Glu Gln Ser Thr Lys
Ser
  450
<210> 8854
<211> 297
<212> PRT
<213> Enterobacter cloacae
<400> 8854
Pro Met Ser Ser Ser Arg Pro Val Phe Arg Ser Arg Trp Leu Pro Tyr
         5
                          10
Leu Leu Val Ala Pro Gln Leu Val Ile Thr Val Ile Phe Phe Ile Trp
 20 25
Pro Ala Gly Glu Ala Leu Trp Tyr Ser Val Gln Ser Val Asp Pro Phe
35
                     40
Gly Leu Ser Ser Gln Phe Val Gly Leu Asp Asn Phe Thr Ala Leu Phe
50 55
His Asp Ser Tyr Tyr Leu Asp Ser Phe Trp Thr Thr Ile Lys Phe Ser
               70
                               75
Ala Leu Val Thr Val Ser Gly Leu Val Ala Ser Leu Phe Phe Ala Ala
            85
                            90
Leu Val Asp Tyr Val Val Arg Gly Ser Arg Leu Tyr Gln Thr Leu Met
         100 105
                                         110
Leu Leu Pro Tyr Ala Val Ala Pro Ala Val Ala Ala Val Leu Trp Ile
115
                     120
                                      125
Phe Leu Phe Asn Pro Gly Arg Gly Leu Ile Thr His Phe Leu Gly Glu
130 135
                                   140
Phe Gly Tyr Asp Trp Asn His Ala Gln Asn Ser Gly Gln Ala Met Phe
       150
                                155
Leu Val Val Phe Ala Ser Val Trp Lys Gln Ile Ser Tyr Asn Phe Leu
            165
                            170 175
Phe Phe Phe Ala Ala Leu Gln Ser Ile Pro Arg Ser Leu Val Glu Ala
        180
                         185 190
Ala Ala Ile Asp Gly Ala Gly Pro Val Arg Arg Phe Phe Arg Leu Ser
                     200
                           205
Leu Pro Leu Ile Ala Pro Val Ser Phe Phe Leu Leu Val Val Asn Leu
 210 215
                                   220
Val Tyr Ala Phe Phe Asp Thr Phe Pro Val Ile Asp Ala Ala Thr Ala
               230
                                235
Gly Gly Pro Val Gln Ala Thr Thr Thr Leu Ile Tyr Lys Ile Tyr Arg
            245
                            250
Glu Gly Phe Ala Gly Leu Asp Leu Ser Ala Ser Ala Ala Gln Ser Val
                         265
                                         270
Val Leu Met Phe Leu Val Ile Ile Leu Thr Val Val Gln Phe Arg Tyr
                     280
Val Glu Ser Lys Val Arg Tyr Gln
  290
                   295
<210> 8855
<211> 373
<212> PRT
<213> Enterobacter cloacae
<400> 8855
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```
Pro Cys Ser Ala Arg Leu Ser Ala Ala Trp Ser Ile Ala Arg Asn Lys
                           10
Met Ala Gly Leu Lys Leu Gln Ala Val Thr Lys Ser Trp Asp Gly Lys
                        25
                                      3.0
Thr Gln Val Ile Gln Pro Leu Thr Leu Asp Val Ala Asp Gly Glu Phe
                     40
Ile Val Met Val Gly Pro Ser Gly Cys Gly Lys Ser Thr Leu Leu Arg
 50
                  55
Met Val Ala Gly Leu Glu Arg Val Thr Ser Gly Asp Ile Trp Ile Asp
              70
                             75
Arg Gln Arg Val Thr Glu Met Glu Pro Lys Asp Arg Gly Ile Ala Met
               90
          85
Val Phe Gln Asn Tyr Ala Leu Tyr Pro His Met Ser Val Glu Glu Asn
        100 105 110
Met Ala Trp Gly Leu Lys Ile Arg Gly Met Gly Lys Gly His Ile Glu
     115 120 125
Glu Arg Val Lys Glu Ala Ala Arg Ile Leu Glu Leu Asp Gly Leu Leu
 130 135 140
Lys Arg Arg Pro Arg Glu Leu Ser Gly Gly Gln Arg Gln Arg Val Ala
    150 155
Met Gly Arg Ala Ile Val Arg Asp Pro Ala Val Phe Leu Phe Asp Glu
      165 170 175
Pro Leu Ser Asn Leu Asp Ala Lys Leu Arg Val Gln Met Arg Leu Glu
 180 185 190
Leu Gln Gln Leu His Arg Arg Leu Gly Thr Thr Ser Leu Tyr Val Thr
 195 200 205
His Asp Gln Val Glu Ala Met Thr Leu Ala Gln Arg Val Met Val Met
 210 215 220
Asn Lys Gly Ile Ala Glu Gln Ile Gly Thr Pro Val Glu Val Tyr Glu
225 230
                             235
Lys Pro Ala Ser Arg Phe Val Ala Ser Phe Ile Gly Ser Pro Ala Met
     245
                          250
Asn Leu Leu Asp Gly Arg Ile Asn Ala Ala Gly Thr His Phe Glu Leu
 260 265
                                      270
Glu Ser Gly Met Ala Leu Pro Ile Asn Trp Tyr Tyr Arg Gly Tyr Ala
 275 280 - 1
                                   285
Gly Arg Lys Met Thr Leu Gly Ile Arg Pro Glu His Ile Gly Leu Thr
 290 295
                                300
Ser Gln Ala Asp Gly Gly Val Pro Leu Val Met Asp Thr Leu Glu Met
305 310
                            315
Leu Gly Ala Asp Asn Leu Ala His Gly Arg Trp Gly Glu Gln Lys Leu
      325 330
                                         335
Val Val Arg Leu Pro His Gln Glu Arg Pro Lys Ala Gly Ser Thr Leu
        340 345 - 350
Trp Leu His Met Pro Glu Asn His Leu His Leu Phe Asp Gly Glu Thr
  355
            360
                                   365
Gly Gln Arg Val
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370 <210> 8856 <211> 361 <212> PRT

<213> Enterobacter cloacae

<400> 8856

Phe Leu Asn Leu Pro Phe Lys Arg Gly Arg Leu Ser Phe Val Arg Asp 1 10 15

Lys Leu Ser Lys Ser Leu Thr Ser Arg Phe Leu Arg Thr Met Lys Lys 20 25 30

Lys Arg Pro Val Leu Gln Asp Val Ala Asp Arg Val Gly Val Thr Lys 375 40 40

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Met Thr Val Ser Arg Phe Leu Arg Asn Pro Glu Gln Val Ser Val Ala
                   5.5
Leu Arg Gly Lys Ile Ala Ala Leu Asp Glu Leu Gly Tyr Ile Pro
                70
                                75
Asn Arg Ala Pro Asp Ile Leu Ser Asn Ala Thr Ser Arg Ala Val Gly
                            90
Val Leu Leu Pro Ser Leu Thr Asn Gln Val Phe Ala Glu Val Leu Arg
                         105
Gly Ile Glu Ser Val Thr Asp Ala Phe Gly Tyr Gln Thr Met Leu Ala
      115
                      120
                                    125
His Tyr Gly Tyr Lys Pro Glu Leu Glu Glu Glu Arg Leu Glu Ser Met
               135
                        140
Leu Ser Trp Asn Ile Asp Gly Leu Ile Leu Thr Glu Arg Thr His Thr
               150 155
Pro Arg Thr Leu Lys Met Ile Glu Val Ala Gly Ile Pro Val Val Glu
            165 170
Leu Met Asp Ser Gln Ser Pro Cys Leu Asp Ile Ala Val Gly Phe Asp
         180
             185
Asn Phe Glu Ala Ala Arg Gln Met Thr Ala Ala Ile Ile Ala Arg Gly
  195 200 205
His Arg His Val Ala Tyr Leu Gly Ala Arg Leu Asp Glu Arg Thr Ile
 210 215 220
Ile Lys Gln Lys Gly Tyr Glu Gln Ala Met Leu Asp Ala Gly Leu Thr
    230 235
225
Pro Tyr Ser Val Met Val Glu Gln Ser Ser Ser Tyr Thr Ser Gly Ile
      245 250 255
Glu Leu Met Arg Gln Ala Arg Arg Glu Tyr Pro Gln Leu Asp Gly Ile
 260
                        265
                                         270
Phe Cys Thr Asn Asp Asp Leu Ala Val Gly Ala Ala Phe Glu Cys Gln
 275 280
                                      285
Arg Leu Gly Leu Lys Ile Pro Asp Asp Met Ala Ile Ala Gly Phe His
 290 295
                                  300
Gly His Asp Ile Gly Gln Val Met Glu Pro Arg Leu Ala Ser Val Leu
305 310 315
Thr Pro Arg Glu Arg Met Gly Arg Ile Gly Ala Glu Arg Leu Leu Ala
      325 330 335
Arg Ile Arg Gly Glu Ala Val Thr Pro Lys Met Leu Asp Leu Gly Phe
    340 345
Thr Leu Ser Pro Gly Gly Ser Ile
<210> 8857
<211> 183
<212> PRT
<213> Enterobacter cloacae
<400> 8857
Gln Leu Thr Glu Gly His Pro Leu Ser Thr Thr Asn His Asp His His
                           10
Val Tyr Val Leu Met Gly Val Ser Gly Ser Gly Lys Ser Ala Val Ala
Ser Glu Val Ala His Gln Leu Gln Ala Ala Phe Leu Asp Gly Asp Phe
          40
Leu His Pro Arg Ser Asn Ile Met Lys Met Ala Ser Gly Glu Pro Leu
                5.5
Asn Asp Asp Arg Lys Pro Trp Leu Gln Ala Leu Asn Asp Ala Ala
             7.0
                               7.5
Phe Ala Met Gln Arg Thr Asn Lys Val Ser Leu Ile Val Cys Ser Ala
          85
                            90
Leu Lys Lys Thr Tyr Arg Asp Leu Leu Arg Asp Gly Asn Pro Asn Leu
                        105
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Ser Phe Ile Tyr Leu Lys Gly Asp Phe Gly Val Ile Glu Ser Arg Leu 115 Lys Ala Arg Lys Gly His Phe Phe Lys Thr Gln Met Leu Val Thr Gln 135 140 Phe Glu Ala Leu Gln Glu Pro Gly Ala Asp Glu Gln Asp Val Leu Val 145 150 155 160 Val Asp Ile Asp Gln Pro Leu Glu Gly Val Val Ala Ser Thr Ile Glu 165 170 175 Val Ile Asn Lys Arg Gln 180 <210> 8858 <211> 448 <212> PRT <213> Enterobacter cloacae <400> 8858 Val Leu Ser Thr Leu Thr Leu Val Leu Thr Ala Val Gly Ser Val Leu 1 5 10 Leu Leu Leu Phe Leu Val Met Lys Ala Arg Met His Ala Phe Val Ala 20 25 Leu Met Val Val Ser Ile Gly Ala Gly Leu Phe Ser Gly Met Pro Leu 40 Asp Lys Ile Ala Ala Thr Met Glu Lys Gly Met Gly Gly Thr Leu Gly 50 55 60 Phe Leu Ala Ile Val Val Ala Leu Gly Ala Met Phe Gly Lys Ile Leu 75 His Glu Thr Gly Ala Val Asp Gln Ile Ala Val Lys Met Leu Lys Ser 90 Phe Gly His Ser Arg Ala His Tyr Ala Ile Gly Leu Ala Gly Leu Ile 100 105 110 Cys Ala Leu Pro Leu Phe Phe Glu Val Ala Val Val Leu Leu Ile Ser 115 120 125 Val Ala Phe Ser Met Ala Arg His Thr Gly Thr Asn Leu Val Lys Leu 135 140 Val Ile Pro Leu Phe Ala Gly Val Ala Ala Ala Ala Phe Leu Leu 150 155 Pro Gly Pro Ala Pro Met Leu Leu Ala Ser Gln Met His Ala Asp Phe 165 170 175 Gly Trp Met Ile Leu Ile Gly Leu Cys Ala Ala Ile Pro Gly Met Ile 180 185 190 Ile Ala Gly Pro Leu Trp Gly Asn Phe Ile Ser Arg Tyr Val Glu Leu 195 200 205 His Ile Pro Asp Asp Ile Thr Glu Pro His Leu Gly Glu Gly Lys Met 210 215 220 Pro Ser Phe Gly Phe Ser Leu Ser Leu Ile Leu Leu Pro Leu Val Leu 230 235 Val Gly Leu Lys Thr Ile Ala Ala Arg Phe Val Pro Val Gly Ser Thr 245 250 Ala Tyr Glu Trp Phe Glu Phe Ile Gly His Pro Phe Thr Ala Ile Leu 260 265 270 Val Ala Cys Leu Val Ala Ile Tyr Gly Leu Ala Met Arg Gln Gly Met 275 280 285 Pro Lys Asp Arg Val Met Glu Ile Cys Gly Ala Ala Leu Gln Pro Ala 290 295 300 Gly Ile Ile Leu Leu Val Ile Gly Ala Gly Gly Val Phe Lys Gln Val 305 310 315 Leu Val Asp Ser Gly Val Gly Pro Ala Leu Gly Glu Ala Leu Thr Gly

330

350

Met Gly Leu Pro Ile Ala Val Thr Cys Phe Val Leu Ala Ala Ala Val 345

Arg Ile Ile Gln Gly Ser Ala Thr Val Ala Cys Leu Thr Ala Val Gly 355 360 365 Leu Val Met Pro Val Ile Glu Gln Leu Asn Tyr Ser Gly Ala Gln Met 380 370 375 Ala Ala Leu Ser Ile Cys Ile Ala Gly Gly Ser Ile Val Val Ser His 390 395 Val Asn Asp Ala Gly Phe Trp Leu Phe Gly Lys Phe Thr Gly Ala Thr 410 415 405 Glu Ala Gln Thr Leu Lys Thr Trp Thr Leu Met Glu Thr Ile Leu Gly 420 425 430 Thr Thr Gly Ala Val Val Gly Met Ile Ala Phe Thr Leu Leu Ser 440 <210> 8859 <211> 683 <212> PRT <213> Enterobacter cloacae <400> 8859 Lys Pro Trp Pro Ser Glu Leu Pro Glu Pro Asp Ala Ala Ala Trp 10 His Asn Leu Ala Gly Ala Gly Gly Arg Met Thr Gln Leu Thr Ala Gly 25 Lys Pro Glu Pro Leu Gly Ala Ser Phe Asp Gly Lys Gly Val Asn Phe 4.0 45 Thr Leu Phe Ser Ala His Ala Glu Arg Val Glu Leu Cys Val Phe Asp 55 60 Gly Glu Gly Asn Glu His Arg Tyr Asp Leu Pro Ala Arg Thr Gly Asp 7.0 7.5 80 Thr Trp His Gly Tyr Leu Ala Gly Gly Arg Pro Gly Met His Tyr Gly 85 90 Phe Arg Val His Gly Pro Trp Glu Pro Ser Gln Gly His Trp Phe Asn 100 105 110 Pro Ala Lys Leu Ieu Ile Asp Pro Cys Ala His Arg Val Asp Gly Glu 115 120 Phe Lys Asp Asp Pro Leu Phe His Val Gly Tyr Gly Glu Pro Asp His 135 140 Leu Asp Ser Ala Pro Val Ala Pro Lys Ser Val Val Wal His Asp Leu 145 150 155 160 Tyr Asp Trp Glu Asp Asp Ala Pro Pro Arg Thr Pro Trp Gly Asn Thr 165 170 Val Ile Tyr Glu Ala His Val Lys Gly Leu Thr Tyr Leu His Pro Ser 185 190 Ile Pro Lys Glu Met Arg Gly Thr Tyr Lys Ala Leu Gly His Pro Thr 200 205 Met Val Ala Tyr Leu Lys His Leu Gly Ile Thr Ala Leu Glu Leu Leu 215 220 Pro Val Ala His Phe Ala Ser Glu Pro Arg Leu Gln Arg Leu Gly Leu 225 230 235 240 Ser Asn Tyr Trp Gly Tyr Asn Pro Leu Ala Leu Phe Ala Leu Asp Pro 245 250 255 Arg Tyr Ala Val Asn Pro Glu Lys Ala Arg Asp Glu Phe Arg Asp Ala 260 265 Val Lys Ala Leu His Ala Ala Gly Ile Glu Val Ile Leu Asp Val Val 275 280 285 Leu Asn His Ser Ala Glu Ser Asp Leu Asp Gly Pro Thr Leu Ser Gln 290 295 300 Arg Gly Ile Asp Asn Arg Ser Tyr Tyr Trp Ile Arg Asp Asp Gly Asp 310 315 Tyr Glu Asn Trp Thr Gly Cys Gly Asn Thr Leu Asn Leu Ser His Pro

330

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Ala Val Thr His Tyr Ala Tyr Glu Cys Leu Lys Tyr Trp Val Glu Thr
         340
                      345
Phe His Val Asp Gly Phe Arg Phe Asp Leu Ala Pro Val Met Gly Arg
     355
                      360
                                     365
Thr Pro Ala Phe Ser Gln Gln Ala Pro Leu Phe Glu Ala Ile Lys Asn
  370
                  375
                                 380
Cys Pro Val Leu Ser Lys Val Lys Leu Ile Ala Glu Pro Trp Asp Ile
385
               390
                               395
Gly Glu Gly Gly Tyr Gln Val Gly Asn Phe Pro Pro Leu Phe Ala Glu
            405 410 415
Trp Asn Asp His Phe Arg Asp Ala Val Arg Arg Phe Trp Leu Thr Arg
       420
             425 430
Asp Leu Ser Leu Gly Glu Phe Ala Gly Arg Phe Ala Gly Ser Ser Asp
    435 440
                         445
Leu Phe Lys Arg Asp Gly Lys Arg Pro Ser Ala Thr Ile Asn Val Val
 450
       455 460
Thr Ala His Asp Gly Phe Thr Leu Arg Asp Cys Val Cys Phe Asn Gln 465 \phantom{0}470 \phantom{0}470 \phantom{0}475 \phantom{0}475
Lys His Asn Glu Ala Asn Gly Glu Glu Asn Arg Asp Gly Thr Asn Asn
     485 490 495
Asn His Ser Phe Asn His Gly Ile Glu Gly Leu Gly Gly Ser Leu Asp
    500 505 510
Val Ile Glu Arg Arg Arg Ala Ser Val His Ala Leu Leu Thr Thr Leu
 515 520
                                     525
Leu Leu Ser Gln Gly Thr Pro Met Leu Leu Ala Gly Asp Glu His Gly
530 535 540
His Ser Gln His Gly Asn Asn Asn Ala Tyr Cys Gln Asp Asn Thr Leu
545 550 555
Thr Trp Leu Asp Trp Gly Glu Ala Asn Ser Gly Leu Thr His Phe Thr
      565 570
Ala Ala Leu Ile His Leu Arg Gln Arg Ile Pro Ala Leu Thr Ala Asp
  580 585
                                        590
Arg Trp Trp Glu Glu Gly Asp Gly Asn Val Arg Trp Leu Asn Lys Asp
   595 600
                                     605
Ala Gln Pro Leu Ser Ala Gln Glu Trp Gln His Gly Ile Pro Cys Leu
 610 615
                                 620
Gln Ile Leu Leu Ser Asp Ala Trp Leu Val Thr Leu Asn Ala Thr Asp
625 630
                              635
Asp Wal Ala Glu Ile Val Leu Pro Asp Gly Glu Trp Arg Ala Ile Pro
            645 650 655
Pro Phe Ala Gly Ala Asp Asn Pro Val Val Met Ala Val Trp His Gly
        660 665
Pro Ala His Gly Val Cys Val Phe Gln Arg
<210> 8860
<211> 309
<212> PRT
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<213> Enterobacter cloacae

<400> 8860

Tyr Thr Leu Ser Ala Asp Pro Ser Arg Pro Val Val Lys Thr Cys Asp 1 5 10 15 Pro Lys Gln Ala Val Ala Val Ala Asn Lys Ile Val Asn Asp Gly Ile 20 30 30 Gln Tyr Val Ile Gly His Leu Cys Ser Ser Ser Thr Gln Pro Ala Ser 35 40 45 Asp Ile Tyr Glu Asp Glu Gly Ile Leu Met Ile Thr Pro Gly Ala Thr 50 50 Asp Pro Glu Leu Thr Gln Arg Gly Tyr Gln His Ile Met Arg Thr Ala

Gly Leu Asp Ser Ser Gln Gly Pro Thr Ala Ala Lys Tyr Ile Leu Glu 85 9.0 Thr Val Lys Pro Gln Arg Ile Ala Ile Ile His Asp Lys Gln Gln Tyr 100 105 Gly Glu Gly Leu Ala Arg Ser Val Gln Asp Gly Leu Lys Lys Gly Gly 120 Ala Asn Ile Val Phe Phe Asp Gly Ile Thr Ala Gly Glu Lys Asp Phe 135 140 Ser Ala Leu Ile Ala Arg Leu Gln Lys Glu Asn Ile Asp Phe Val Tyr 150 155 Tyr Gly Gly Tyr Tyr Pro Glu Met Gly Gln Met Leu Arg Gln Ala Arg 165 170 175 Ala Thr Gly Leu Lys Thr Gln Phe Met Gly Pro Glu Gly Val Gly Asn 180 185 190 Ala Ser Leu Ser Asn Ile Ala Gly Asp Ser Ala Glu Gly Met Leu Val 195 200 205 Thr Met Pro Lys Arg Tyr Asp Gln Asp Pro Ala Asn Lys Ala Ile Val 210 215 220 Asp Ala Leu Lys Ala Gln Lys Lys Asp Pro Ser Gly Pro Tyr Val Trp 225 230 235 240 Ile Thr Tyr Ala Ala Val Gln Ser Leu Ala Thr Ala Leu Asp Arg Thr 245 250 255 Gly Ser Lys Glu Pro Leu Asp Leu Val Lys Asp Leu Lys Ala His Gly $260 \hspace{1cm} 265 \hspace{1cm} 265 \hspace{1cm} 270 \hspace{1cm}$ Ala Asn Thr Val Ile Gly Pro Leu Asn Trp Asp Glu Lys Gly Asp Leu 275 280 285 Lys Gly Phe Glu Phe Gly Val Phe Lys Trp His Ala Asp Gly Ser Ser 290 295 Ser Val Ala Arg

305

<210> 8861 <211> 454

<212> PRT

<213> Enterobacter cloacae <400> 8861

Arg Cys Gly Val Val Cys Pro Ala Asn Ser Gly Ser Ala Gly Asp Ala 10 Tyr Arg Tyr Ser Gly Pro Ser Gly Gly Arg Glu Ser Met Lys Pro Met 25 3.0 His Phe Ala Met Ala Leu Leu Ser Ala Ala Met Phe Phe Val Leu Ala 35 40 Gly Val Phe Met Gly Val Gln Leu Gly Leu Asp Gly Thr Lys Leu Val 55 Val Asp Thr Ala Pro Asp Ile Arg Trp Gln Trp Val Phe Ile Gly Thr 70 75 Ala Val Val Phe Leu Phe Gln Leu Leu Arg Pro Leu Phe Gln Lys Thr 85 90 Leu Lys Asn Val Ser Gly Pro Lys Phe Val Leu Pro Ala Ile Asp Gly 100 105 Thr Thr Val Lys Gln Lys Leu Phe Leu Val Ala Leu Leu Val Ala Ala 115 120 125 Val Ala Trp Pro Phe Met Val Ser Arg Gly Thr Val Asp Ile Ala Thr 130 135 140 Leu Thr Met Ile Tyr Val Ile Leu Gly Leu Gly Leu Asn Val Val Val 145 150 155 Gly Leu Ser Gly Leu Leu Val Leu Gly Tyr Gly Gly Phe Tyr Ala Ile 165 170 Gly Ala Tyr Thr Phe Ala Leu Leu Asn His Tyr Tyr Gly Leu Gly Phe 185

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Trp Thr Cys Leu Pro Leu Ala Gly Leu Val Ser Ala Ala Ala Gly Phe
 195 200
Leu Leu Gly Phe Pro Val Leu Arg Leu Arg Gly Asp Tyr Leu Ala Ile
                                 220
Val Thr Leu Gly Phe Gly Glu Ile Val Arg Ile Leu Leu Leu Asn Asn
            230
                               235
Thr Glu Val Thr Gly Gly Pro Asn Gly Ile Ser Gln Ile Pro Lys Pro
                 250
            245
Thr Phe Phe Gly Leu Glu Phe Ser Arg Thr Ala Arg Glu Gly Gly Trp
       260 265 270
Asp Thr Phe Ser Asn Phe Phe Gly Ile Lys Tyr Asp Pro Ser Asp Arg
      275 280 285
Val Ile Trp Leu Tyr Leu Val Ala Leu Leu Leu Val Val Ile Thr Leu
 290 295 300
Phe Val Ile Asn Arg Leu Leu Arg Met Pro Leu Gly Arg Ala Trp Glu
    310 315
Ala Leu Arg Glu Asp Glu Tle Ala Cys Arg Ser Leu Gly Leu Asn Pro
     325 330 335
Thr Arg Ile Lys Leu Thr Ala Phe Thr Ile Ser Ala Ala Phe Ala Gly
 340 345 350
Phe Ala Gly Thr Leu Phe Ala Ala Arg Gln Gly Phe Val Ser Pro Glu
355 360 365
Ser Phe Thr Phe Ala Glu Ser Ala Phe Val Leu Ala Ile Val Val Leu
 370 375
                                 380
Gly Gly Met Gly Ser Gln Phe Ala Val Ile Leu Ala Ala Ile Leu Leu
385 390 395
Val Val Ser Arg Glu Leu Met Arg Asp Phe Asn Glu Tyr Ser Met Leu
           405 410 415
Met Leu Gly Gly Leu Met Val Leu Met Met Ile Trp Arg Pro Gln Gly
 420 425 430
Leu Leu Pro Met Thr Arg Pro Gln Leu Lys Leu Lys Arg Thr Gln Ala
435
            440
                                     445
Lys Gly Glu Gln Ala
  450
<210> 8862
<211> 247
<212> PRT
<213> Enterobacter cloacae
<400> 8862
Ser Ala His Thr Leu Val Arg His Lys Met Glu Lys Ala Met Leu Thr
                         10
Phe Asp Lys Val Asn Ala His Tyr Gly Lys Ile Gln Ala Leu His Asp
                        25
Val Ser Leu His Ile Asn Gln Gly Glu Ile Val Thr Leu Ile Gly Ala
                   40
Asn Gly Ala Gly Lys Thr Thr Leu Leu Gly Thr Leu Cys Gly Asp Pro
               5.5
Arg Ala Thr Ser Gly Arg Ile Val Phe Asp Gly Lys Asp Ile Thr Asp
              70
                              75
                                              80
Trp Gln Thr Ala Arg Ile Met Arg Glu Ala Val Ala Ile Val Pro Glu
            8.5
                           90
Gly Arg Arg Val Phe Ser Arg Met Thr Val Glu Glu Asn Leu Ala Met
        100 105
Gly Gly Phe Phe Ala His Arg Asp Glu Tyr Gln Thr Arg Ile Lys Trp
    115
                    120
Val Tyr Glu Leu Phe Pro Arg Leu Trp Glu Arg Arg Ile Gln Arg Ala
 130
               135
                                 140
Gly Thr Met Ser Gly Gly Glu Gln Gln Met Leu Ala Ile Gly Arg Ala
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Leu Met Ser Gln Pro Arg Leu Leu Leu Leu Asp Glu Pro Ser Leu Gly 165 170 175 Leu Ala Pro Ile Ile Ile Gln Gln Ile Phe Asp Thr Ile Glu Gln Leu 180 185 190 Arg Lys Glu Gly Met Thr Ile Phe Leu Val Glu Gln Asn Ala Asn Gln 195 200 205 Ala Leu Lys Leu Ala Asp Arg Gly Tyr Val Leu Glu Asn Gly Arg Val 215 220 Val Leu Ser Asp Thr Gly Asp Ala Leu Leu Ala Asn Glu Ala Val Arg 230 235 Ser Ala Tyr Leu Gly Gly 245

<210> 8863 <211> 735

<212> PRT <213> Enterobacter cloacae

<400> 8863 Lys Asn Arg Met Asn Thr Met Ser Asp Arg Ile Ser Arg Asp Val Ile 10 Asn Ala Leu Ile Ala Gly His Phe Ala Asp Pro Phe Ser Val Leu Gly 20 25 Met His Arg Thr Glu Ala Gly Leu Glu Val Arg Ala Leu Leu Pro Asp 35 4.0 4.5 Ala Thr Glu Val Trp Val Ile Glu Pro Lys Thr Gly Arg Lys Val Gly 55 60 Asn Leu Glu Cys Leu Asp Ser Arg Gly Phe Phe Ser Gly Val Met Pro 70 Arg Arg Lys Asn Pro Phe Arg Tyr Gln Leu Ala Val Ile Trp His Gly 85 90 Gln Gln Asn Leu Ile Asp Asp Pro Tyr Ser Phe Gly Pro Leu Leu Lys 100 105 110 Glu Met Asp Ala Trp Leu Leu Ser Glu Gly Thr His Leu Arg Pro Tyr 115 120 125 Glu Thr Leu Gly Ala His Ala Asp Thr Met Asp Gly Ile Thr Gly Thr 130 135 140 Arg Phe Ala Val Trp Ala Pro Asn Ala Gln Arg Val Ser Val Val Gly 145 150 155 160 Gln Phe Asn Tyr Trp Asp Gly Arg Arg His Pro Met Arg Leu Arg Arg 165 170 175 Glu Thr Gly Ile Trp Glu Leu Pne Ile Pro Gly Ala His Asn Gly Gln 180 185 190 Leu Tyr Lys Phe Glu Met Ile Asp Ala Asn Gly Lys Leu Arg Ile Lys 195 200 205 Ser Asp Pro Tyr Ala Phe Glu Ala Glu Leu Arg Pro Asn Thr Ala Ser 210 215 220 Leu Ile Cys Gly Leu Pro Glu Lys Val Val Gln Thr Glu Glu Arg Lys 230 235 Gln Ala Asn Arg Phe Asp Ala Pro Ile Ser Val Tyr Glu Val His Leu 245 250 255 Gly Ser Trp Arg Arg His Thr Asp Asn Asn Phe Trp Leu Ser Tyr Arg 265 270 260 Glu Leu Ala Asp Gln Leu Val Pro Tyr Ala Lys Trp Met Gly Phe Thr 275 280 His Leu Glu Leu Leu Pro Ile Asn Glu His Pro Phe Asp Gly Ser Trp 290 295 300 Gly Tyr Gln Pro Thr Gly Leu Tyr Ala Pro Thr Arg Arg Phe Gly Thr 305 310 315 Arg Asp Asp Phe Arg Tyr Phe Ile Asp Ala Ala His Ala Ala Gly Leu 325 330

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Asn Val Ile Leu Asp Trp Val Pro Gly His Phe Pro Ser Asp Asp Phe
         340
                       345
Ala Leu Ala Glu Phe Asp Gly Thr Lys Leu Tyr Glu His Ser Asp Pro
     355
                    360
                                  365
Arg Glu Gly Tyr His Gln Asp Trp Asn Thr Leu Ile Tyr Asn Tyr Gly
                 375
                          380
Arg Arg Glu Val Ser Asn Tyr Leu Val Gly Asn Ala Leu Tyr Trp Ile
              390
                             395
Glu Arg Phe Gly Ile Asp Ala Leu Arg Val Asp Ala Val Ala Ser Met
           405 410 415
Ile Tyr Arg Asp Tyr Ser Arg Lys Glu Gly Glu Trp Ile Pro Asn Glu
        420 425 430
Tyr Gly Gly Arg Glu Asn Leu Glu Ala Ile Glu Phe Leu Arg Asn Thr
    435 440 445
Asn Arg Ile Ile Gly Glu Gln Val Glu Gly Ala Val Thr Met Ala Glu
450 455 460
Glu Ser Thr Asp Phe Pro Gly Val Ser Arg Pro Pro Ser Met Gly Gly
465 470 475 480
Leu Gly Phe Trp Tyr Lys Trp Asn Leu Gly Trp Met His Asp Thr Leu
      485 490 495
Asp Tyr Met Lys Leu Asp Pro Val Tyr Arg Gln Tyr His His Asp Lys
 500 505 510
Leu Thr Phe Gly Leu Leu Tyr Asn Tyr Thr Glu Asn Phe Met Leu Pro
515
                    520 525
Leu Ser His Asp Glu Val Val His Gly Lys Lys Ser Ile Leu Asp Arg
530 535 540
Met Pro Gly Asp Ala Trp Gln Lys Phe Ala Asn Leu Arg Ala Tyr Tyr
545 550
                            555
                                          560
Gly Trp Met Phe Ala Phe Pro Gly Lys Lys Leu Leu Phe Met Gly Asn
    565 570 575
Glu Phe Ala Gln Gly Arg Glu Trp Asn His Asp Thr Ser Leu Asp Trp
 580 585 590
His Leu Leu Glu Gly Ala Asp Asr Trp His His Gly Val Gln Arg Leu
595 600
                                  605
Val Arg Asp Leu Asn Leu Thr Tyr Arg His His Lys Ala Leu His Glu
 610 615
                                620
Leu Asp Phe Asp Pro Tyr Gly Phe Glu Trp Leu Val Val Asp Asp His
625 630 635
Glu Arg Ser Val Phe Val Phe Ala Arg Arg Asp Lys Ala Gly Asn Glu
           645 650
Ile Ile Val Ala Ser Asn Phe Thr Pro Val Pro Arg Glu His Tyr Arg
        660 665
Phe Gly Ile Asn Gln Pro Gly Lys Trp Arg Glu Ile Leu Asn Thr Asp
 675 680
Ser Met His Tyr His Gly Ser Asn Ala Gly Asn Gly Gly Leu Val Gln
690 695
                               700
Ser Asp Ala Ile Glu Ser His Gly Arg Pro Asn Ser Leu Ser Leu Thr
705 710 715
Leu Pro Pro Leu Gly Thr Ile Trp Leu Val Arg Glu Gly Glu
           725
                          730
<210> 8864
<211> 549
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<212> PRT

<213> Enterobacter cloacae

<400> 8864

Tyr Arg Phe Gly Ser Pro Ala Ala Gly Cys Leu Gly Arg Ala Leu Met 10 Ser Ser Ala Ser Leu Arg Tyr Arg Pro Cys Leu Arg His Ser Arg Arg 2.5

Asp Gly Asp Trp Gly Lys Cys Gly Arg Arg Cys Ala Ser Phe Leu Pro 40 Phe Gly Arg Gly Asp Arg Val Ser Asn Thr Gly Asn Val Ala Glu Ala 55 Ala Asn Gln Thr Gly Ala Met Met Gln Val Leu His Val Cys Ser Glu Met Phe Pro Leu Leu Lys Thr Gly Gly Leu Ala Asp Val Leu Gly Ala 85 Leu Pro Ala Ala Gln Ile Ala Gly Gly Val Asp Thr Arg Val Leu Leu 105 110 Pro Ala Phe Pro Asp Ile Arg Arg Gly Ile Pro Asp Ala Lys Val Val 120 Thr Arg Arg Glu Thr Phe Ala Gly Arg Ile Thr Leu Leu Phe Gly His 135 140 Tyr Asn Gly Thr Gly Ile Tyr Leu Ile Asp Ala Pro His Leu Tyr Asp 150 155 Arg Pro Gly Ser Pro Tyr His Asp Thr Asn Leu Tyr Ala Tyr Thr Asp 165 170 175 Asn Val Leu Arg Phe Ala Leu Leu Gly Trp Val Gly Ala Glu Met Ala 180 185 190 Val Gly Leu Asp Pro Phe Trp Arg Pro Asn Val Val His Ala His Asp 195 200 205 Trp His Ala Gly Leu Ala Pro Ala Tyr Leu Ala Ala Lys Gly His Pro 210 215 220 Ala Lys Ser Val Phe Thr Val His Asn Leu Ala Tyr Gln Gly Met Tyr 230 235 Tyr Ala His His Met Asn Asp Ile Asp Leu Pro Trp Ser Phe Phe Asn 245 250 255 Met His Gly Leu Glu Phe Asn Gly Gln Ile Ser Phe Leu Lys Ala Gly 260 265 270 Leu Tyr Tyr Ala Asp His Ile Thr Ala Val Ser Pro Thr Tyr Ala Arg 275 280 285 Glu Ile Thr Gln Pro Glu Phe Gly Tyr Gly Met Glu Gly Leu Leu Gln 290 295 Gln Arg His Arg Glu Gly Arg Leu Ser Gly Ile Leu Asn Gly Val Asp 305 310 315 Glu Gln Ile Trp Asn Pro Glu Thr Asp Leu Leu Leu Ala Ala Arg Tyr 325 330 335 Gly Arg Asp Ser Val Glu Asp Lys Ala Glu Asn Lys Arg Gln Leu Gln 340 345 350 Ile Ala Met Gly Leu Lys Val Asn Asp Lys Val Pro Leu Phe Ala Val 355 360 365 Val Ser Arg Leu Thr Ser Gln Lys Gly Leu Asp Leu Val Leu Glu Ala 370 375 380 Leu Pro Gly Leu Leu Glu Gln Gly Gly Gln Leu Ala Leu Leu Gly Ala 385 390 395 Gly Asp Pro Val Leu Gln Glu Gly Phe Leu Ala Ala Ala Ala Glu His 405 410 415 Pro Gly Gln Val Gly Val Gln Ile Gly Tyr His Glu Ala Phe Ser His 420 425 4.30 Arg Ile Met Gly Gly Ala Asp Val Ile Leu Val Pro Ser Arg Phe Glu 440 445 Pro Cys Gly Leu Thr Gln Leu Tyr Gly Leu Lys Tyr Gly Thr Leu Pro 455 460 Leu Val Arg Arg Thr Gly Gly Leu Ala Asp Thr Val Ser Asp Ser Ser 470 475 Leu Glu Asn Leu Ala Asp Gly Ile Ala Ser Gly Phe Val Phe Glu Asp 485 490 495 Ser Asn Ala Trp Ser Leu Leu Arg Ala Ile Arg Arg Ala Phe Val Leu 500 505 Trp Ser Arg Pro Ser Leu Trp Arg Tyr Val Gln Arg Gln Ala Met Ser

520 Met Asp Phe Gly Trp His Val Ala Ala Gln Ser Tyr Arg Asp Leu Tyr 530 535 Gln Arg Leu Met 545 <210> 8865 <211> 822 <212> PRT <213> Enterobacter cloacae <400> 8865 Arg Gly Glu Val Thr Asp Met Asn Ala Pro Phe Ser Tyr Ser Ser Pro 10 Thr Leu Ser Val Glu Ala Leu Lys His Ser Ile Ala Tyr Lys Leu Met 20 25 Phe Thr Ile Gly Lys Asp Pro Val Ile Ala Asn Lys His Glu Trp Leu 35 40 Asn Ala Thr Leu Phe Ala Val Arg Asp Arg Met Val Glu Arg Trp Leu 55 50 60 Arg Ser Asn Arg Ala Gln Leu Ser Gln Glu Thr Arg Gln Val Tyr Tyr 70 75 Leu Ser Met Glu Phe Leu Ile Gly Arg Thr Leu Ser Asn Ala Leu Leu 85 90 Ser Leu Gly Ile Tyr Asp Asp Val Lys Asn Ala Leu Glu Glu Met Gly 100 105 Leu Asp Leu Glu Glu Leu Ile Asp Glu Glu Asn Asp Pro Gly Leu Gly 115 120 125 Asn Gly Gly Leu Gly Arg Leu Ala Ala Cys Phe Leu Asp Ser Leu Ala 130 135 140 Thr Leu Ala Leu Pro Gly Arg Gly Tyr Gly Ile Arg Tyr Asp Tyr Gly 145 150 155 Met Phe Lys Gln Asn Ile Val Asp Gly Arg Gln Lys Glu Ser Pro Asp 165 170 175 Tyr Trp Leu Glu Tyr Gly Asn Pro Trp Glu Phe Lys Arg His Asn Thr 180 185 190 Arg Tyr Lys Val Arg Phe Gly Gly Arg Ile Gln Gln Glu Gly Lys Lys 195 200 205 Ser Arg Trp Val Glu Thr Glu Glu Ile Leu Ala Val Ala Tyr Asp Gln 210 215 220 Ile Ile Pro Gly Tyr Asp Thr Asp Ala Thr Asn Thr Leu Arg Leu Trp 230 235 Asn Ala Gln Ala Ser Ser Glu Ile Asn Leu Gly Lys Phe Asn Gln Gly 245 250 Asp Tyr Phe Ala Ala Val Glu Asp Lys Asn His Ser Glu Asn Val Ser 260 265 270 Arg Val Leu Tyr Pro Asp Asp Ser Thr Tyr Ser Gly Arg Glu Leu Arg 275 280 285 Leu Arg Gln Glu Tyr Phe Leu Val Ser Ala Thr Ile Gln Asp Ile Leu 290 295 300 Ser Arg His Tyr Gln Leu His Lys Thr Tyr Ala Asn Leu Ala Glu Lys 310 315 Thr Ala Ile His Leu Asn Asp Thr His Pro Val Leu Ser Ile Pro Glu 325 330 Leu Met Arg Leu Leu Ile Asp Glu His Lys Phe Ser Trp Asp Asp Ala 340 345 350 Phe Glu Val Thr Cys Gln Val Phe Ser Tyr Thr Asn His Thr Leu Met 355 360 365 Ser Glu Ala Leu Glu Thr Trp Pro Val Asp Met Leu Gly Lys Ile Leu 375 380

Pro Arg His Leu Gln Ile Ile Phe Glu Ile Asn Asp Tyr Phe Leu Lys

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390
                            395
Thr Leu Gln Glu Gln Tyr Pro Asn Asp Thr Gly Leu Leu Ser Arg Ala
       405
                 410
Ser Ile Ile Asp Glu Ser Asn Gly Arg Arg Val Arg Met Ala Trp Leu
        420
              425
Ala Val Val Ile Ser His Lys Val Asn Gly Val Ser Glu Leu His Ser
         440 445
Asn Leu Met Val Gln Ser Leu Phe Ala Asp Phe Ala Lys Ile Phe Pro
450 455 460
Thr Arg Phe Cys Asn Val Thr Asn Gly Val Thr Pro Arg Arg Trp Leu
   470 475 480
Ala Leu Ala Asn Gln Pro Leu Ser Asp Val Leu Asp Glu Asn Ile Gly
      485 490 495
Arg Thr Trp Arg Thr Asp Leu Ser Gln Leu Ser Glu Leu Glu Gln His
      500 505 510
Ile Asp Phe Pro Thr Val Asn Lys Ala Val Arg Glu Ala Lys Leu Leu
  515 520 525
Asn Lys Lys Arg Leu Ala Val Trp Leu Ala Met His Leu Asn Val Val
530 535 540
Ala Asn Pro Lys Ala Leu Phe Asp Val Gln Ile Lys Arg Ile His Glu
545 550 555 560
Tyr Lys Arq Gln Leu Met Asn Val Leu His Val Ile Thr His Tyr Asn
     565 570 575
Arg Ile Lys Ala Asp Pro Thr Ala Glu Trp Val Pro Arg Val Lys Ile
 580 585 590
Phe Ala Gly Lys Ala Ala Ser Ala Tyr Tyr Met Ala Lys His Ile Ile
595 600 605
His Leu Ile Asn Asp Val Ala Lys Val Val Asn His Asp Pro Asp Ile
610 615 620
Gly Asp Lys Leu Lys Val Val Phe Ile Pro Asn Tyr Ser Val Ser Leu
625 630 635 640
Ala Gln Leu Ile Ile Pro Ala Ala Asp Leu Ser Glu Gln Ile Ser Thr
     645 650 655
Ala Gly Thr Glu Ala Ser Gly Thr Ser Asn Met Lys Phe Ala Leu Asn
 660 665 670
Gly Ala Leu Thr Ile Gly Thr Leu Asp Gly Ala Asn Val Glu Met Leu
675 680 685
Glu His Val Gly Ala Glu Asn Ile Phe Ile Phe Gly Asn Thr Ala Glu
690 695 700
Glu Val Glu Ala Leu Arg Lys Gln Gly Tyr Ser Pro Arg Glu Tyr Tyr 705 710 715 720
Glu Glu Asp Glu Glu Leu Arg Gln Val Leu Thr Gln Ile Ala Thr Gly
       725 730 735
Val Phe Asn Pro Glu Glu Pro Gly Arg Tyr Arg Asp Leu Val Asp Ser
   740 745
Leu Ile Asn Phe Gly Asp His Tyr Gln Val Leu Ala Asp Tyr Arg Ser
755 760 765
Tyr Val Asp Cys Gln Asp Lys Val Asp Glu Leu Tyr Arg Gln Gln Glu
770 775
                              780
Lys Trp Thr Ser Thr Ala Met His Asn Ile Ala Asn Met Gly Tyr Phe
785 790 795
Ser Ser Asp Arg Thr Ile Lys Glu Tyr Ala Glu Asn Ile Trp His Ile
                810
Asp Pro Val Arg Leu
```

<210> 8866

<211> 313

<212> PRT <213> Enterobacter cloacae

```
<400> 8866
Lys Gly Leu His Met Ser Glu Gln Phe Leu Tyr Phe Leu Gln Gln Met
                              1.0
Phe Asn Gly Val Thr Leu Gly Ser Thr Tyr Ala Leu Ile Ala Ile Gly
                           25
Tyr Thr Met Val Tyr Gly Ile Ile Gly Met Ile Asn Phe Ala His Gly
                       40
Glu Val Tyr Met Ile Gly Ser Tyr Val Ser Phe Met Ile Ile Ala Ala
                                 60
Leu Met Met Met Gly Ile Asp Ser Ser Trp Leu Leu Val Ala Ala Gly
                 7.0
                                 75
Phe Val Gly Ala Ile Val Ile Ala Ser Ala Tyr Gly Trp Ser Ile Glu
                         90
Arg Val Ala Tyr Arg Pro Val Arg Ser Ser Lys Arg Leu Ile Ala Leu
          100
                        105 110
Ile Ser Ala Ile Gly Met Ser Ile Phe Leu Gln Asn Tyr Val Ser Leu
      115
                    120 125
Thr Glu Gly Ser Arg Asp Val Ala Leu Pro Ser Leu Phe Asn Gly Gln
  130
          135 140
Trp Ile Val Gly Ala Ser Glu Asn Phe Ser Ala Ser Val Thr Thr Met
145
        150 155
Gln Leu Val Ile Trp Val Val Thr Phe Ile Ala Met Leu Ala Leu Thr
          165
                 170
Leu Phe Ile Arg Tyr Ser Arg Met Gly Arg Ala Cys Arg Ala Cys Ala
 180
               185 190
Glu Asp Leu Lys Met Ala Ser Leu Leu Gly Ile Asn Thr Asp Arg Val
 195 200 205
Ile Ala Leu Thr Phe Val Ile Gly Ala Ala Met Ala Ala Val Ala Gly
 210 215 220
Val Leu Leu Gly Gln Phe Tyr Gly Val Ile Asn Pro Tyr Ile Gly Phe
225 230
                     235
                                                  240
Met Ala Gly Met Lys Ala Phe Thr Ala Ala Val Leu Gly Gly Ile Gly
          245 250
Ser Ile Pro Gly Ala Met Ile Gly Gly Leu Ile Leu Gly Val Ala Glu
       260
                          265
Ala Leu Ser Ser Ala Tyr Leu Ser Thr Glu Tyr Lys Asp Val Val Ser
   275 280
Phe Ala Leu Leu Ile Leu Val Leu Leu Val Met Pro Thr Gly Ile Leu
                 295
Gly Arg Pro Glu Val Glu Lys Val
305
<210> 8867
<211> 286
<212> PRT
<213> Enterobacter cloacae
<400> 8867
Gly Ala Leu Pro Met Ile Glu Asn Arg Arg Gly Leu Thr Ile Phe Ser
His Thr Leu Leu Ile Leu Gly Ile Leu Val Ile Leu Phe Pro Leu Tyr
         20
                          25
Val Ala Phe Val Ala Ala Thr Leu Asp Thr Lys Ala Val Phe Asp Thr
                       4.0
Pro Met Thr Leu Ile Pro Gly Thr His Leu Phe Glu Asn Met Lys Thr
                   55
                                    60
Ile Trp Thr Gln Gly Val Gly Ala Asn Ser Ala Pro Phe Trp Leu Met
              7.0
                               75
Met Leu Asn Ser Phe Ile Met Ala Phe Gly Ile Thr Val Gly Lys Ile
                             90
Thr Val Ser Met Leu Ser Ala Phe Ala Ile Val Trp Phe Arg Phe Pro
```

```
100
Leu Arg Asn Leu Phe Phe Trp Met Ile Phe Ile Thr Leu Met Leu Pro
                     120
Val Glu Val Arg Ile Phe Pro Thr Val Glu Val Ile Ala Asn Leu Lys
         135
                           140
Met Leu Asp Ser Tyr Ala Gly Leu Thr Leu Pro Leu Met Ala Ser Ala
             150 155 160
Thr Ala Thr Phe Leu Phe Arg Gln Phe Phe Met Thr Leu Pro Asp Glu
         165 170 175
Leu Ile Glu Ala Ala Arg Ile Asp Gly Ala Ser Pro Met Arg Phe Phe
        180
                185 190
Arg Asp Ile Val Leu Pro Leu Ser Lys Thr Asn Leu Ala Ala Leu Phe
      195
            200
                         205
Val Ile Thr Phe Ile Tyr Gly Trp Asn Gln Tyr Leu Trp Pro Leu Leu
               215 220
Ile Val Gln Asp Val Asn Leu Gly Thr Ala Val Ala Gly Ile Lys Gly
225
      230 235
Met Ile Ala Thr Gly Glu Gly Thr Thr Leu Trp Asn Gln Val Met Ala
       245 250 255
Ala Met Leu Leu Thr Leu Ile Pro Pro Val Val Ile Val Leu Ala Met
    260 265 270
Gln Arg Ala Phe Val Arg Gly Leu Val Asp Ser Glu Lys
                     280
<210> 8868
<211> 252
<212> PRT
<213> Enterobacter cloacae
<400> 8868
Asn Arg Thr Thr Ser Met Ser Asn Trp Pro Tyr Pro His Ile Val Ala
                         10
His Arg Gly Gly Lys Leu Ala Pro Glu Asn Thr Leu Ala Ala Ile
      20
                2.5
Asp Val Gly Ala Arg Tyr Gly His Thr Met Ile Glu Phe Asp Ala Lys
35
               40
Leu Ser Lys Asp Gly Glu Ile Phe Leu Leu His Asp Asp Asn Leu Glu
 50 55
Arg Thr Ser Asn Gly Trp Gly Val Ala Gly Glu Leu Pro Trp Arg Asp
              70
                   75
Leu Leu Lys Val Asp Ala Gly Ser Trp Phe Ser Gly Glu Phe Lys Gly
         85
                          90 95
Glu Pro Leu Pro Leu Leu Ala Glu Val Ala Asp Arg Cys Arg Gln His
   100 105
                                       110
Gly Met Met Ala Asn Ile Glu Ile Lys Pro Thr Thr Gly Thr Gly Pro
 115 120
                                   125
Leu Thr Gly Lys Val Ile Ala Ile Ala Ala Arg Glu Leu Trp Glu Gly
 130 135
                                140
Met Thr Ala Pro Leu Leu Ser Ser Phe Asp Ile Asp Ala Leu Glu Ala
145 150
                             155
Ala Gln Ala Ala Val Pro Glu Leu Pro Arg Gly Leu Leu Leu Asp Ala
   165
                          170 175
Trp Arg Glu Asp Trp Arg Ala Leu Thr Thr Arg Leu Gly Cys Val Ser
                       185 190
Ile His Leu Asn His Lys Leu Leu Asp Glu Ala Arg Val Thr Leu Leu
                    200
                                   205
Lys Glu Ala Gly Leu His Ile Leu Val Tyr Thr Val Asn Lys Pro Gln
               215 220
Arg Ala Ala Glu Leu Leu Arg Trp Gly Val Asp Ser Ile Cys Thr Asp
              230
                          235
```

Ala Ile Asp Gln Ile Gly Pro Asn Phe Ile Tyr

<210> 8869 <211> 594 <212> PRT <213> Enterobacter cloacae

<400> 8869 Ala Gly Asn Met Gly Pro Phe Thr Trp Arg Thr Ile Met Met Lys Pro 10 Thr Phe Leu Arg Trp Val Ala Ile Ala Ala Leu Met Ala Gly Gly Thr 20 25 3.0 Phe Thr Val Ala Ala Asn Pro Pro Ala Ala Pro Pro Val Ser Tyr Gly 35 40 45 Val Glu Glu Asp Val Phe His Pro Val Arg Ala Thr His Gly Met Val 55 60 Ala Ser Val Asp Ala Leu Ala Thr Gln Val Gly Val Asp Ile Leu Lys 65 70 75 Gln Gly Gly Asn Ala Val Asp Ala Ala Val Ala Val Gly Tyr Ala Leu 85 90 Ala Val Thr His Pro Gln Ala Gly Asn Leu Gly Gly Gly Phe Met 100 105 110 Met Leu Arg Thr Lys Asp Gly Lys Thr Thr Ala Ile Asp Phe Arg Glu 115 120 125 Met Ala Pro Asn Gln Ala Ser Arg Asp Met Phe Leu Asp Asp Gln Gly 130 135 140 Asn Pro Asp Ser Lys Lys Ser Leu Thr Ser His Leu Ala Ser Gly Thr 145 150 155 160 Pro Gly Thr Val Ala Gly Phe Ser Leu Ala Leu Glu Lys Tyr Gly Thr 165 170 175 Leu Pro Leu Asn Lys Val Val Gln Pro Ala Ile Arg Leu Ala Arg Asp 180 185 190 Gly Phe Val Val Asn Asp Ala Leu Ala Asp Asp Leu Lys Thr Tyr Gly 195 200 205 Ser Glu Val Ile Pro Asn His Glu Asn Ser Lys Ala Ile Phe Trp Lys 210 215 220 Asp Gly Glu Pro Leu Lys Lys Gly Asp Lys Leu Val Gln Lys Asn Leu 225 230 235 240 Ala Lys Ser Leu Glu Leu Ile Ala Glu Asn Gly Pro Asp Ala Phe Tyr 245 250 255 Lys Gly Pro Ile Ala Asp Gln Ile Ala Asp Glu Met Gln Lys Asn Gly 265 270 Gly Leu Ile Thr Lys Ala Asp Leu Ala Glu Tyr Lys Ala Val Glu Arg 275 280 285 Glu Pro Ile Ser Gly Thr Tyr Arg Gly Tyr Glu Val Phe Ser Met Pro 295 300 Pro Pro Ser Ser Gly Gly Ile His Ile Val Gln Ile Leu Asn Ile Leu 310 315 Glu Asn Phe Asp Met His Lys Tyr Gly Phe Gly Ser Ala Asp Ala Met 325 330 Gln Val Met Ala Glu Ala Glu Lys Arg Ala Tyr Ala Asp Arg Ser Glu 340 345 350 Tyr Leu Gly Asp Pro Asp Phe Val Lys Val Pro Trp Gln Ala Leu Thr 355 360 365 Asn Lys Ala Tyr Ala Lys Ser Ile Ala Asp Gln Ile Asp Ile Asn Lys 375 380 Ala Lys Pro Ser Ser Glu Ile Arg Pro Gly Lys Leu Ala Pro Tyr Glu 385 390 395 Ser Asn Gln Thr Thr His Phe Ser Val Val Asp Lys Asp Gly Asn Ala 405 410

Val Ala Val Thr Tyr Thr Leu Asn Thr Thr Phe Gly Thr Gly Ile Val

420 425 Ala Gly Asn Ser Gly Ile Leu Leu Asn Asn Glu Met Asp Asp Phe Ser 435 440 445 Ala Lys Pro Gly Val Pro Asn Val Tyr Gly Leu Val Gly Gly Asp Ala 450 455 460 Asn Ala Val Gly Pro Lys Lys Arg Pro Leu Ser Ser Met Ser Pro Thr 470 475 480 Ile Val Val Lys Asp Gly Lys Thr Trp Leu Val Thr Gly Ser Pro Gly 485 490 495 Gly Ser Arg Ile Ile Thr Thr Val Leu Gln Met Val Val Asn Ser Ile 500 505 510 Asp Phe Gly Met Asn Val Ala Glu Ala Thr Asn Ala Pro Arg Phe His 515 520 525 His Gln Trp Leu Pro Asp Glu Leu Arg Val Glu Lys Gly Phe Ser Pro 530 535 540 Asp Thr Leu Lys Leu Glu Gln Arg Gly Gln Lys Val Ala Val Lys 545 550 555 Glu Ala Met Gly Ser Thr Gln Ser Ile Met Val Gly Pro Asp Gly Ala 565 570 Leu Phe Gly Ala Ser Asp Pro Arg Ser Val Asp Asp Leu Thr Ala Gly

<210> 8870 <211> 347 <212> PRT <213> Enterobacter cloacae

<400> 8870 Ala Met Thr Leu His Cys Ala Phe Ile Gly Phe Gly Lys Ser Thr Thr 10 Arg Tyr His Leu Pro Tyr Val Leu Asn Arg Lys Glu Thr Trp His Val 25 3.0 Ala His Ile Tyr Arg Arg Ser Ala Lys Pro Glu Glu Gln Ser Pro Gln 40 45 Tyr Ser His Ile His Phe Thr Ser Asp Leu Asp Glu Val Leu Asn Asp 5.5 60 Pro Gln Val Lys Leu Val Val Cys Thr His Ala Asp Ser His Phe 7.0 Asp Tyr Ala Lys Arg Ala Leu Glu Ala Gly Lys Asn Val Leu Val Glu 85 90 Lys Pro Phe Thr Pro Thr Ile Ala Glu Ala Lys Glu Leu Phe Ala Leu 105 Ala Lys Ser Lys Gly Leu Thr Val Thr Pro Tyr Gln Asn Arg Arg Phe 120 Asp Ser Cys Phe Leu Thr Ala Lys Lys Ala Ile Glu Ser Gly Lys Leu 135 140 Gly Glu Ile Val Glu Ile Glu Ser His Phe Asp Tyr Tyr Arg Pro Val 150 155 Ala Glu Thr Gln Pro Gly Leu Pro Gln Asp Gly Ser Phe Tyr Gly Leu 165 170 175 Gly Val His Thr Met Asp Gln Ile Ile Ser Leu Phe Gly Arg Pro Asp 180 185 190 His Val Ala Tyr Asp Ile Arg Ser Leu Arg Asn Lys Ala Asn Pro Asp 200 Asp Thr Phe Glu Ala Gln Leu Phe Tyr Gly Asp Leu Lys Ala Ile Val 215 220 Lys Thr Ser His Leu Val Lys Ile Asp Tyr Pro Lys Phe Ile Val His 230 235 Gly Lys Lys Gly Ser Phe Ile Lys Tyr Gly Ile Asp Gln Gln Glu Thr

```
245
Ser Leu Lys Ala Asn Ile Met Pro Gly Glu Pro Gly Phe Ala Ala Asp
         260
                      265 270
Asp Ser Val Gly Val Leu Glu Tyr Val Asn Asp Glu Gly Val Thr Val
                          285
   275
          280
Arg Glu Glu Leu Lys Pro Glu Thr Gly Asp Tyr Gly Arg Val Tyr Asp
  290
       295 300
Ala Leu Phe Glu Thr Leu Thr Asn Gly Thr Ala Asn Tyr Val Lys Glu
305 310 315 320
Ser Asp Val Leu Thr Asn Leu Glu Ile Leu Glu Arg Ala Phe Glu Gln
       325 330
Ala Ser Pro Ala Thr Val Thr Leu Ala Lys
         340
<210> 8871
<211> 273
<212> PRT
<213> Enterobacter cloacae
<400> 8871
Ala Lys Thr Ala Pro Leu Arg Leu Phe Thr Ile Phe Glu Gln Arg Ser
1 5
                          1.0
Gln Phe Ser Pro Ser Met Ile Pro Gly Arg Leu Arg Pro His Leu Leu
20
                        25
His Arg Asn Glu Leu Arg Val Lys Thr Met Ile Tyr Leu Arg Lys Ala
35
                     4.0
Asn Glu Arg Gly His Ala Asn His Gly Trp Leu Asp Ser Trp His Ser
                55 60
Phe Ser Phe Ala Asp Tyr Tyr Asp Pro Asn Phe Met Gly Phe Ser Ala
             70 75
Leu Arg Val Ile Asn Asp Asp Val Ile Asp Ala Gly Gln Gly Phe Gly
                           90
Thr His Pro His Lys Asp Met Glu Ile Leu Thr Tyr Val Leu Glu Gly
        100 105
                                        110
Ala Val Glu His Gln Asp Ser Met Gly Asn Lys Glu Gln Val Pro Ala
 115 120
                                    125
Gly Glu Phe Gln Ile Met Ser Ala Gly Thr Gly Val Arg His Ser Glu
 130 135
                                 140
Tyr Asn Pro Ser Lys Thr Glu Lys Leu His Leu Tyr Gln Ile Trp Ile
            150
                              155
                                             160
Ile Pro Glu Glu Thr Gly Ile Thr Pro Arg Tyr Glu Gln Arg Arg Phe
           165
                           170
Asp Ala Lys Gln Gly Lys Gln Leu Val Leu Ser Pro Asp Ala Arg Glu
                       185
                                      190
Gly Ser Leu Lys Val His Gln Asp Met Glu Leu Tyr Arg Trp Ala Leu
                    200
                                    205
Ala Lys Asp Glu Gln Ser Val His Gln Ile Ala Ala Asn Arg Arg Val
 210 215
                                 220
Trp Ile Gln Val Val Lys Gly Glu Val Ser Ile Asn Gly Thr Lys Ala
225 230
                              235
Thr Thr Ala Asp Gly Leu Ala Val Trp Asp Glu Gln Ala Leu Ser Val
      245
                          250 255
His Ala Asp Ser Glu Ser Glu Ile Leu Leu Phe Asp Leu Pro Pro Val
         260
                        265
```

<210> 8872 <211> 391

<212> PRT

<213> Enterobacter cloacae

```
<400> 8872
Cys Glu Ala Tyr Pro Ser Ser Ile Leu Ala Cys Thr Ile Ser Thr His
Pro Leu Gln Glu Lys Asn Ala Met Lys Asn Val Gly Phe Ile Gly Trp
                        25
Arg Gly Met Val Gly Ser Val Leu Met Gln Arg Met Val Glu Glu Arg
      35
                    4.0
                                 4.5
Asp Phe Asp Ala Ile Arg Pro Val Phe Phe Ser Thr Ser Gln Leu Gly
                 55
                               60
Gln Ala Ala Pro Ser Phe Gly Gly Thr Thr Gly Thr Leu Gln Asp Ala
               70
                             75
Tyr Asp Leu Glu Ala Leu Lys Ala Leu Asp Ile Ile Val Thr Cys Gln
           8.5
                    90 95
Gly Gly Asp Tyr Thr Asn Glu Ile Tyr Pro Lys Leu Arg Glu Ser Gly
         100 105 110
Trp Gln Gly Tyr Trp Ile Asp Ala Ala Ser Ser Leu Arg Met Lys Asp
    115 120 125
Asp Ala Ile Ile Ile Leu Asp Pro Val Asn Gln Gly Val Ile Thr Asp
 130 135 140
Gly Leu Asn Asn Gly Val Lys Thr Phe Val Gly Gly Asn Cys Thr Val
145 150 155 160
Ser Leu Met Leu Met Ser Leu Gly Gly Leu Phe Ala Gln Asp Leu Val
    165 170 175
Glu Trp Val Ser Val Ala Thr Tyr Gln Ala Ala Ser Gly Gly Gly Ala
      180 185 190
Arg His Met Arg Glu Leu Leu Thr Gln Met Gly Gln Leu His Gln Ser
 195 200 205
Val Ala Ala Glu Leu Ala Asp Pro Ala Ser Ala Ile Leu Asp Ile Glu
 210 215
                                220
Arg Lys Val Thr Gln Leu Thr Arg Ser Gly Glu Leu Pro Val Asp Asn
225 230 235
Phe Gly Val Pro Leu Ala Gly Gly Leu Ile Pro Trp Ile Asp Lys Gln
     245 250 255
Leu Asp Asn Gly Gln Thr Arg Glu Glu Trp Lys Gly Gln Ala Glu Thr
 260 265 270
Asn Lys Ile Leu Gly Thr Ala Asn Thr Ile Pro Val Asp Gly Leu Cys
 275 280 285
Val Arg Ile Gly Ala Leu Arg Cys His Ser Gln Ala Phe Thr Ile Lys
 290 295 300
Leu Lys Lys Asp Val Ser Ile Pro Thr Val Glu Glu Leu Leu Ala Ala
              310 315
His Asn Pro Trp Ala Lys Val Val Pro Asn Asp Arg Asp Ile Thr Met
           325
                          330 335
Arg Glu Leu Thr Pro Ala Ala Val Thr Gly Thr Leu Thr Thr Pro Val
        340
                       345
Gly Arg Leu Arg Lys Leu Asn Met Gly Pro Glu Tyr Leu Ser Ala Phe
     355 360
                                   365
Thr Val Gly Asp Gln Leu Leu Trp Gly Ala Ala Glu Pro Leu Arg Arg
 370 375
Met Leu Arg Gln Leu Ala
<210> 8873
<211> 458
<212> PRT
<213> Enterobacter cloacae
<400> 8873
Ser Gly Cys Tyr Gly Cys Leu Ala Arg Ala Cys Ala Arg Ser Val Arg
                          1.0
```

Ile Pro Lys Met Ile Lys Lys Glu Leu Val Met Val Arg Leu Glu Lys 2.0 Asn Asp Pro Leu Met Leu Ala Arg Gln Leu Pro Leu Lys Thr Val Ala Leu Ile Leu Ala Gly Gly Arg Gly Thr Arg Leu Lys Asp Leu Thr Ile 55 Lys Arg Ala Lys Pro Ala Val His Phe Gly Gly Lys Phe Arg Ile Ile 70 75 Asp Phe Ala Leu Ser Asn Cys Leu Asn Ser Gly Ile Arg Arg Ile Gly 90 8.5 Val Ile Thr Gln Tyr Gln Ser His Thr Leu Val Gln His Ile Gln Arg 100 105 110 Gly Trp Ser Phe Phe Ser Glu Glu Met Asn Glu Phe Val Asp Leu Leu 115 120 125 Pro Ala Gln Gln Arg Val His Gly Glu Asn Trp Tyr Arg Gly Thr Ala 135 140 Asp Ala Val Thr Gln Asn Leu Asp Ile Ile Arg Arg Tyr Asn Ala Glu 145 150 155 Tyr Ile Val Ile Leu Ala Gly Asp His Ile Tyr Lys Gln Asp Tyr Ser 165 170 175 His Met Leu Ile Asp His Val Glu Lys Gly Ala Arg Cys Thr Val Ala 180 185 190 Cys Leu Pro Val Pro Val Ala Glu Ala Thr Ala Phe Gly Val Met His 195 200 205 Val Asp Gly Asp Asp Lys Ile Ile Asp Phe Val Glu Lys Pro Ala Asn 210 215 220 Pro Pro Thr Met Pro Gly Asp Asp Thr Lys Ser Leu Ala Ser Met Gly 225 230 235 240 Ile Tyr Val Phe Asp Ala Asp Tyr Leu Tyr Glu Leu Leu Glu Glu Asp 245 250 255 Asp Lys Asp Glu Asn Ser Ser His Asp Phe Gly Lys Asp Ile Ile Pro 260 265 270 Lys Ile Thr Lys Ala Gly Met Ala Tyr Ala His Pro Phe Pro Leu Ser 275 280 285 Cys Val Gln Ser Asp Pro Asn Ala Glu Pro Tyr Trp Arg Asp Val Gly 290 295 300 Thr Leu Glu Ala Tyr Trp Lys Ala Asn Leu Asp Leu Ala Ser Val Thr 305 310 315 Pro Glu Leu Asp Met Tyr Asp Gln Asn Trp Pro Ile Arg Thr His Met 325 \$330\$Glu Ser Leu Pro Pro Ala Lys Phe Val Gln Asp Arg Ser Gly Ser His 345 350 Gly Met Thr Leu Asn Ser Leu Val Ser Gly Gly Cys Ile Ile Ser Gly 355 360 365 Ser Val Val Val Gln Ser Val Leu Phe Pro Arg Val Arg Ile Asn Ser 375 380 Phe Cys Asn Ile Asp Ser Ala Val Leu Leu Pro Asp Val Trp Val Gly 390 395 Arg Ser Cys Arg Leu Arg Arg Cys Val Ile Asp Arg Ala Cys Val Ile 405 410 415 Pro Glu Gly Met Val Ile Gly Glu Asn Ala Glu Glu Asp Ala Arg Arg 425 Phe Tyr Arg Ser Glu Glu Gly Ile Val Leu Val Thr Arg Glu Met Leu 435 440 Arg Lys Leu Gln Ile Lys Gln Glu Arg 450 455

<210> 8874 <211> 86

<211> 00 <212> PRT

<213> Enterobacter cloacae

```
<400> 8874
Arg Arg Pro Pro Trp Ile Ser Leu Glu Leu Ala Asp Asp Val Ala Gln
Ala Arg Ser Leu Ala Ser Ser Ile Ser Thr Asp Lys Pro Arg Pro Ala
                              25
Ala Ser Thr Ala Ile Pro Ala Pro Leu Met Pro Pro Pro Ile Thr Ile
                          40
Arg Ser Leu Val Ser Ile Thr Pro Ser Cys Thr Phe Val Lys Ala Gln
                      55
Lys Cys Ser Ile Ser Leu Ile Ile Ala Lys Glu Arg Ala Phe Gly Asn
Ile Lys Lys Thr Ile
<210> 8875
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 8875
Arg Gly Pro Tyr Ser Pro Leu Lys Pro Gly Ser Gln Leu Leu Lys Asn
His Arg Tyr Ala Gly Met Arg Ile Asn Leu Arg Glu Ala Ser Lys Glu
                           25
Glu Ile Thr Met Lys Arg Leu Leu Ile Leu Thr Ala Leu Leu Pro Phe
                         40
                                             45
Ala Ala Leu Ala Gln Pro Ile Asn Thr Leu Asn Asn Pro Asn Gln Pro
                      55
Gly Tyr Val Ile Pro Ser Gln Gln Arg Met Gln Thr Glu Met Met Ser
                70
                                     75
Gln Gln Gln Gln Lys Gly Met Leu Asn Gln Gln Leu Lys Thr Gln
             8.5
                                 90
Thr Gln Val Gln Gln Gln His Leu Gln Asn Gln Met Asn Thr Asn Thr
          100
                             105 110
Gln Arg Val Gln Gln Gly Gln Met Leu Glu Gln Pro Leu Pro Asn Thr
      115
                          120
Asn Gly Gly Met Leu Gly Gly Gly Val Ser Gln Ser Ser Gly Gln Gln
 130 135 140
His Met Leu Pro Thr Gln Gln Asn Gly Ser Met Leu Asn Lys
                  150
<210> 8876
<211> 106
<212> PRT
<213> Enterobacter cloacae
<400> 8876
Ser Thr Ala Pro Val Ser Cys Lys Ile Leu Pro Asn Ile Ala Pro Ser
                                 1.0
Ala Thr Thr Met Ala Arg Lys Pro Ser Val Pro Pro Ile Pro Phe Ser
                              25
Ile Val Ala Ala Ile Leu Ser Ser Gly Met Pro Glu Lys Arg Pro Ala
                          4.0
Pro Ile Glu Thr Thr Ile Lys Ala Thr Lys Ala Cys Ile Arg Ala Phe
                      55
Ile Thr Lys Asn Ser Ser Ser Asn Thr Glu Pro Thr Ala Val Lys Thr
                                     75
Ser Val Asn Val Leu Lys Thr Tyr Cys Leu Leu Leu Ile Thr Ser Met
              8.5
Val Leu Ala Thr Thr Pro Ser Ser Gly
```

<213> Enterobacter cloacae

<400> 8877

Leu Thr Glu Ala Gln Gly Met Ser Glu Ile Val Ile Arg His Ala Glu

105

Pro Lys Asp Tyr Asp Ala Ile Arg Gln Ile His Ala Gln Pro Glu Val 25 3.0 Tyr His Asn Thr Leu Gln Val Pro His Pro Ser Met Glu Met Trp Gln

35 40 4.5 Met Arg Leu Gly Glu Gln Pro Gly Ile Lys Gln Leu Val Ala Cys Ile

5.5 60 Asp Asp Ile Val Val Gly His Leu Thr Ile Asp Val Ala Gln Arg Pro

70 75 Arg Arg Ser His Val Ala Asp Phe Gly Ile Cys Val Gly Ala Glu Trp

85 90 His Asn Arg Gly Val Ala Ser Ala Leu Ile Arg Thr Met Ile Asp Met

100 105 110 Cys Asp Asn Trp Leu Arg Val Asp Arg Ile Glu Leu Thr Val Phe Val 115 120 125

Asp Asn Glu Pro Ala Ile Ala Val Tyr Lys Lys His Gly Phe Glu Ile 130 135 140

Glu Gly Thr Gly Arg Arg Tyr Ala Leu Arg Asn Gly Glu Tyr Val Asp 145 150 155

Ala Tyr Tyr Met Ala Arg Met Lys 165

<210> 8878 <211> 512

<212> PRT

<213> Enterobacter cloacae

<400> 8878

Ala Leu Thr Lys Val His Glu Gly Val Met Glu Thr Lys Asp Leu Ile 10

Val Ile Gly Gly Gly Ile Asn Gly Ala Gly Ile Ala Val Asp Ala Ala 25 Gly Arg Gly Leu Ser Val Leu Met Leu Glu Ala Asn Asp Leu Ala Cys

40 Ala Thr Ser Ser Ala Ser Ser Lys Leu Ile His Gly Gly Leu Arg Tyr

55 Leu Glu His Tyr Glu Phe Arg Leu Val Ser Glu Ala Leu Ala Glu Arg

70 75 Glu Val Leu Leu Lys Met Ala Pro His Leu Ala Ile Pro Met Arg Phe

85 90 Arg Leu Pro His Arg Pro His Leu Arg Pro Ala Trp Met Ile Arg Ile 100 105 110

Gly Leu Phe Met Tyr Asp His Leu Gly Lys Arg Thr Ser Leu Pro Gly 120 125

Ser Thr Gly Leu Arg Phe Gly Ser Glu Ser Val Leu Lys Pro Glu Ile 135 140

Val Arg Gly Phe Glu Tyr Ser Asp Cys Trp Val Asp Asp Ala Arg Leu 150 155 160

Val Leu Ala Asn Ala Gln Met Val Glu Lys Lys Gly Gly Glu Val Lys 165 170

Thr Arg Thr Arg Ala Thr Ala Ala Arg Arg Glu Asn Gly Leu Trp Ile 180

185

111 U fu (A 1.3 14 1.4 7.0

13

.2

```
Val Glu Ala Glu Asp Val Asp Thr Gly Glu Lys Phe Ser Trp Lys Ala
      195
                      200
Arg Gly Leu Val Asn Ala Thr Gly Pro Trp Val Lys Gln Phe Phe Asp
Asp Gly Met His Leu Pro Ser Pro Tyr Gly Ile Arg Leu Ile Lys Gly
          230
                               235
Ser His Ile Val Val Pro Arg Val His Thr Gln Lys Gln Ala Tyr Ile
            245
                                 255
                            250
Leu Gln Asn Glu Asp Lys Arg Ile Val Phe Val Ile Pro Trp Met Asp
                       265
       260
Glu Phe Ser Ile Ile Gly Thr Thr Asp Val Glu Tyr Lys Gly Asp Pro
 275
             280 285
Lys Asn Val Glu Ile Asp Glu Ser Glu Val Ser Tyr Leu Leu Lys Val
       295 300
Tyr Asn Ala His Phe Lys Lys Gln Leu Ala Arg Asp Asp Val Val Trp
               310 315
Thr Tyr Ser Gly Val Arg Pro Leu Cys Asp Asp Glu Ser Asp Ser Pro
            325 330
Gln Ala Ile Thr Arg Asp Tyr Thr Leu Asp Ile His Asp Val Asp Gly
        340
                       345
Gln Ala Pro Leu Leu Ser Val Phe Gly Gly Lys Leu Thr Thr Tyr Arg
 355 360 365
Lys Leu Ala Glu His Ala Leu Glu Lys Leu Ala Pro Tyr Tyr Lys Gly
370 375
                                  380
Ile Gly Pro Ala Trp Thr Lys Gly Ala Val Leu Pro Gly Gly Asp Ile
385 390
                               395
Gly Asp Asn Arg Asp Asp Tyr Ala Ala Lys Leu Arg Arg Arg Phe Pro
           405 410 415
Phe Ile Thr Glu Gly Met Ala Arg His Tyr Ala Arg Thr Tyr Gly Ser
 420 425
                                        430
Asn Thr Glu Leu Phe Leu Gly Asp Ala Lys Glu Ile Ala Asp Leu Gly
435 440
                                     445
Glu His Phe Gly His Glu Leu Tyr Glu Ala Glu Leu Arg Tyr Leu Val
450 455 460
Glu His Glu Trp Val Arg Arg Leu Asp Asp Ala Ile Trp Arg Arg Thr
465 470 475
Lys Glu Gly Met Trp Leu Asn Ala Glu Gln Gln Ser Arg Val Ala Gln
        485 490 495
Trp Leu Ala Gln His Ala Gly Lys Arg Glu Leu Ser Leu Ala Ser
                         505
<210> 8879
<211> 200
<212> PRT
<213> Enterobacter cloacae
<400> 8879
Phe Lys Met Ser Glu Ile Ile Ser Ala Ala Val Leu Leu Ile Leu Ile
                           10
Met Asp Pro Leu Gly Asn Leu Pro Ile Phe Met Ser Val Leu Lys His
        20
                         25
Thr Glu Pro Lys Arg Arg Arg Ala Ile Met Ile Arg Glu Leu Leu Ile
                     4.0
Ala Leu Leu Val Met Phe Ile Phe Leu Phe Ala Gly Glu Lys Ile Leu
               55
                                  60
Ala Phe Leu Asn Leu Arg Ala Glu Thr Val Ser Ile Ser Gly Gly Ile
          7.0
                               75
Ile Leu Phe Leu Ile Ala Ile Lys Met Ile Phe Pro Ser Ala Glu Gly
           8.5
                            90
Ser Ser Ser Gly Leu Pro Ala Gly Glu Glu Pro Phe Ile Val Pro Leu
```

105

```
Ala Ile Pro Leu Val Ala Gly Pro Thr Ile Leu Ala Thr Leu Met Leu
      115
Leu Ser His Gln Tyr Pro Asn Gln Met Ser His Leu Val Ile Ala Leu
  130
                    135
                                    140
Leu Ile Ala Trp Gly Gly Thr Phe Ile Ile Leu Leu Gln Ser Ser Leu
                 150
                                  155 160
Phe Leu Arg Leu Clu Glu Lys Gly Val Asn Ala Leu Glu Arg Leu
                  170 175
             165
Met Gly Leu Ile Leu Val Met Met Ala Thr Gln Met Phe Leu Asp Gly
          180
                        185 190
Ile Arg Ala Trp Met Lys Gly
       195
<210> 8880
<211> 213
<212> PRT
<213> Enterobacter cloacae
<400> 8880
Gly Leu Ser Gln Arg Cys Ser Phe Gln Pro Pro Gly Glu Asp Pro Tyr
1 5
                              10
Asn Leu Asn Asp Leu Tyr Ser Asp Lys Ile Ser His Trp Ile Lys Met
 20
                           25
Lys Thr Ile Glu Val Asp Asp Glu Leu Tyr Gln Tyr Ile Ala Ser Gln
 35 ' 40
                                       4.5
Thr Arg His Ile Gly Glu Ser Ala Ser Asp Ile Leu Arg Arg Met Leu
                  55
                                     60
Lys Ile Ser Ala Ala Ser Gln Pro Thr Pro Val Thr Lys Asp Val Val
                70
                                 7.5
                                                   80
Ser Gln Pro Ser Val Val Ala Gln Val Lys Pro Ala Val Met Pro Ala
             8.5
                              90
                                               95
Lys Asp Lys Val Arg Ala Met Arg Glu Leu Leu Leu Ser Asp Glu Tyr
        100
                         105 110
Ala Glu Gln Lys Lys Ala Val Asn Arg Phe Met Leu Val Leu Ser Thr
115
           120
                                         125
Leu Tyr Ser Leu Asp Asn Asn Ala Phe Ala Glu Ala Thr Glu Ser Leu
 130 135 140
His Gly Arg Thr Arg Val Tyr Phe Ala Gly Asp Glu Gln Thr Leu Leu
                                  155
                                      160
Gln Asn Gly Asn Gln Thr Lys Pro Lys His Val Pro Gly Thr Pro Tyr
             165
                              170
Trp Val Ile Thr Asn Thr Asn Thr Gly Arg Lys Cys Ser Met Ile Glu
         180 185
                                            190
His Ile Met Gln Ser Met Gln Phe Pro Ala Glu Leu Ile Glu Lys Val
                       200
                                         205
Cys Gly Thr Ile
   210
<210> 8881
<211> 555
<212> PRT
<213> Enterobacter cloacae
<400> 8881
Pro Leu His Gln Lys Asp Gln Ala Met Ala Asn His Ser Arg Ala Gly
                              10
Gln Pro Ala Gln Gln Arg Asp Leu Ile Asn Val Ala Gln Leu Thr Ala
         20
                           25
Gln Tyr Tyr Val Leu Lys Pro Val Val Gly Asn Ala Gln His Ala Val
                       40
Lys Phe Gly Thr Ser Gly His Arg Gly Ser Ala Ala Arg His Ser Phe
```

Asn Glu Pro His Ile Leu Ala Ile Ala Gln Ala Ile Ala Glu Glu Arg 70 7.5 Ala Lys Asn Gly Val Thr Gly Pro Cys Tyr Val Gly Lys Asp Thr His 85 90 95 Ala Leu Ser Glu Pro Ala Phe Ile Ser Val Leu Glu Val Leu Ala Ala 100 105 110 Asn Gly Val Asp Val Ile Val Gln Glu Asn Asn Gly Phe Thr Pro Thr 115 120 125 Pro Ala Val Ser Asn Ala Ile Leu Val His Asn Lys Lys Gly Gly Ala 130 135 140 Gln Ala Asp Gly Ile Val Ile Thr Pro Ser His Asn Pro Pro Glu Asp 145 150 155 Gly Gly Ile Lys Tyr Asn Pro Pro Asn Gly Gly Pro Ala Asp Thr Asn 165 170 Val Thr Lys Val Val Glu Asp Arg Ala Asn Ala Leu Leu Ala Asn Gly 180 185 190 Leu Asn Gly Val Lys Arg Ile Ser Leu Asp Glu Ala Met Ala Ser Gly 195 200 205 His Val Lys Glu Gln Asp Leu Val Gln Pro Phe Val Glu Gly Leu Ala 210 215 220 Asp Ile Val Asp Met Ala Ala Ile Gln Lys Ala Gly Leu Lys Leu Gly 225 230 235 240 Val Asp Pro Leu Gly Gly Ser Gly Ile Glu Tyr Trp Lys Arg Ile Ala 245 250 255 Glu His Tyr Lys Leu Asp Leu Thr Ile Val Asn Asp His Val Asp Gln 260 265 270 Thr Phe Arg Phe Met His Leu Asp Lys Asp Gly Ala Ile Arg Met Asp 275 280 285 Cys Ser Ser Glu Cys Ala Met Ala Gly Leu Leu Ala Leu Arg Asp Lys 290 295 300 Phe Asp Leu Ala Phe Ala Asn Asp Pro Asp Tyr Asp Arg His Gly Ile 305 310 315 Val Thr Pro Ala Gly Leu Met Asn Pro Asn His Tyr Leu Ala Val Ala 325 330 Ile Asn Tyr Leu Phe Gln His Arg Pro Gln Trp Gly Lys Glu Val Ala 340 345 350 Val Gly Lys Thr Leu Val Ser Ser Ala Met Ile Asp Arg Val Val Asp 355 360 365 Ala Leu Gly Arg Lys Leu Val Glu Val Pro Val Gly Phe Lys Trp Phe 370 375 380 Val Asp Gly Leu His Asp Gly Ser Phe Gly Phe Gly Gly Glu Glu Ser 390 395 Ala Gly Ala Ser Phe Leu Arg Phe Asp Gly Thr Pro Trp Ser Thr Asp 405 410 Lys Asp Gly Ile Ile Met Cys Leu Leu Ala Ala Glu Ile Thr Ala Val 420 425 Thr Gly Lys Asn Pro Gln Glu His Tyr Asn Glu Leu Ala Glu Arg Phe 445 435 440 Gly Ala Pro Ser Tyr Asn Arg Ile Gln Ala Gly Ala Thr Ser Ala Gln 450 455 460 Lys Ala Ala Leu Ser Lys Leu Ser Pro Glu Met Val Ser Ala Ser Thr 470 475 Leu Ala Gly Asp Pro Ile Thr Ala Arg Leu Thr Ala Ala Pro Gly Asn 485 490 Gly Ala Ser Ile Gly Gly Leu Lys Val Met Thr Glu Asn Gly Trp Phe 505 500 Ala Ala Arg Pro Ser Gly Thr Glu Asp Ala Tyr Lys Ile Tyr Ser Glu 515 520 525 Ser Phe Leu Gly Ala Glu His Arg Gln Gln Ile Glu Lys Glu Ala Val 535 540

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Glu Ile Val Ser Glu Val Leu Lys Asn Ala
545
                550
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<212> PRT
<213> Enterobacter cloacae
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Val Val Lys Leu Gln Thr Lys Arg Tyr Tyr Phe Asn Gln Val Thr Asp
                               10
Phe Thr Phe Ser Gly Asp Gly Phe Arg Pro Thr Thr Gly Glu Lys Asn
          20
                        25
                                             30
Met Asp Leu Tyr Lys Glu Phe Pro Ala His Ile Ile Phe Met Arg Arg
      35
                     40
                                       45
Thr Phe Ala Val Val Ala Gly Val Leu Ala Leu Pro Val Met Leu Phe
 5.0
                   55 60
Trp Lys Asp Arg Ala Arg Phe Tyr Ser Tyr Leu His Arg Val Trp Ala
              70 75
Lys Thr Ser Glu Lys Pro Val Trp Met Asp Gln Ala Glu Lys Ala Thr
Cys Asp Phe Tyr
         100
<210> 8883
<211> 375
<212> PRT
<213> Enterobacter cloacae
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Ala Ala Pro Glu Arg Thr Gly Gly Gln Arg Gly Asp Trp Trp Arg Ala
Asn Gly Asn Leu Ser Ala Arg Phe Thr Gly Arg Leu Ala Ala Asp Trp
20
Ala His Val His Ala Val Ile Arg Thr Arg Pro Gly Arg Ala His Thr
                       40
Pro Ala Ser Gly Gly Tyr Ala Ala Leu Tyr Pro Ala Glu Gly Gly Ser
                    55
                                     60
Met Leu Thr Leu Ile Arg Ala Gly Leu Tyr Thr Ser Val Gln Asp Ala
                7.0
                                  75
Gly Arg Phe Gly Leu Arg Gln Ser Gly Val Ser Tyr Cys Gly Ala Leu
            85 90
Asp Arg Pro Ser Leu Glu Ile Ala Asn Leu Leu Val Gly Asn Ala Gly
         100
                         105
                                             110
Ser Thr Ala Ala Leu Glu Ile Thr Leu Gly Gln Cys Val Ile Glu Phe
                        120
                                          125
Gly Gln Glu Ala Trp Phe Ala Leu Thr Gly Ala Gly Cys Asp Ala Thr
                  135
                                      140
Leu Asp Gly Lys Ala Val Trp Thr Gly Trp Arg Leu Arg Ala Lys Ala
                 150
                                   155
                                                    160
Gly Gln Arg Leu Thr Leu Lys Arg Pro Leu His Gly Val Arg Ser Tyr
             165
                               170
Leu Ala Val Ala Gly Gly Ile Asp Val Pro Glu Val Leu Gly Ser Ser
         180
                           1.85
                                          190
Ser Thr Asp Gln Lys Ala Gly Met Gly Gly His Glu Gly Arg Leu Leu
                        200
      195
                                          205
Arg Asp Gly Asp Arg Leu Arg Ile Lys Thr Ser Thr Arg His Phe Thr
                  215
                                      220
Thr Thr Gln Gly Val Lys Gln Leu Leu Trp Gly Asn Val Ile Arg Ala
                230
                                  235
Leu Pro Gly Pro Glu Tyr Gln Glu Phe Asp Glu Ala Ala Lys Glu Ser
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245 250 Phe Trp Arg Ser Pro Trp Lys Ile Ser Pro Gln Ser Asn Arg Met Glv 260 265 Tyr Arg Leu Gln Gly Gln Pro Leu Thr Arg Thr Thr Asp Arg Glu Leu 280 285 Leu Ser His Gly Leu Leu Pro Gly Val Ile Gln Val Pro Gly Asn Gly 295 300 Gln Pro Ile Val Leu Met Asn Asp Ala Gln Thr Thr Gly Gly Tyr Pro 310 315 Arg Ile Ala Cys Ile Ile Glu Ala Asp Arg Tyr His Leu Ala Gln Ile 330 335 Pro Leu Gly Gln Pro Ile His Phe Val Gln Cys Ser Leu Glu Glu Ala 340 345 350 Leu Lys Ala Arg Gln Asp Gln Gln Arg Tyr Leu Glu Gln Leu Ala Trp 355 360 Arg Leu Asp Gly Lys Asp 370 <210> 8884 <211> 167 <212> PRT <213> Enterobacter cloacae <400> 8884 His Leu Glu Ala Met Phe Cys Met Thr Arg Ser Tyr Arg Lys Gly Thr 1 5 1.0 Leu Ser Asp Pro His Arg Ser Pro Glu Glu Gly Asn Asn Lys Asn Ser 20 25 Met Trp Ala Leu Phe Met Ile Arg Asn Val Lys Lys Gln Arg Pro Val 35 40 Asn Leu Asp Leu Lys Thr Ile Arg Phe Pro Val Thr Ala Ile Ala Ser 50 55 Ile Leu His Arg Val Ser Gly Val Ile Thr Phe Val Ala Val Gly Ile 65 70 75 Leu Leu Trp Leu Leu Gly Thr Ser Leu Ser Ser Pro Glu Gly Phe Leu 85 90 Gln Ala Ser Ala Ile Met Asn Ser Phe Phe Val Lys Phe Ile Met Trp 100 105 110 Gly Ile Leu Thr Ala Leu Ala Tyr His Val Val Gly Gly Val Arg His 115 120 Met Leu Met Asp Phe Gly Tyr Leu Glu Glu Thr Phe Glu Ala Gly Lys 130 135 140 Arg Thr Ala Asn Ile Ser Phe Val Ile Thr Val Val Leu Ser Leu Leu 145 150 155 Ala Gly Val Leu Val Trp 165 <210> 8885 <211> 478 <212> PRT <213> Enterobacter cloacae <400> 8885 Trp Thr Ile Ala Arg Ser Phe Met Pro Thr His Leu Val Trp Phe Arg 10 Ala Asp Leu Arg Ile His Asp Asn Phe Ala Leu Ala Ala Ala Cys Arg 20 25 Ala Lys Asp Ala Asn Val Leu Ala Leu Phe Ile Ala Thr Pro Glu Gin 4.0 Trp Arg Gln His Asp Met Ala Pro Arg Gln Ala Ala Leu Leu Ser Ala

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Tyr Leu Asn Asp Leu Gln His Ser Leu Ala Glu Lys Gly Ile Pro Leu
              7.0
                            75
Ile Tyr Lys Glu Ala His Asp Phe Ala Ala Gln Arg Gln Thr Val Gln
           8.5
                          90
Ala Ile Cys Gln Gln Tyr Ala Val Thr His Leu Tyr Tyr Asn Tyr Gln
                       105
        100
Tyr Glu Phe Asn Glu Gln Gln Arg Asp Arg Gln Leu Glu Lys Ser Leu
      115
                    120
Ala Gly Val Val Cys Glu Gly Phe Asp Asp Ser Val Met Leu Ala Pro
                 135
                               140
Gly Ser Val Met Thr Gly Ser His Glu Met Tyr Lys Val Phe Thr Pro
   150 155 160
145
Phe Lys Asn Ala Phe Ile Lys Arg Leu Lys Glu Gly Leu Pro Glu Cys
        165 170 175
Val Thr Ala Pro Ser Val Arg Gly Glu Thr Ile Thr Asp Leu Pro Ala
            185 190
        180
Ile Arg Leu Asn Tyr Pro Gln Gln Ser Phe Asp Glu Thr Val Phe Pro
  195 200 205
Ala Ser Glu Lys Ala Ala Ile Ala Arg Leu Arg Gln Phe Cys Ala Gln
 210 215 220
Gly Ala Val Glu Tyr Glu Ala Arg Arg Asp Phe Pro Ala Ile Glu Gly
225 230 235 240
Thr Ser Arg Leu Ser Ala Cys Leu Ala Leu Gly Ala Leu Ser Pro Arg
   245 250 255
Gln Cys Leu His Arg Leu Leu Ala Glu Gln Pro Gln Ala Leu Asp Gly
260 265 270
Gly Ala Gly Ala Val Trp Leu Asn Glu Leu Ile Trp Arg Glu Phe Tyr
275 280 285
Arg His Leu Met Thr Tyr His Pro Asp Leu Cys Lys His Arg Pro Phe
290 295 300
Ile Arg Trp Thr Glu Gln Val Gln Trp Gln Ser Asn Glu Lys Leu Leu
305 310 315
Lys Ala Trp Gln His Gly Leu Thr Gly Phe Pro Ile Val Asp Ala Ala
   325 330 335
Met Arg Gln Leu Asn Glu Thr Gly Trp Met His Asn Arg Leu Arg Met
  340 345
Ile Thr Ala Ser Phe Leu Val Lys Asp Leu Leu Ile Asp Trp Arg Thr
 355 360
Gly Glu Arg Tyr Phe Ile Ser Gln Leu Ile Asp Gly Asp Leu Ala Ala 370 380
Asn Asn Gly Gly Trp Gln Trp Ala Ala Ser Thr Gly Thr Asp Ala Ala
             390 395
Pro Tyr Phe Arg Ile Phe Asn Pro Thr Thr Gln Gly Gln Arg Phe Asp
          405 410
Ala Asp Gly Glu Phe Ile Arg Arg Trp Leu Pro Glu Leu Lys Asp Val
       420 425 430
Pro Ala Lys Ala Ile His Glu Pro Trp Val Trp Ala Asp Lys Gln Arg
    435 440 445
Val Thr Leu Asn Tyr Pro Arg Pro Ile Val Asp His Lys Gln Ala Arg
 450 455 460
Val Ala Thr Leu Ala Ala Tyr Glu Ala Ala Arg Lys Val
              470
<210> 8886
<211> 219
<212> PRT
<213> Enterobacter cloacae
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<400> 8886
Val Gln Arg Ala Arg Cys Tyr Leu Leu Gly Glu Thr Ala Val Val Leu
1 5 10 15

Glu Leu Glu Pro Pro Val Thr Leu Ala Thr Gln Lys Arg Ile Trp Arg 20 Leu Ala Gln Arg Leu Pro Glu Leu Pro Gly Val Val Glu Ala Ile Pro 35 Gly Met Asn Asn Ile Thr Val Val Leu Arg Asp Pro His Thr Gly Ala 5.5 Leu Asp Ala Ile Glu Arg Leu Gln Arg Trp Trp Glu Glu Ser Glu Ala 7.0 75 Leu Glu Pro Glu Ser Arg Thr Ile Glu Ile Pro Val Val Tyr Gly Gly 85 90 Lys Gly Gly Pro Asp Leu Gly Val Val Ala Glu His Cys Gly Leu Thr 100 105 110 Glu Lys Gln Val Val Glu Leu His Ser Ser Val Asp Tyr Val Val Trp 115 120 125 Phe Leu Gly Phe Gln Pro Gly Phe Pro Tyr Leu Gly Gly Leu Ser Pro 130 135 140 Gln Leu His Thr Pro Arg Arg Ala Glu Pro Arg Leu Ser Val Pro Ala 145 150 155 160 Gly Ser Val Ala Ile Gly Gly Glu Gln Thr Gly Ile Tyr Pro Leu Ala 165 170 175 Ser Pro Gly Gly Trp Gln Leu Ile Gly His Thr Ser Thr Pro Leu Phe 180 185 190 Glu Pro Gly Gln Asp Ala Pro Ile Leu Leu Arg Pro Gly Asp Thr Leu 195 200 Arg Phe Ile Pro Gln Lys Glu Gly Val Cys

210 <210> 8887 <211> 264

<212> PRT <213> Enterobacter cloacae

<400> 8887 Lys Pro Gly Arg Ile Ser Ser Val Ile Ser Asn Ser Trp Arg Gly Gly 10 Ser Met Val Lys Ile Asp Leu Asn Ala Asp Leu Gly Glu Gly Ser Ser 20 2.5 Ala Asp Ala Ala Leu Met Thr Leu Val Ser Ser Val Asp Ile Ala Cvs 40 Gly Phe His Ala Gly Asp Ala Gln Thr Met Leu Ala Ser Val Arg Asn 55 Ala Met Lys Asn Gly Val Ala Ile Gly Ala His Pro Ser Phe Pro Asp 70 75 Arq Glu Asn Phe Gly Arg Thr Ala Met Asp Leu Pro Pro Glu Thr Val 85 90 Tyr Ala Gln Met Leu Tyr Gln Ile Gly Ala Leu Glu Ala Ile Val Arg 105 110 Ala Glu Asn Gly Val Leu Arg His Val Lys Pro His Gly Met Leu Tyr 120 115 125 Asn Gln Ala Ala Lys Asp Pro Val Leu Ala Asp Ala Ile Ala Arg Ala 135 140 Val Arg Asp Cys Asn Pro Arg Leu Val Leu Val Gly Leu Ala Gly Ser 150 155 Glu Leu Ile Arg Ala Gly Glu Arg Leu Gly Leu Ser Thr Arg Gln Glu 165 170 175 Val Phe Ala Asp Arg Gly Tyr Leu Pro Asp Gly Ser Leu Val Pro Arg 180 185 190 Thr Arg Ala Gly Ala Leu Ile Thr Asp Glu Gly Lys Ala Leu Ala Gln 195 200 205 Thr Leu Glu Met Val Arg Phe Gly Arg Val Thr Ser Thr Glu Gly Thr 210 215

```
Thr Ala Asn Val Gln Ala Asp Thr Val Cys Leu His Gly Asp Gly Glu
          230
                              235
His Ala Leu Gln Phe Ala Arg Arg Leu Arg Ala Ala Phe Ser Glu Glu
                   250 255
            245
Gly Ile Val Val Ser Ala Glu
      260
<210> 8888
<211> 268
<212> PRT
<213> Enterobacter cloacae
<400> 8888
Lys Asp Asn Asn Met Pro Glu Gly Pro Glu Ile Arg Arg Ala Ala Asp
                           10
Ser Leu Glu Ala Ala Ile Lys Gly Lys Pro Leu Thr His Val Trp Phe
      2.0
                        25
Ala Phe Pro Gln Leu Lys Pro Phe Glu Ser Gln Leu Val Gly Gln Thr
    35
                   4.0
                               4.5
Val Thr His Ile Glu Thr Arg Gly Lys Ala Leu Leu Thr His Phe Ser
               55
His Asn Leu Thr Leu Tyr Ser His Asn Gln Leu Tyr Gly Val Trp Arg
65 70 75
Val Val Glu Ala Asp Glu Gln Pro Gln Thr Thr Arg Val Leu Arg Val
         85 90 95
Arg Leu Gln Thr Ala Asp Lys Ala Ile Leu Leu Tyr Ser Ala Ser Asp
    100 105 110
Ile Glu Met Leu Thr Pro Glu Gln Leu Leu Thr His Pro Phe Leu Gln
115 120 125
Arg Val Gly Pro Asp Val Leu Asp Met Arg Leu Thr Ala Ser Asp Val
130 135 140
Lys Thr Arg Leu Leu Ser Pro Thr Phe Arg Asn Arg Gln Phe Ser Gly
145 150 155 160
Leu Leu Asp Gln Ala Phe Leu Ala Gly Leu Gly Asn Tyr Leu Arg
           165 170
Val Glu Ile Leu Trp Glu Val Gly Leu Ala Pro Gln His Lys Ala Ser
        180 185 190
Gln Leu Ser Asp Glu Gln Leu Glu Ala Leu Ser His Ala Leu Leu Asp
 195 200 205
Ile Pro Arg Leu Ser Tyr Asn Thr Arg Gly Met Val Asp Glu Asn Lys
 210 215 220
His His Gly Ala Leu Phe Arg Phe Lys Val Phe His Arg Ala Gly Lys
225 230 235
Lys Cys Glu Arg Cys Gly Gly Ile Ile Asp Arg Ile Met Leu Ser Ser
            245
Arg Pro Phe Tyr Trp Cys Pro His Cys Gln Lys
<210> 8889
<211> 620
<212> PRT
<213> Enterobacter cloacae
<400> 8889
Thr Ala Gly Asp Ser Pro Ser Ala Ala Thr Asp Tyr Cys Cys Cys Ser
                            10
Ala Gly Leu Arg His Leu Trp Ile Cys Cys Gly Val Gly Cys Val Met
                        25
                                        30
Lys Leu Pro Val Arg Glu Phe Asp Ala Val Val Ile Gly Ala Gly Gly
                     4.0
Ala Gly Met Arg Ala Ala Leu Gln Ile Ser Gln Ser Gly Gln Thr Cys
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55 Ala Leu Leu Ser Lys Val Phe Pro Thr Arg Ser His Thr Val Ser Ala 70 Gln Gly Gly Ile Thr Val Ala Leu Gly Asn Ser His Glu Asp Asn Trp 8.5 90 Glu Trp His Met Tyr Asp Thr Val Lys Gly Ser Asp Tyr Ile Gly Asp 100 105 Gln Asp Ala Ile Glu Tyr Met Cys Lys Thr Gly Pro Glu Ala Ile Leu 115 120 125 Glu Leu Asp His Met Gly Leu Pro Phe Ser Arg Leu Glu Asn Gly Thr 135 140 Ile Tyr Gln Arg Pro Phe Gly Gly Gln Ser Lys Asn Phe Gly Gly Glu 150 155 160 Gln Ala Ala Arg Thr Ala Ala Ala Ala Asp Arg Thr Gly His Ala Leu 165 170 175 Leu His Thr Leu Tyr Gln Gln Asn Leu Lys Asn His Thr Thr Ile Phe 180 185 190 Ser Glu Trp Tyr Ala Leu Asp Leu Val Lys Asn Ala Asp Gly Ala Val 195 200 205 Val Gly Cys Thr Ala Leu Cys Ile Glu Thr Gly Glu Val Val Tyr Phe 215 220 Lys Ala Arg Ala Thr Val Leu Ala Thr Gly Gly Ala Gly Arg Ile Tyr 225 230 235 Gln Ser Thr Thr Asn Ala His Ile Asn Thr Gly Asp Gly Val Gly Met 245 250 255 Ala Ile Arg Ala Gly Val Pro Val Gln Asp Met Glu Met Trp Gln Phe 260 265 270 His Pro Thr Gly Ile Ala Gly Ala Gly Val Leu Val Thr Glu Gly Cys 275 280 285 Arg Gly Glu Gly Gly Tyr Leu Leu Asn Lys His Gly Glu Arg Phe Met 290 295 300 Glu Arg Tyr Ala Pro Asn Ala Lys Asp Leu Ala Gly Arg Asp Val Val 305 310 315 Ala Arg Ser Ile Met Ile Glu Ile Arg Glu Gly Arg Gly Cys Asp Gly 325 330 Pro Trp Gly Pro His Ala Lys Leu Lys Leu Asp His Leu Gly Lys Glu 340 345 350 Val Leu Glu Ser Arg Leu Pro Gly Ile Leu Glu Leu Ser Arg Thr Phe 355 360 365 Ala His Val Asp Pro Val Lys Glu Pro Ile Pro Val Ile Pro Thr Cys 370 375 380 His Tyr Met Met Gly Gly Ile Pro Thr Lys Val Thr Gly Gln Ala Leu 385 390 395 400 Thr Val Asn Glu Gln Gly Glu Asp Val Val Ile Pro Gly Leu Phe Ala 405 410 415 Val Gly Glu Ile Ala Cys Val Ser Val His Gly Ala Asn Arg Leu Gly 420 425 430 Gly Asn Ser Leu Leu Asp Leu Val Val Phe Gly Arg Ala Val Gly Leu 435 440 445 His Leu Gln Glu Ser Ile Ala Glu Gln Gly Ala Leu Arg Asp Ala Thr 450 455 460 Asp Asp Glu Ile Asp Ala Ser Leu Glu Arg Leu Asn Arg Trp Asn Gly 465 470 475 480 Asn Arg Asn Gly Glu Asp Pro Val Glu Ile Arg Lys Ala Leu Gln Glu 485 490 495 Cys Met Gln His Asn Phe Ser Val Phe Arg Glu Gly Asp Ala Met Ala 500 505 Lys Gly Leu Glu Gln Leu Lys Ala Ile Arg Glu Arg Leu Lys Asn Ala 520 Arg Leu Asp Asp Thr Ser Ser Glu Phe Asn Thr Gln Arg Val Glu Cys 535 540

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Leu Glu Leu Asp Asn Leu Met Glu Thr Ala Phe Ala Thr Ala Met Ser
545
        550
                                 555
Ala Asn Phe Arg Thr Glu Ser Arg Gly Ala His Ser Arg Phe Asp Phe
             565
                              570
                                               575
Pro Asp Arg Asp Glu Asn Trp Leu Cys His Ser Leu Tyr Leu Pro
          580 585
                               590
Glu Ser Glu Thr Met Thr Arg Arg Ser Val Asn Met Glu Pro Lys Leu
      595
           600
Arg Pro Ala Phe Pro Pro Lys Ile Arg Thr Tyr
   610 615
<210> 8890
<211> 244
<212> PRT
<213> Enterobacter cloacae
<400> 8890
Cys Gly Asp Arg Ile Met Lys Leu Glu Phe Ser Val Tyr Arg Tyr Asn
                        10
Pro Asp Val Asp Asp Ala Pro Arg Met Gln Asp Tyr Thr Leu Glu Ala
         20
                           25
Glu Glu Gly Arg Asp Met Met Leu Leu Asp Ala Leu Ile Gln Leu Lys
      35
                    40
Glu Lys Asp Pro Thr Leu Ser Phe Arg Arg Ser Cys Arg Glu Gly Val
                    55
Cys Gly Ser Asp Gly Val Asn Met Asn Gly Lys Asn Gly Leu Ala Cys
                 7.0
65
                                75
                                                   80
Ile Thr Pro Ile Ser Ala Leu Asn Arg Pro Gly Gln Lys Ile Val Ile
             8.5
                               90
Arg Pro Leu Pro Gly Leu Pro Val Val Arg Asp Leu Val Val Asp Met
                          105 110
Gly Gln Phe Tyr Ala Gln Tyr Glu Lys Ile Lys Pro Tyr Leu Leu Asn
                        120
                                      125
Asn Gly Gln Asn Pro Pro Ala Arg Glu His Leu Gln Ser Pro Glu Gln
 130 135
                                     140
Arg Glu Lys Leu Asp Gly Leu Tyr Glu Cys Ile Leu Cys Ala Cys Cys
                150
                                 155
                                                   160
Ser Thr Ser Cys Pro Ser Phe Trp Trp Asn Pro Asp Lys Phe Ile Gly
             165 170 175
Pro Ala Gly Leu Leu Ala Ala Tyr Arg Phe Leu Ile Asp Ser Arg Asp
        180 185 190
Thr Glu Thr Glu Asn Arg Leu Glu Gly Leu Ser Asp Ala Phe Ser Val
                       200
                                        205
Phe Arg Cys His Ser Ile Met Asn Cys Val Ser Val Cys Pro Lys Gly
                 215
                                     220
Leu Asn Pro Thr Arg Ala Ile Gly His Ile Lys Ser Met Leu Leu Gln
                 230
                                  235
Arg Ser Ala
<210> 8891
<211> 420
<212> PRT
<213> Enterobacter cloacae
<400> 8891
Arg Ala Glu Arg Arg Leu Ile Lys Gly Tyr Ile Met Ser Ser Val Asp
                               10
Ile Leu Val Pro Asp Leu Pro Glu Ser Val Ala Asp Ala Thr Val Ala
                           25
```

Thr Trp His Lys Lys Pro Gly Asp Ala Val Thr Arg Asp Glu Val Leu

```
Val Glu Ile Glu Thr Asp Lys Val Val Leu Glu Val Pro Ala Ser Ala
Asp Gly Ile Leu Asp Ala Val Leu Glu Asp Glu Gly Thr Thr Val Thr
             7.0
Ser Arg Gln Ile Leu Gly Arg Leu Arg Glu Gly Asn Ser Ala Gly Lys
           8.5
                  90
Glu Ser Ser Ala Lys Ser Glu Glu Lys Ala Ser Thr Pro Ala Gln Arg
      100 105 110
Gln Gln Ala Ser Leu Ser Asp Gln Thr Asn Asp Ala Leu Ser Pro Ala
    115 120 125
Ile Arg Arg Leu Leu Ala Glu His Ser Leu Asp Pro Ala Ala Ile Lys
 130 135 140
Gly Thr Gly Val Gly Gly Arg Leu Thr Arg Glu Asp Ile Asp Lys His
145 150 155 160
Leu Ala Lys Ala Pro Ser Glu Ala Lys Ala Glu Ala Lys Ala Pro Ala
        165 170 175
Ala Ala Pro Ala Ala Gln Pro Ala Leu Gly Ala Arg Ser Glu Lys Arg
   180 185 190
Val Pro Met Thr Arg Leu Arg Lys Arg Val Ala Glu Arg Leu Leu Glu
195 200 205
Ala Lys Asn Ser Thr Ala Met Leu Thr Thr Phe Asn Glu Val Asn Met
210 215 220
Lys Pro Ile Met Asp Leu Arg Lys Gln Tyr Gly Asp Ala Phe Glu Lys
225 230 235
Arg His Gly Ile Arg Leu Gly Phe Met Ser Phe Tyr Val Lys Ala Val
          245 250
Val Glu Ala Leu Lys Arg Tyr Pro Glu Val Asn Ala Ser Ile Asp Gly
        260 265 270
Asp Asp Val Val Tyr His Asn Tyr Phe Asp Val Ser Met Ala Val Ser
275 280 285
Thr Pro Arg Gly Leu Val Thr Pro Val Leu Arg Asp Val Asp Thr Leu
290 295 300
Gly Met Ala Asp Ile Glu Lys Lys Ile Lys Glu Leu Ala Val Lys Gly
305 310 315
Arg Asp Gly Lys Leu Thr Val Glu Asp Leu Thr Gly Gly Asn Phe Thr
          325 330 335
Ile Thr Asn Gly Gly Val Phe Gly Ser Leu Met Ser Thr Pro Ile Ile
       340 345 350
Asn Pro Pro Gln Ser Ala Ile Leu Gly Met His Ala Ile Lys Asp Arg
355 360 365
Pro Met Ala Val Asp Gly Lys Val Glu Ile Leu Pro Met Met Tyr Leu
 370 375 380
Ala Leu Ser Tyr Asp His Arg Leu Ile Asp Gly Arg Glu Ser Val Gly
385 390
                            395 400
Phe Leu Val Ala Ile Lys Glu Leu Leu Glu Asp Pro Thr Arg Leu Leu
           405
                         410
Leu Asp Val
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<210> 8892
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<210> 6092
<211> 316
<212> PRT
<213> Enterobacter cloacae

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Phe His Ser Glu Gln Ala Ile Ala Tyr Gly Thr Gln Met Val Gly Gly
Val Thr Pro Gly Lys Gly Gly Thr Thr His Leu Gly Leu Pro Val Phe
                7.0
                                  75
Asn Thr Val Arg Glu Ala Val Glu Ala Thr Gly Ala Thr Ala Thr Val
             8.5
                      90
Ile Tyr Val Pro Ala Pro Phe Cys Lys Asp Ser Ile Leu Glu Ala Ile
        100 105 110
Asp Ala Gly Ile Lys Leu Ile Ile Thr Ile Thr Glu Gly Ile Pro Thr
 115 120 125
Leu Asp Met Leu Thr Val Lys Val Lys Leu Asp Glu Ala Gly Val Arg 130 \\ \phantom{1}135 \\ \phantom{1}140
Met Ile Gly Pro Asn Cys Pro Gly Val Ile Thr Pro Gly Glu Cys Lys
145 150 155
Ile Gly Ile Met Pro Gly His Ile His Arg Pro Gly Lys Val Gly Ile
        165 170 175
Val Ser Arg Ser Gly Thr Leu Thr Tyr Glu Ala Val Lys Gln Thr Thr
   180 185 190
Asp Tyr Gly Phe Gly Gln Ser Thr Cys Val Gly Ile Gly Gly Asp Pro
 195 200 205
Ile Pro Gly Ser Asn Phe Ile Asp Ile Leu Lys Leu Phe Gln Glu Asp 210 215 220
Pro Gln Thr Glu Ala Ile Val Met Ile Gly Glu Ile Gly Gly Ser Ala
225 230 235
Glu Glu Glu Ala Ala Ala Tyr Ile Lys Asp His Val Thr Lys Pro Val 245 250 255
Val Gly Tyr Ile Ala Gly Val Thr Ala Pro Lys Gly Lys Arg Met Gly
         260 265 270
His Ala Gly Ala Ile Ile Ala Gly Gly Lys Gly Thr Ala Asp Glu Lys
275 280 285
Phe Ala Ala Leu Glu Ala Ala Gly Val Lys Thr Val Arg Ser Leu Ala
290 295 300
Asp Ile Gly Glu Ala Leu Lys Ser Ile Ile Lys
                 310
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<211> 562
<212> PRT
<213> Enterobacter cloacae
<400> 8893
Gln Glu Thr Lys Met Lys Ala Val Ser Arg Val His Ile Thr Pro His
Met His Trp Asp Arg Glu Trp Tyr Phe Thr Thr Glu Ala Ser Arg Ile
                          25
Leu Leu Val Asn Asn Met Glu Glu Ile Leu Thr Arg Leu Glu Gln Asp
                       4 0
Ala Glu Tyr Lys Tyr Tyr Val Leu Asp Gly Gln Thr Ala Val Leu Glu
                   55
Asp Tyr Phe Ala Val Lys Pro Glu Asn Arg Pro Arg Val Lys Ala Leu
                70
                                 75
Val Ala Ala Gly Lys Leu Ile Ile Gly Pro Trp Tyr Thr Gln Thr Asp
            85
Thr Thr Leu Val Ser Gly Glu Ser Ile Val Arg Asn Leu Met Tyr Gly
        100
                               110
                          105
Ile Arg Asp Cys Leu Ala Phe Gly Glu Pro Met Lys Ile Gly Tyr Leu
     115 120
Pro Asp Ser Phe Gly Met Ser Ser Gln Leu Pro His Ile Tyr Asn Gly
          135
Phe Gly Ile Thr Arg Thr Met Phe Trp Arg Gly Cys Ser Glu Arg His
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```
150
                           155
Gly Thr Asp Lys Thr Glu Phe Leu Trp Gln Ser Gln Asp Gly Ser Glu
         165
                        170
Val Thr Ala Gln Val Leu Pro Leu Gly Tyr Ala Ile Gly Lys Tyr Leu
        180
                    185
Pro Glu Asp Glu Ala Gly Leu Arg Lys Arg Leu Asp Thr Tyr Phe Glu
     195 200
Val Leu Glu Lys Ala Ser Val Thr Lys Glu Ile Leu Leu Pro Asn Gly
         215
                     220
His Asp Gln Met Pro Leu Gln Gln Asn Ile Phe Ala Val Met Asp Lys
225 230
                 235
Leu Arg Glu Ile Tyr Pro Gln Arg Gln Phe Val Met Ser Arg Phe Glu
         245 250 255
Glu Val Phe Asp His Ile Asp Ala His Arg Asp Glu Leu Ala Thr Leu
       260 265 270
Lys Gly Glu Phe Ile Asp Gly Lys Tyr Met Arg Val His Arg Thr Ile
    275 280 285
Gly Ser Thr Arg Met Asp Ile Lys Ile Ala His Ala Arg Ile Glu Asn
 290 295 300
Lys Ile Val Asn Val Leu Glu Pro Leu Ala Thr Leu Ala Trp Thr Leu
305 310 315
Gly Phe Glu Tyr His His Gly Leu Leu Glu Lys Met Trp Lys Glu Ile
         325 330 335
Leu Lys Asn His Ala His Asp Ser Ile Gly Cys Cys Gys Ser Asp Lys
 340 345 350
Val His Arg Glu Val Met Ser Arg Phe Glu Leu Ala Glu Asp Met Ala
355 360 365
Asp Asn Leu Thr Cys Phe Tyr Met Arg Lys Ile Val Asp Asn Met Pro
370 375
Gln Cys Glu Glu Asp Lys Leu Val Met Phe Asn Leu Thr Pro Trp Pro
             390 395
Arg Glu Glu Val Ile Asn Thr Thr Ile Arg Leu Arg Ala Ser Gln Phe
         405 410 415
Arg Leu Leu Asp Asp Arg Gly Asn Glu Ile Pro Tyr Cys Leu Arg Ser
       420 425
Ala Arg Glu Ile Asp Pro Gly Leu Ile Asp Arg Gln Ile Val His Tyr
    435 440 445
Gly Asn Tyr Asp Pro Phe Met Glu Phe Asp Ile Gln Leu Asn Gln Ile
 450 455 460
Leu Pro Ser Met Gly Tyr Arg Thr Leu Tyr Ile Glu Pro His Val Ala
465 470 475 480
Gly Lys Leu Leu Ala Pro Glu Thr Thr Ser Glu Ala Leu Leu Glu Asn
          485 490 495
Ala Phe Trp Glu Ile Thr Leu Asn Asp Asp Gly Thr Leu Arg Leu Leu
        500 505 510
Asp Lys Ala Ser Gly Leu Ile Tyr Asp Arg Ala Leu Glu Ile Glu Glu
     515
                   520 525
Ser Ser Asp Asp Gly Asp Glu Tyr Asp Tyr Ser Pro Ser Arg Glu Glu
                    540
530 535
Trp Arg Leu Thr Ser Ala Gln Ala Tyr Phe Thr Thr Arg Pro Arg Ser
545
              550
                            555
                                          560
Ser Arg
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<210> 8894
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<211> 278

<212> PRT

<213> Enterobacter cloacae

<400> 8894

Thr Ile Pro Val Pro Leu Ser Thr Ile Asn Arg Arg Ala Ser Pro Arg

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10
Trp Arg Arg Thr Lys Pro Pro Glu Lys Phe Glu Arg Met Met Lys
         20
                         25
Asn Ser Glu Leu Glu Arg Leu Ile Asn Glu Lys Leu Asn Thr Ala Ser
                      40
Phe Ser Asp Tyr Gly Pro Asn Gly Leu Gln Val Glu Gly Arg Glu Thr
                                   60
Val Gln Lys Ile Ile Thr Gly Val Thr Ala Ser Gln Ala Leu Leu Asp
               7.0
                              7.5
Glu Ala Val Arg Gln Glu Ala Asp Ala Val Ile Val His His Gly Tyr
            8.5
                    90
Phe Trp Lys Asn Glu Ser Pro Ile Ile Arg Gly Met Lys Arg Asn Arg
       100 105 110
Leu Lys Thr Leu Leu Ala Asn Asp Ile Asn Leu Tyr Gly Tyr His Leu
 115 120 125
Pro Leu Asp Ala His Pro Glu Leu Gly Asn Asn Val Gln Leu Ala Gln
 130 135 140
Leu Leu Gly Ile Thr Val Met Gly Glu Ile Glu Pro Leu Val Pro Trp
145 150 155
Gly Glu Leu Ser Met Pro Val Pro Gly Leu Glu Leu Ala Ser Trp Ile
       165 170 175
Glu Ala Arg Leu Gly Arg Arg Pro Leu Trp Cys Gly Asp Thr Gly Pro
      180 185 190
Asp Thr Val Lys Arg Val Ala Trp Cys Thr Gly Gly Gly Gln Gly Phe
195 200 205
Ile Asp Ser Ala Ala Arg Phe Gly Val Asp Ala Phe Ile Thr Gly Glu
210 215
                                   220
Val Ser Glu Gln Thr Ile His Ser Ala Arg Glu Gln Gly Leu His Phe
225 230
                             235
Tyr Ala Ala Gly His His Ala Thr Glu Arg Gly Gly Ile Arg Ala Leu
           245 250
Ser Glu Trp Leu Thr Glu Asn Thr Asp Leu Asp Val Thr Phe Ile Asp
  260
                        265
Ile Pro Asn Pro Ala
     275
<210> 8895
<211> 133
<212> PRT
<213> Enterobacter cloacae
<400> 8895
His Phe Ile Cys Asp His Cys Arg Ala Phe Thr Ser Arg Arg Ser Ser
                            1.0
Arg Met Val Ser Asn Ala Ser Ala Leu Gly Arg Asn Gly Val His Asp
        20
                         25
Phe Ile Leu Val Arg Ala Thr Ala Ile Val Leu Thr Leu Tyr Ile Ile
                      40
Tyr Met Ile Gly Phe Phe Ala Thr Ser Gly Thr Leu Thr Trp Glu Ile
                55
 50
                                   60
Trp Ser Gly Phe Phe Gly Ser Ala Phe Thr Lys Val Phe Thr Leu Leu
65
               70
Ala Leu Phe Ser Ile Leu Ile His Ala Trp Ile Gly Met Trp Gln Val
         8.5
                            90
Leu Thr Asp Tyr Val Lys Pro Leu Ala Ile Arg Leu Pro Leu Gln Leu
             105
        100
Ile Ile Val Val Ala Leu Leu Val Tyr Val Ile Tyr Gly Phe Val Val
     115
                   120
Val Trp Gly Val
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<210> 8896
<211> 939
<212> PRT
<213> Enterobacter cloacae
<400> 8896
Gly Ile Thr Met Gln Asn Gly Ala Met Lys Ala Trp Leu Asp Ser Ser
                     10
Tyr Leu Ser Gly Ser Asn Gln Ser Trp Ile Glu Gln Leu Tyr Glu Asp
   20
                      25
Phe Leu Thr Asp Pro Asp Ser Val Asp Ala Asn Trp Arg Ser Met Phe
 35
                  40
                           45
Gln Gln Leu Pro Gly Thr Gly Val Lys Pro Asp Gln Phe His Ser Lys
50 55
Thr Arg Asp Tyr Phe Arg Arg Leu Ala Lys Asp Ala Ser Arg Tyr Ser
65 70 75
Ser Ala Ile Ser Asp Pro Asp Thr Asn Ala Lys Gln Val Lys Val Leu
        85 90
Gln Leu Ile Asn Ala Tyr Arg Phe Arg Gly His Gln His Ala Asn Leu
 100 105 110
Asp Pro Leu Gly Leu Trp Gln Gln Glu Arg Val Ala Asp Leu Asp Pro
115 120
                        125
Ala Tyr His Asp Leu Thr Glu Ala Asp Phe Gln Glu Ser Phe Asn Val
130 135 140
Gly Ser Phe Ala Ile Gly Lys Asp Thr Met Lys Leu Gly Asp Leu Ile
145 150 155 160
Asp Ala Leu Lys Gln Thr Tyr Cys Gly Ser Ile Gly Ala Glu Tyr Met
         165 170 175
His Ile Thr Ser Thr Glu Glu Lys Arg Trp Ile Gln Gln Arg Ile Glu
       180 185 190
Ser Val Ala Gly His Ala Asn Phe Ser Ala Glu Glu Lys Lys Arg Phe
195 200
                                  205
Leu Ser Glu Leu Thr Ala Ala Glu Gly Leu Glu Arg Tyr Leu Gly Ala
                215
                                220
Lys Phe Pro Gly Ala Lys Arg Phe Ser Leu Glu Gly Gly Asp Ala Leu
225 230 235
Val Pro Met Leu Lys Glu Leu Ile Arg His Ala Gly Lys Ser Gly Thr
         245
                          250 255
Arg Glu Val Val Leu Gly Met Ala His Arg Gly Arg Leu Asn Val Leu
        260 265
Val Asn Val Leu Gly Lys Lys Pro Gln Asp Leu Phe Asp Glu Phe Ala
     275 280
Gly Lys His Lys Glu His Leu Gly Thr Gly Asp Val Lys Tyr His Met
 290 295
                               300
Gly Phe Ser Ser Asp Ile Glu Thr Glu Gly Gly Gln Val His Leu Ala
             310
                            315
Leu Ala Phe Asn Pro Ser His Leu Glu Ile Val Ser Pro Val Val Ile
          325
                          330
Gly Ser Val Arg Ala Arg Leu Asp Arg Leu Asp Glu Pro Ser Ser Asn
        340
                      345 350
Lys Val Leu Pro Ile Thr Ile His Gly Asp Ala Ala Val Thr Gly Gln
     355
                    360
Gly Val Val Gln Glu Thr Leu Asn Met Ser Lys Ala Arg Gly Tyr Glu
                375
                                380
Val Gly Gly Thr Val Arg Ile Val Ile Asn Asn Gln Val Gly Phe Thr
              390
                            395
Thr Ser Asn Pro Leu Asp Ala Arg Ser Thr Pro Tyr Cys Thr Asp Ile
      405
                          410
Gly Lys Met Val Gln Ala Pro Ile Phe His Val Asn Ala Asp Asp Pro
     420
                      425
```

Glu Ala Val Ala Phe Val Thr Arg Leu Ala Leu Asp Phe Arg Asn Thr

```
440
Phe Lys Arg Asp Val Phe Ile Asp Leu Phe Cys Tyr Arg Arg His Gly
                455
                        460
His Asn Glu Ala Asp Glu Pro Ser Ala Thr Gln Pro Leu Met Tyr Gln
      470
                  475
Lys Ile Lys Lys His Pro Thr Pro Arg Lys Ile Tyr Ala Asp Lys Leu
         485 490 495
Glu Ser Glu Lys Val Ala Thr Leu Glu Asp Ala Thr Glu Met Val Asn
      500 505 510
Leu Tyr Arg Asp Ala Leu Asp Ala Gly Glu Cys Val Val Lys Glu Leu
    515 520 525
Arg Pro Met Asn Met His Ser Phe Thr Trp Ser Pro Tyr Leu Asn His
 530 535 540
Glu Trp Asp Glu Ser Tyr Pro Asn Lys Val Glu Met Lys Arg Leu Gln
    550 555 560
Glu Leu Ala Lys Arg Ile Ser Thr Val Pro Glu Ala Ile Glu Met Gln
      565 570 575
Ser Arg Val Ala Lys Ile Tyr Gly Asp Arg Gln Ala Met Ala Ala Gly
  580 585 590
Glu Lys Leu Phe Asp Trp Gly Gly Ala Glu Thr Leu Ala Tyr Ala Thr
 595 600 605
Leu Val Asp Glu Gly Ile Pro Val Arg Leu Ser Gly Glu Asp Ala Gly
610 615 620
Arg Gly Thr Phe Phe His Arg His Ala Val Val His Asn Gln Ser Asn
625 630 635
Gly Ser Thr Tyr Thr Pro Leu Gln His Val His Asn Gly Gln Gly Gln
         645 650 655
Phe Lys Val Trp Asp Ser Val Leu Ser Glu Glu Ala Val Leu Ala Phe
       660 665 670
Glu Tyr Gly Tyr Ala Thr Ala Glu Pro Arg Thr Leu Thr Ile Trp Glu
675 680 685
Ala Gln Phe Gly Asp Phe Ala Asn Gly Ala Gln Val Val Ile Asp Gln
 690 695 700
Phe Ile Ser Ser Gly Glu Gln Lys Trp Gly Arg Met Cys Gly Leu Val
   710 715 720
Met Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Glu His Ser Ser 725 730 735
Ala Arg Leu Glu Arg Tyr Leu Gln Leu Cys Ala Glu Gln Asn Met Gln
    740 745
Val Cys Val Pro Ser Thr Pro Ala Gln Val Tyr His Met Leu Arg Arg
   755 760 765
Gln Ala Leu Arg Gly Met Arg Arg Pro Leu Val Val Met Ser Pro Lys
 770 775
                               780
Ser Leu Leu Arg His Pro Leu Ala Val Ser Ser Leu Glu Glu Leu Ala
785 790
                            795 800
Asn Gly Thr Phe Leu Pro Ala Ile Gly Glu Ile Asp Glu Leu Asp Pro
          805 810 815
Gln Ala Val Lys Arg Val Val Met Cys Ser Gly Lys Val Tyr Tyr Asp
           825 830
        820
Leu Leu Glu Gln Arg Arg Lys Asn Asp Gln Lys Asp Val Ala Ile Val
                   840
                                  845
Arg Ile Glu Gln Leu Tyr Pro Phe Pro His Gln Ala Met Gln Glu Val
                855
                               860
Leu Lys Gln Tyr Ala His Val His Asp Phe Val Trp Cys Gln Glu Glu
865 870 875
Pro Leu Asn Gln Gly Ala Trp Tyr Cys Ser Gln His His Phe Arg Glu
                             895
         885
                         890
Val Ile Pro Phe Gly Ser Ala Leu Arg Tyr Ala Gly Arg Pro Ala Ser
              905
        900
                          910
Ala Ser Pro Ala Val Gly Tyr Met Ser Val His Gln Lys Gln Gln Gln
                   920
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Asp Leu Val Asn Asp Ala Leu Asn Val Asp 930 935

<210> 8897 <211> 398 <212> PRT

<213> Enterobacter cloacae

<400> 8897

Arg Leu Pro Glu Gly Trp Ile Glu His Met Asn Leu His Glu Tyr Gln 10 Ala Lys Gln Leu Phe Ala Arg Tyr Gly Leu Pro Ala Pro Val Gly Tyr 20 30 Ala Cys Thr Thr Pro Arg Glu Ala Glu Glu Ala Ala Ser Lys Ile Gly 35 40 4.5 Ala Gly Pro Trp Val Val Lys Cys Gln Val His Ala Gly Gly Arg Gly 50 55 60 Lys Ala Gly Gly Val Lys Val Lys Ser Lys Glu Glu Ile Arg Ala 70 75 Phe Ala Glu His Trp Leu Gly Lys Arg Leu Val Thr Tyr Gln Thr Asp 85 90 95 Ala Asn Gly Gln Pro Val Asn Gln Ile Leu Val Glu Ala Ala Thr Asp 100 105 110 Ile Ala Lys Glu Leu Tyr Leu Gly Ala Val Val Asp Arg Ser Ser Arg 115 120 125 Arg Val Val Phe Met Ala Ser Thr Glu Gly Gly Val Glu Ile Glu Lys 130 135 140 Val Ala Glu Glu Thr Pro His Leu Ile His Lys Val Ala Ile Asp Pro 145 150 155 Leu Ala Gly Pro Met Pro Tyr Gln Gly Arg Glu Leu Ala Phe Lys Leu 165 170 175 Gly Leu Glu Gly Lys Leu Val Gln Gln Phe Thr Lys Ile Phe Met Gly 180 185 190 Leu Ala Thr Ile Phe Leu Glu Arg Asp Leu Ala Leu Ile Glu Ile Asn 195 200 205 Pro Leu Val Ile Thr Thr Gln Gly Asp Leu Ile Cys Leu Asp Gly Lys 210 215 220 Leu Gly Ala Asp Gly Asn Ala Leu Phe Arg Gln Ser Asp Leu Arg Glu 225 230 235 Met Arg Asp Gln Ser Gln Glu Asp Pro Arg Glu Ala Gln Ala Ala Gln 245 250 Trp Glu Leu Asn Tyr Val Ala Leu Asp Gly Asn Ile Gly Cys Met Val 260 265 270 Asn Gly Ala Gly Leu Ala Met Gly Thr Met Asp Ile Val Lys Leu His 275 280 285 Gly Gly Glu Pro Ala Asn Phe Leu Asp Val Gly Gly Gly Ala Thr Lys 290 295 300 Glu Arg Val Thr Glu Ala Phe Lys Ile Ile Leu Ser Asp Ser Asn Val 305 310 315 320 Lys Ala Val Leu Val Asn Ile Phe Gly Gly Ile Val Arg Cys Asp Leu 325 330 335 Ile Ala Asp Gly Ile Ile Gly Ala Val Glu Glu Val Gly Val Asn Val 345 Pro Val Val Val Arg Leu Glu Gly Asn Asn Ala Glu Leu Gly Ala Lys 365 360 Lys Leu Ala Asp Ser Gly Leu Asn Ile Ile Ala Ala Lys Ser Leu Thr 375 380 Asp Ala Ala Gln Gln Val Val Ala Ala Val Glu Gly Lys

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<211> 643
<212> PRT
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<213> Enterobacter cloacae

<400> 8898 Gly Arg Ile Phe Met Asn Leu Thr Thr Leu Thr Asp Pro Arg Ala Val Cys Val Gln Ala Gln Phe Thr Ser Arg Asp Glu Ala Ile Arg Gln Leu 20 25 Ala Thr Arg Leu Val Ala Leu Gly Lys Ile Ala Asp Ala Asp Thr Phe 35 40 45 Leu Ala Glu Val Phe His Arg Glu Ser Leu Gly Pro Thr Ala Leu Gly 55 60 Glu Gly Leu Ala Val Pro His Gly Lys Ser Ala Ala Val Lys Glu Ala 75 70 Ala Phe Ala Val Ala Thr Leu Cys Glu Pro Leu Ala Trp Glu Gly Val 8.5 90 95 Asp Gly Pro Glu Glu Val Glu Leu Ile Phe Leu Leu Ala Ile Pro Pro 100 105 110 Ala Gln Ala Gly Ser Thr His Ile Gln Val Leu Thr Glu Leu Thr Ser 115 120 125 Arg Leu Ala Asp Asp Asp Leu Arg Gly Arg Val Met Thr Ala Thr Ser 130 135 140 Ala Glu Ala Val Leu Ala Ala Leu Glu Thr Ala Pro Asp Ala Gln Glu 145 150 155 160 Thr Ala Val Ala Glu Asn Ala Pro Thr Ile Val Cys Val Thr Ala Cys 165 170 175 Pro Ala Gly Ile Ala His Thr Tyr Met Ala Ala Glu Tyr Leu Glu Lys 180 185 Ala Gly Arg Lys Leu Gly Val Asn Val Val Val Glu Lys Gln Gly Ala 195 200 205 Asn Gly Ile Glu Gly Arg Ile Thr Ala Gln Gln Leu Gln Glu Ala Lys 210 215 220 Ala Cys Ile Phe Ala Ala Glu Val Ala Ile Lys Glu Arg Glu Arg Phe 230 235 Gln Gly Ile Pro Ala Ile Ser Val Pro Val Ala Glu Pro Leu Arg His 245 250 Ala Glu Ala Leu Ile Glu Arg Ala Leu Ala Leu Gln Pro Val Ser Asp 260 265 270 Ala Arg Pro Ala His Val Asp Thr Asp Ala Lys Lys Cys Val Lys Thr 275 280 285 Glu Leu Lys Gln Ala Leu Leu Ser Gly Ile Ser Phe Ala Val Pro Leu 290 295 300 Ile Val Ala Gly Gly Thr Val Leu Ala Val Ser Val Leu Leu Ala Gln 305 310 315 320 Ile Leu Gly Leu Gln His Leu Phe Asp Gln Glu Asn Ser Trp Leu Trp 325 330 335 Met Tyr Arg Lys Leu Gly Gly Gly Met Leu Gly Ile Leu Met Val Pro 340 345 350 Val Leu Ala Ala Tyr Thr Ala Tyr Ser Leu Ala Asp Lys Pro Ala Leu 360 365 Thr Pro Gly Phe Ala Ala Gly Leu Ala Ala Asn Met Ile Gly Ser Gly 375 380 Phe Leu Gly Ala Ile Val Gly Gly Leu Ile Ala Gly Tyr Leu Met Arg 390 395 Trp Val Lys Asn His Ile Arg Leu Ser Ser Arg Tyr Asn Gly Phe Leu 405 410 415 Thr Phe Tyr Leu Tyr Pro Val Ile Gly Val Leu Gly Ala Gly Ser Leu 420 425 430 Met Leu Phe Val Ile Gly Glu Pro Val Ala Trp Ile Asn Asn Ala Leu 440

Thr Ala Trp Leu Asn Gly Leu Ser Gly Ala Asn Ala Leu Leu Gly 450 455 Ala Ile Leu Gly Phe Met Cys Ser Phe Asp Leu Gly Gly Pro Val Asn 470 475 Lys Ala Ser Tyr Ala Phe Cys Leu Gly Ala Met Ala Asn Gly Val Tyr 485 490 495 Gly Pro Tyr Ala Ile Phe Ala Ser Val Lys Met Val Ser Ala Phe Thr 505 510 Val Thr Ala Ser Thr Met Leu Ala Pro Asn Leu Phe Lys Gln Phe Glu 515 520 525 Ile Glu Thr Gly Lys Ser Thr Trp Leu Leu Gly Leu Ala Gly Ile Thr 530 535 540 Glu Gly Ala Ile Pro Met Ala Ile Glu Asp Pro Leu Arg Val Ile Gly 550 555 Ser Phe Val Leu Gly Ser Met Ala Thr Gly Ala Ile Val Gly Ala Met 565 570 575 Gly Ile Gly Leu Ser Thr Pro Gly Ala Gly Ile Phe Ser Leu Phe Leu 580 585 590 Leu His Asp Ala Gly Leu Gly Gly Val Met Ala Ala Ala Gly Trp Phe 595 600 605 Gly Ala Ala Leu Ile Gly Ala Ala Ile Ser Thr Leu Ile Leu Leu Leu 610 615 620 Trp Arg Arg Gln Ala Val Lys Ser Gly Ala Tyr Val Thr Glu Asp Ile 625 630 635 Thr Ser

<210> 8899 <211> 565 <212> PRT

<213> Enterobacter cloacae

<400> 8899 Cys Gly Gly Ile Leu Met Ala Ala Gln Ala Phe Leu Leu Ile Ala Ser 10 15 Phe Leu Leu Val Leu Phe Val Phe Ala Arg Pro Leu Gly Thr Ala Leu 20 25 Ala Arg Leu Ile Asn Asn Val Pro Leu Pro Gly Thr Arg Asn Ile Glu 35 40 45 Asn Val Leu Trp Arg Ile Ser Gly Ile Ser Asp Arg Glu Met Asn Trp 50 55 Arg Gln Tyr Leu Met Ala Ile Leu Leu Leu Asn Ile Val Gly Leu Ile 70 75 Ala Leu Phe Thr Leu Leu Met Leu Gln Gly Ser Leu Pro Leu Asn Pro 90 95 Gln Gln Leu Pro Gly Leu Ser Trp His Leu Ala Leu Asn Thr Ala Val 105 110 100 Ser Phe Val Thr Asn Thr Asn Trp Gln Ser Tyr Ala Gly Glu Thr Thr 115 120 125 Leu Ser Tyr Phe Ser Gln Met Ala Gly Leu Thr Val Gln Asn Phe Leu 130 135 140 Ser Ala Ala Ser Gly Ile Ala Val Ile Phe Ala Leu Thr Arg Ala Phe 145 150 155 Ala Arg Gln Asn Val Ser Thr Leu Gly Asn Ala Trp Val Asp Val Thr 165 170 175 Arg Ile Thr Leu Trp Ile Leu Val Pro Val Ala Leu Ile Ile Ala Leu 190 180 185 Phe Phe Ile Gln Gln Gly Thr Leu Gln Asn Leu Leu Pro Tyr Thr Pro 200 Phe Thr Ser Leu Glu Gly Ala Arg Glu Leu Leu Pro Met Gly Pro Val

```
Ala Ser Gln Glu Ala Ile Lys Met Leu Gly Thr Asn Gly Gly Gly Phe
225
      230
                              235
Phe Asn Ala Asn Ser Ser His Pro Phe Glu Asn Pro Thr Ala Leu Thr
            245 250
Asn Phe Val Gln Met Leu Ala Ile Phe Leu Ile Pro Thr Ala Leu Cys
                      265
         260
Phe Ala Phe Gly Asp Val Val Asn Asp Arg Arg Gln Gly Arg Thr Leu
          280 285
Leu Trp Ala Met Ser Leu Ile Phe Val Val Cys Val Ala Leu Val Met
 290 295 300
Trp Ala Glu Trp Tyr Gly Asn Ser His Phe Met Gln Leu Gly Ala Asn
305 310 315 320
Ser Asn Ile Asn Leu Glu Gly Lys Glu Ser Arg Phe Gly Ile Leu Ala
       325 330 335
Ser Ser Leu Tyr Ala Val Val Thr Thr Ala Ala Ser Cys Gly Ala Val
      340 345 350
Asn Ala Met His Asp Ser Phe Thr Ala Leu Gly Gly Met Ile Pro Met
 355 360 365
Trp Leu Met Gln Ile Gly Glu Val Val Phe Gly Gly Val Gly Ser Gly
370 375 380
Leu Tyr Gly Met Leu Leu Phe Val Leu Leu Ala Val Phe Ile Ala Gly 385 390 395 400
Leu Met Ile Gly Arg Thr Pro Glu Tyr Leu Gly Lys Lys Ile Asp Val
 405 410 415
Arg Glu Met Lys Leu Thr Ala Leu Ala Ile Leu Val Thr Pro Ala Leu
 420 425 430
Val Leu Leu Gly Thr Ala Leu Ala Leu Met Thr Asp Val Gly Arg Ser
 435 440
                                  445
Gly Ile Phe Asn Pro Gly Ile His Gly Phe Ser Glu Val Leu Tyr Ala
450 455
                                 460
Val Ser Ser Ala Ala Asn Asn Gly Ser Ala Phe Ala Gly Leu Ser
465 470 475
Ala Asn Ser Pro Phe Trp Asn Cys Leu Leu Ala Phe Cys Met Phe Val
         485 490 495
Gly Arg Phe Gly Val Ile Ile Pro Val Met Ala Ile Ala Gly Thr Leu 500 \hspace{1.5cm} 505 \hspace{1.5cm} 510
Val Asn Lys Lys Ile Gln Pro Thr Thr Thr Gly Thr Leu Pro Thr His
   515 520
                                    525
Gly Ala Leu Phe Val Gly Leu Leu Ile Gly Thr Val Leu Leu Val Gly
 530 535 540
Ala Leu Thr Phe Ile Pro Ala Leu Ala Leu Gly Pro Val Ala Glu Tyr
              550
                             555
                                              560
Leu Ser Leu Arq
<210> 8900
<211> 689
<212> PRT
<213> Enterobacter cloacae
<400> 8900
Phe Cys Gly Glu Phe Phe Met Ser Arg Lys Gln Leu Ala Leu Leu Glu
                           10
Pro Thr Leu Val Arg Gln Ala Leu Met Asp Ala Val Lys Lys Leu Ser
                     25
                                       30
Pro Arg Val Gln Trp His Asn Pro Val Met Phe Ile Val Trp Thr Gly
                 40
```

Ser Leu Leu Thr Thr Val Leu Ala Ile Ala Met Gly Thr Gly His Leu

Leu Gly Asn Ala Thr Phe Thr Gly Ala Ile Ser Leu Trp Leu Trp Phe

60

7.5

Thr Val Leu Phe Ala Asn Phe Ala Glu Ala Leu Ala Glu Gly Arg Ser 85 Lys Ala Gln Ala Asn Ser Leu Lys Gly Val Lys Lys Thr Ala Phe Ala 100 105 Arg Lys Leu Arg Glu Pro Lys Tyr Gly Ala His Met Asp His Val Pro 120 115 125 Ala Asp Glu Leu Arg Lys Gly Asp Val Val Leu Val Glu Ala Gly Asp 135 140 Ile Ile Pro Cys Asp Gly Glu Val Ile Glu Gly Gly Ala Ser Val Asp 150 155 Glu Ser Ala Ile Thr Gly Glu Ser Ala Pro Val Ile Arg Glu Ser Gly 165 170 175 Gly Asp Phe Ala Ser Val Thr Gly Gly Thr Arg Ile Leu Ser Asp Trp 180 185 190 Leu Val Ile Gln Cys Ser Val Asn Pro Gly Glu Thr Phe Leu Asp Arg 195 200 205 Met Ile Ala Met Val Glu Gly Ala Gln Arg Arg Lys Thr Pro Asn Glu 210 215 220 Ile Ala Leu Thr Ile Leu Leu Val Ala Leu Thr Ile Val Phe Leu Leu 225 230 235 240 Ala Thr Ala Thr Leu Trp Pro Phe Ser Ala Tyr Gly Gly Thr Ala Val 245 250 255 Ser Ile Thr Val Leu Ile Ala Leu Leu Val Cys Leu Ile Pro Thr Thr 260 265 270 Ile Gly Gly Leu Leu Ser Ala Ile Gly Val Ala Gly Met Ser Arg Met 275 280 285 Leu Gly Ala Asn Val Ile Ala Thr Ser Gly Arg Ala Val Glu Ala Ala 290 295 300 Gly Asp Val Asp Val Leu Leu Leu Asp Lys Thr Gly Thr Ile Thr Leu 305 310 315 Gly Asn Arg Gln Ala Ser Asp Phe Leu Pro Ala Pro Gly Val Asp Glu 325 330 335 Lys Thr Leu Ala Asp Ala Ala Gln Leu Ser Ser Leu Ala Asp Glu Thr \$340\$Pro Glu Gly Arg Ser Ile Val Ile Leu Ala Lys Gln Arg Phe Asn Leu 355 360 365 Arg Gln Arg Asp Val Gln Ser Leu His Ala Thr Phe Val Pro Phe Thr 375 380 Ala Gln Thr Arg Met Ser Gly Ile Asn Ile Gln Asp Arg Met Ile Arg 390 395 Lys Gly Ser Val Asp Ala Ile Arg Arg His Ile Glu Ala Asn Asn Gly
405 410 415 His Phe Pro Pro Glu Val Asp His Leu Val Glu Ser Val Ala Arg Gln 420 425 430 Gly Ala Thr Pro Leu Val Val Ala Glu Gly Ala Ser Val Leu Gly Val 440 445 Ile Ala Leu Lys Asp Ile Val Lys Gly Gly Ile Lys Glu Arg Phe Ala 455 460 Gln Met Arg Lys Met Gly Ile Lys Thr Val Met Ile Thr Gly Asp Asn 465 470 475 Arg Leu Thr Ala Ala Ala Ile Ala Ala Glu Ala Gly Val Asp Asp Phe 485 490 495 Leu Ser Glu Ala Thr Pro Glu Ala Lys Leu Ala Leu Ile Arg Gln Tyr 500 505 510 Gln Ala Glu Gly Arg Leu Val Ala Met Thr Gly Asp Gly Thr Asn Asp 515 520 525 Ala Pro Ala Leu Ala Gln Ala Asp Val Ala Val Ala Met Asn Ser Gly 535 540 Thr Gln Ala Ala Lys Glu Ala Gly Asn Met Val Asp Leu Asp Ser Asn 555 550 Pro Thr Lys Leu Ile Glu Val Val His Ile Gly Lys Gln Met Leu Met

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565
                            570
Thr Arg Gly Ser Leu Thr Thr Phe Ser Ile Ala Asn Asp Val Ala Lys
         580
                 585 590
Tyr Phe Ala Ile Ile Pro Ala Ala Phe Ala Ala Thr Tyr Pro Gln Leu
    595 600 605
Asn Ala Leu Asn Val Met His Leu His Ser Pro Ala Ser Ala Ile Leu
 610 615 620
Ser Ala Val Ile Phe Asn Ala Leu Ile Ile Val Phe Leu Ile Pro Leu
625 630 635 640
Ala Leu Lys Gly Val Ser Tyr Lys Ala Leu Thr Ala Ala Ala Met Leu
         645 650 655
Arg Arg Asn Leu Trp Ile Tyr Gly Leu Gly Gly Leu Val Val Pro Phe
       660 665 670
Ile Gly Ile Lys Val Ile Asp Met Leu Leu Thr Leu Phe Gly Leu Val
                     680
<210> 8901
<211> 196
<212> PRT
<213> Enterobacter cloacae
<400> 8901
Lys Val Asp Pro Met Thr Met Leu Arg Pro Ala Ile Leu Leu Phe Ile
                            10
Leu Leu Ser Leu Ile Thr Gly Gly Leu Tyr Pro Leu Met Thr Thr Ala
                    25
                                 30
Leu Gly Gln Trp Trp Phe Gln Asp Gln Ala Asn Gly Ser Leu Ile Ile
          4.0
                                    4.5
Gln Asn Gly Glu Asn Arg Gly Ser Arg Leu Ile Gly Gln Asn Phe Thr
                                 60
Asp Pro Arg Tyr Phe Gln Gly Arg Pro Ser Ala Thr Ala Glu Ser Pro
             70
                               75
Tyr Asn Pro Met Ala Ser Gly Gly Ser Asn Leu Ala Gly Ser Asn Pro
           85 90 95
Asp Leu Asp Lys Ala Ile Ala Giu Arg Val Ala Ala Leu Arg Ala Ala
    100 105 110
Asn Pro Gln Ala Ser Arg Glu Val Pro Val Glu Leu Val Thr Ala Ser
    115 120
Ala Ser Gly Leu Asp Tyr Ser Leu Thr Pro Asp Ala Val Val Trp Gln
                135
                                   140
Ile Pro Arg Val Ala Ala Ala Arg Gln Leu Thr Val Glu Gln Val Ser
               150
                               155
Gln Leu Val Ala Glu His Thr Gln Lys Pro Leu Val Ser Phe Ile Gly
            165 170 175
Met Pro Val Val Asn Ile Val Glu Leu Asn Leu Ala Leu Asp Ala Leu
                         185
Arg Lys Asn
     195
<210> 8902
<211> 896
<212> PRT
<213> Enterobacter cloacae
<400> 8902
Met Thr Asp Glu Pro Met Arg Pro Asp Pro Asp Arg Leu Leu Glu Gln
         5
                            10
Thr Ala Glu Ala His Arg Gly Lys Leu Lys Ile Phe Phe Gly Ala Cys
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Ala Gly Val Gly Lys Thr Phe Ala Met Leu Thr Glu Ala Gln Arg Leu Arg Ala Gln Gly Leu Asp Ile Leu Ile Gly Val Val Glu Thr His Gly 60 Arg Lys Glu Thr Ala Ala Leu Leu Thr Gly Leu Ala Thr Gln Pro Pro 70 75 Gln Arg Ile Ser His Arg Gly Arg Leu Val Thr Glu Phe Asp Leu Asp 85 90 Ala Ala Leu Ala Arg Arg Pro Ala Leu Ile Leu Met Asp Glu Leu Ala 100 105 110 His Ser Asn Ala Pro Gly Ser Arg His Pro Lys Arg Trp Gln Asp Val 115 120 125 Glu Glu Leu Leu Glu Ala Gly Ile Asp Val Phe Thr Thr Val Asn Val 130 135 140 Gln His Leu Glu Ser Leu Asn Asp Val Val Ser Gly Val Thr Gly Ile 150 155 Gln Val Arg Glu Thr Val Pro Asp Pro Phe Phe Asp Ser Ala Asp Glu 165 170 175 Val Val Leu Val Asp Leu Pro Pro Asp Asp Leu Arg Gln Arg Leu His 180 185 190 Glu Gly Lys Val Tyr Ile Ala Gly Gln Ala Glu Arg Ala Ile Glu His 195 200 205 Phe Phe Arg Lys Gly Asn Leu Ile Ala Leu Arg Glu Leu Ala Leu Arg 210 215 220 Arg Thr Ala Asp Arg Val Asp Asp Gln Met Arg Ala Trp Arg Asp Leu 225 230 235 Gln Gly Gln Glu Arg Val Trp His Thr Arg Asp Ala Ile Leu Leu Cys 245 250 255 Ile Gly His Gly Ser Gly Asn Glu Lys Leu Val Arg Thr Ala Ala Arg 260 265 270 Leu Ala Ala Lys Phe Gly Ser Val Trp His Ala Val Tyr Val Glu Thr 275 280 285 Pro Gln Leu His Gly Leu Pro Glu Asn Gln Arg Arg Ala Ile Leu Ser 295 300 Ala Leu Arg Leu Ala Gln Glu Leu Gly Ala Glu Thr Ala Thr Leu Ser 305 310 315 Asp Pro Gln Glu Asp Lys Ala Ile Leu Arg Tyr Ala Arg Glu His Asn 325 330 335 Leu Gly Lys Ile Val Ile Gly Arg Arg Gln His Arg Arg Trp Phe Ser 340 345 350 Arg Glu Ser Phe Ala Asp Arg Leu Ala Arg Arg Ala Pro Asp Leu Asp 355 360 365 Leu Val Ile Val Ala Leu Asp Asp Lys Pro Ala Pro Leu Pro Asn Arg 375 380 Thr Pro Asp Ala Arg Thr Phe Gly Asp Lys Trp Arg Ile Gln Ile Arg 390 395 Gly Cys Met Val Ala Val Val Leu Cys Ala Leu Ile Thr Val Ile Ala 405 410 Ser Gln Trp Leu Ile Ala Phe Asp Ala Ala Asn Leu Val Met Ile Tyr 420 425 430 Leu Leu Gly Val Val Val Ala Leu Phe Tyr Gly Arg Trp Pro Ser 435 440 445 Val Leu Ala Thr Val Ile Asn Val Ile Ser Phe Asp Leu Phe Phe Ile 450 455 460 Ala Pro Arg Gly Thr Leu Ala Val Ser Asp Val Gln Tyr Ile Leu Thr 470 475 Phe Ala Val Met Leu Thr Val Gly Leu Val Ile Gly Asn Leu Thr Ala 485 490 Gly Val Arg Tyr Gln Ala Arg Ile Ala Arg Tyr Arg Glu Gln Arg Thr 500 505 Arg His Leu Tyr Glu Met Ser Lys Ser Leu Ala Val Gly Arg Thr Gln

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Arg Asp Ile Val Gln Thr Ser Glu Gln Phe Ile Arg Ser Thr Phe His
               535
                              540
Ala Ser Asn Leu Ile Leu Leu Pro Asp Glu Gln Gly Arg Leu Arg Pro
           550
                    555
Leu Thr Ser Pro Ser Gly Met Thr Pro Trp Asp Glu Ala Ile Ala Arg
          565
               570 575
Trp Ser Phe Asp Lys Gly Leu Pro Ala Gly Ala Gly Thr Asp Thr Leu
       580 585 590
Pro Gly Val Pro Tyr Gln Ile Leu Pro Leu Arg Ser Ala Asp Lys Asn
     595
         600 605
His Gly Leu Val Ile Val Glu Pro Ser Asn Leu Arg Gln Leu Met Ile
 610 615 620
Pro Glu Gln Gln Arg Leu Leu Glu Thr Phe Thr Leu Leu Val Ala Ser
625 630 635
Ala Leu Glu Arg Leu Ala Leu Thr Ala Ser Glu Glu GIn Ala Arg Leu
        645 650 655
Ala Ser Glu Arg Glu Ser Ile Arg Asn Ser Leu Leu Ala Ala Leu Ser
  660 665 670
His Asp Leu Arg Thr Pro Leu Thr Val Leu Phe Gly Gln Ser Glu Ile
675 680 685
Leu Thr Leu Asp Leu Ala Ala Glu Gly Ser Lys His Ala Met Gln Ala
690 695
Ser Glu Ile Arg Gln His Val Leu Asn Thr Thr Arg Leu Val Asn Asn
                           715
705 710
Leu Leu Asp Met Ala Arg Ile Gln Ser Gly Gly Phe Asn Leu Lys Lys
          725 730
                                      735
Glu Trp Leu Thr Leu Glu Glu Val Val Gly Ser Ala Leu Lys Met Leu
       740 745 750
Glu Pro Gly Leu Gly Gly Arg His Ile Glu Leu Asp Met Pro Glu Pro
755 760
                                 765
Leu Thr Leu Ile His Val Asp Gly Pro Leu Phe Glu Arg Val Leu Ile
770 775
                              780
Asn Leu Leu Glu Asn Ala Ala Lys Tyr Ala Gly Ala Lys Ala Arg Leu
785 790
                            795
Gly Ile Ala Ala Arg Val Asp Lys Arg Val Leu Arg Leu Asp Val Trp
          805 810 815
Asp Thr Gly Pro Gly Ile Pro Ala Gly Gln Glu Arg Ala Ile Phe Glu
       820 825
Lys Phe Ala Arg Gly Asn Lys Glu Ser Ala Ile Pro Gly Val Gly Leu
 835 840
Gly Leu Ala Ile Cys Gln Ala Ile Val Asp Val His Gly Gly Thr Ile
 850 855
Ser Ala Glu Asn Arg Pro Glu Gly Gly Ala Arg Phe Cys Val Thr Leu
865 870
                            875
Pro Leu Glu Ser Pro Pro Glu Leu Asp Glu Leu Pro Glu Asp Leu
           885
                         890
```

<210> 8903 <211> 65 <212> PRT

<213> Enterobacter cloacae

<400> 8903

Asn Asp Arg Leu Leu Val Ile Cys Phe Thr Val Asn Pro Phe Ser Leu Asp Lys Met Thr Met Leu Ser Ile Thr Glu Arg Lys Leu Asn Met Glu 20 25 Asn Asn Asn Arg Leu Met Pro His Ile Arg Arg Thr Thr His Ile Met 4.0

Met Phe Ala His Arg Asn Cys Phe Asp Phe His Leu Phe Asn Ala Arg

55

60

65

<210> 8904

<211> 738 <212> PRT

<213> Enterobacter cloacae

<400> 8904

Asn Lys Glu Ile Lys Met Lys Thr Leu Lys Ile Ala Val Ser Arg Ala 1 5 10 15 Cys Pro Glu Cys Phe Thr Thr Ser Arg Asp Ile Val Asp Ile Thr Ala

20 25 30 Ser Asp Tyr Ile Asp Val Ala Ala Val Val Leu Ala Val Ser Asp Ile

ser asp Tyr lie asp val ala ala val val beu ala val ser asp lie 35 40 45

Phe Asn Gly Ala Ile Glu Glu Ile Glu Ala Thr Gly Phe Gly Ile Pro 50 55 60

Val Phe Ile Ala Thr His Lys Glu Glu Arg Val Pro Ala Glu Phe Leu 65 70 75 Ser Arg Ile His Gly Val Phe Glu Tyr Ser Asp Thr Ser Asn Ala Tyr

85 90 95

Tyr Gly Arg Gin Leu Glu Ala Ala Ala Gin Lys Tyr Glu Thr Gln Leu 100 105 110 Arg Pro Pro Phe Phe Arg Ala Leu Val Asp Tyr Val Gln Gln Gly Asp

115 120 125 Ser Ala Phe Asp Cys Pro Gly His Gln Gly Gly Gln Phe Phe Arg Arg

130 135 140 His Pro Ala Gly Asn Gln Phe Val Asp Phe Phe Gly Glu Thr Leu Phe

145 150 150 155 160 Arg Ala Asp Leu Cys Asn Ala Asp Val Ala Met Gly Asp Leu Leu Ile

165 170 175 His Glu Gly Ala Pro Cys Ile Ala Gln Gln His Ala Ala Lys Val Tyr

Asn Ala Asp Lys Thr Tyr Phe Val Leu Asn Gly Thr Ser Ser Ser Asn

Lys Val Val Leu Asn Ala Leu Leu Thr Pro Gly Asp Leu Val Leu Phe $\,$

210 215 220
Asp Arg Asn Asn His Lys Ser Asn His His Gly Ala Leu Leu Gln Ala

225 230 235 240 Gly Ala Thr Pro Val Tyr Leu Glu Thr Ala Arg Asn Pro Tyr Gly Phe

245 250 Ile Gly Ile Asp Ala His Cys Phe Asp Glu Ser Tyr Leu Arg Glu

260 265 270
Leu Val Ser Glu Val Ala Pro Gly Arg Ala Arg Asp Glu Arg Pro Phe

275 280 285 Arg Leu Ala Val Ile Gln Leu Gly Thr Tyr Asp Gly Thr Ile Tyr Asn

290 295 300 Ala Arg Gln Val Val Asp Lys Ile Gly His Leu Cys Asp Tyr Ile Leu

305 310 315 320 Phe Asp Ser Ala Trp Val Gly Tyr Glu Gin Phe Ile Pro Met Met Ala 325 330 335

325 335 Asp Cys Ser Pro Leu Leu Leu Glu Leu Asn Glu Asn Asp Pro Gly Ile 340 345 350

340 345 350 Leu Val Thr Gln Ser Val His Lys Gln Gln Ala Gly Phe Ser Gln Thr 355 360 365

Ser Gln Ile His Lys Lys Asp Ser His Ile Lys Gly Gln Ala Arg Tyr 370 375 380

Val Pro His Lys Arg Leu Asn Asn Ala Phe Met Met His Ala Ser Thr 385 390 395 400

Ser Pro Phe Tyr Pro Leu Phe Ala Ala Leu Asp Ile Asn Ala Arg Met

(3)

```
405
                         410
His Glu Gly Gln Ser Gly Arg Asn Met Trp Met Asp Cys Val Val Thr
        420
                    425
Gly Ile Glu Ala Arg Lys Leu Ile Leu Gln Asn Cys Gln Phe Ile Arg
     435
                440
                                 445
Pro Phe Val Pro Glu Thr Val Asp Gly Arg Pro Trp Glu Ser Trp Asp
         455
                       460
Thr Ala Glu Ile Ala Thr Asp Leu Arg Phe Phe His Phe Val Pro Gly
      470
                  475 480
Glu Arg Trp His Ala Phe Glu Gly Tyr Ala Glu His Gln Tyr Phe Ile
          485 490
Asp Pro Cys Lys Leu Leu Thr Thr Pro Gly Ile Asn Ala Arg Thr
       500
           505 510
Gly Glu Tyr Asp Asp Phe Gly Val Pro Ala Thr Ile Leu Ala Asn Phe
   515 520 525
Leu Arg Glu Asn Gly Ile Val Pro Glu Lys Cys Asp Leu Asn Ser Ile
530 535 540
Leu Phe Leu Leu Thr Pro Ala Glu Asp Met Gly Lys Leu Gln Gln Leu
545 550 555
Val Ala Gln Leu Val Arg Phe Glu Lys Leu Leu Gln Ser Asp Val Pro
        565 570 575
Leu Lys Glu Val Leu Pro Ser Leu Tyr Lys Gln His Pro Glu Arg Tyr
   580 585 590
Ala Asp Tyr Thr Leu Arg Glr. Ile Cys Gln Glu Met His Asp Leu Tyr
595 600 605
Ala Arg His Asn Val Lys Gln Leu Gln Lys Glu Met Phe Arg Arg Ser
610 615 620
His Phe Pro Arg Val Met Met Asn Pro Gln Glu Ala Asn Tyr Ala Tyr
625 630 635
Leu Arg Gly Glu Val Glu Leu Val Ser Leu Arg Asp Ala Glu Gly Arg
          645 650
Ile Ala Ala Glu Gly Ala Leu Pro Tyr Pro Pro Gly Val Leu Cys Val
     660 665 670
Val Pro Gly Glu Val Trp Gly Gly Ser Val Leu Arg Tyr Phe Ala Ala
675 680 685
Leu Glu Asp Gly Ile Asn Leu Leu Pro Gly Phe Ala Pro Glu Leu Gln
 690 695 700
Gly Val Tyr Val Glu Glu Cys Asp Gly Arg Lys Gln Val Arg Cys Tyr
705 710 715
Val Ile Lys Gln Pro Ala Ala Gln Pro Ser Leu Leu Lys Gly Glu Lys
                         730
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<210> 8905
<211> 250
<212> PRT
<213> Enterobacter cloacae
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<400> 8905

Leu

Lys Glu Glu Arg Val Asn Tyr Asp Ile Tyr Gln Leu Thr Gly Phe Tyr

Glu Lys Leu Ala Asp Arg Asn Val Asp Thr His Ser Asp Val Ser Val 100 105 110 Phe Glu Val Val Lys Ala Asp Glu Arg Leu Ala Thr Lys Leu Ala Leu 115 120 125 Asn Pro Asp Asp Lys Val Trp His Val Lys Arg Val Arg Phe Ile Arg 135 140 Glu Lys Pro Val Asn Leu Glu Glu Thr Trp Met Pro Leu Ala Met Phe 150 155 160 Pro Asp Leu Thr Trp Glu Val Met Glu Gln Ser Lys Tyr His Tyr Ile 165 170 175 Glu Gln Ile Lys Lys Met Val Ile Asp Arg Ser Glu Gln Glu Leu Val 180 185 190 Pro Val Met Pro Ser Asp Glu Ala Ile Ala Ala Leu Ala Leu Asp Pro 195 200 205 Ala Lys Pro Ile Leu Glu Lys Val Ser Arg Gly Phe Leu Lys Asp Gly 210 215 220 Arg Val Phe Glu Tyr Ser Arg Asn Val Phe Asn Ser Asp Asp Tyr Lys 225 230 235 Phe Thr Leu Val Ala Lys Arg Arg Gln

<211> 407 <212> PRT <213> Enterobacter cloacae

<210> 8906

<400> 8906 Lys Ala Arg Ser Val Arg Met Leu Leu Ile Ser Val Arg Trp Val Pro 1.0 Lys Gly Tyr Ser Pro Phe Asp Pro Gly Phe Thr Ser Thr Ala Ser Cys Glu Ser Lys Ile Thr Tyr Ile Asp Gly Asp Glu Gly Ile Leu Leu His 40 4.5 Arg Gly Phe Pro Ile Asp Gln Leu Ala Thr Glu Ser Asn Tyr Leu Glu 5.5 60 Val Cys Tyr Ile Leu Leu Asn Gly Glu Lys Pro Thr Gln Ala Gln Tyr 65 70 75 Asp Glu Phe Lys Thr Thr Val Thr Arg His Thr Met Ile His Glu Gln 85 90 Ile Thr Arg Leu Phe His Ala Phe Arg Arg Asp Ser His Pro Met Ala 100 105 110 Val Met Cys Gly Ile Thr Gly Ala Leu Ala Ala Phe Tyr His Asp Ser 115 120 125 Leu Asp Val Asn Asn Pro Arg His Arg Asp Ile Ala Ala Phe Arg Leu 130 135 140 Leu Ser Lys Met Pro Thr Met Ala Ala Met Cys Tyr Lys Tyr Ser Ile 145 150 155 Gly Gln Pro Phe Val Tyr Pro Arg Asn Asp Leu Ser Tyr Ala Gly Asn 165 170 Phe Leu Arg Met Met Phe Ser Thr Pro Cys Glu Glu Tyr Glu Val Asn 180 185 Pro Val Leu Glu Arg Ala Met Asp Arg Ile Leu Ile Leu His Ala Asp 195 200 205 His Glu Gln Asn Ala Ser Thr Ser Thr Val Arg Thr Ala Gly Ser Ser 215 220 Gly Ala Asn Pro Phe Ala Cys Ile Ala Ala Gly Ile Ala Ser Leu Trp 225 230 235 Gly Pro Ala His Gly Gly Ala Asn Glu Ala Ala Leu Lys Met Leu Glu 245 250 Glu Ile Ser Ser Val Glu His Ile Pro Glu Phe Val Arg Arg Ala Lys

```
265
Asp Lys Asn Asp Ser Phe Arg Leu Met Gly Phe Gly His Arg Val Tyr
   275
             280
                                     285
Lys Asn Tyr Asp Pro Arg Ala Thr Val Met Arg Glu Thr Cys His Glu
       295
                        300
Val Leu Lys Glu Leu Gly Thr Lys Asp Asp Leu Leu Glu Val Ala Met
305 310 315
Glu Leu Glu His Ile Ala Leu Asn Asp Pro Tyr Phe Ile Glu Lys Lys
       325 330 335
Leu Tyr Pro Asn Val Asp Phe Tyr Ser Gly Ile Ile Leu Lys Ala Met
      340 345 350
Gly Ile Pro Ser Ser Met Phe Thr Val Ile Phe Ala Met Ala Arg Thr
    355 360 365
Val Glv Trp Ile Ala His Trp Asn Glu Met His Ser Glu Glv Met Lvs
 370 375 380
Ile Ala Arg Pro Arg Gln Leu Tyr Thr Gly Tyr Glu Gln Arg Asp Phe
385 390
                               395
Lys Ser Asp Leu Lys Arg
            405
<210> 8907
<211> 231
<212> PRT
<213> Enterobacter cloacae
<400> 8907
Ile Thr Arg Gly Phe Val Ile Asn Val Leu Ile Val Glu Asp Glu Leu
                            10
Ala Ile Ser Arg Phe Leu Arg Thr Ala Leu Glu Gly Asp Gly Leu Arg
     2.0
                         2.5
                                         3.0
Val His Glu Ala Gly Thr Leu Gln Arg Gly Leu Ile Glu Ala Ala Thr
                     40
Arg Lys Pro Asp Leu Val Ile Leu Asp Leu Gly Leu Pro Asp Gly Asp
 50 55
                                  60
Gly Ile Asp Phe Ile Arg Glu Val Arg Gln Trp Ser Gln Met Pro Ile
               70
                               75
Leu Val Leu Ser Ala Arg Thr Glu Glu Thr Asp Lys Ile Ala Ala Leu
            85
                            90
Asp Ala Gly Ala Asp Asp Tyr Leu Ile Lys Pro Phe Gly Ile Gly Glu
         100 105
                                        110
Leu Gln Ala Arg Leu Arg Val Ala Leu Arg Arg His Ser Ala Thr Ser
 115
                      120
                                     125
Pro Ser Asp Pro Val Tyr Ala Phe Gly Asp Ile Arg Val Asp Leu Ala
                135
                                   140
Ala Arg Arg Ile Val Arg Gly Glu Glu Glu Ile His Leu Thr Pro Ile
             150
                               155 160
Glu Phe Arg Leu Leu Ala Val Leu Leu Asn Asn His Gly Lys Val Leu
            165
                            170 175
Thr Gln Arg Gln Leu Leu Ser Gln Val Trp Gly Pro Asn Ala Val Glu
         180
                         185
                                        190
His Ser His Tyr Leu Arg Ile Tyr Met Gly His Leu Arg Gln Lys Leu
     195
                     200
                            205
Glu Ala Asp Pro Ala Arg Pro Arg His Leu Leu Thr Glu Thr Gly Ile
Gly Tyr Arg Phe Met Ile
               230
<210> 8908
<211> 463
<212> PRT
<213> Enterobacter cloacae
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```
<400> 8908
Arg Ser Gln Thr Gly Ala Leu Leu Arg His Gln Thr Thr Cys Arg Ser
Ala Ile Ala Ala Glu Arg Arg Lys Ile Met Ser Lys Ala Asn Lys Met
        20
                        25
Gly Val Val Gln Leu Thr Ile Leu Thr Met Val Asn Met Met Gly Ser
     3.5
Gly Ile Ile Met Leu Pro Thr Lys Leu Ala Glu Val Gly Thr Ile Ser
                55
                               60
Ile Ile Ser Trp Leu Val Thr Ala Val Gly Ser Met Ala Leu Ala Trp
          70
                              75
Ala Phe Ala Lys Cys Gly Met Phe Ser Arg Lys Ser Gly Gly Met Gly
          85
                          90
Gly Tyr Ala Glu Tyr Ala Phe Gly Lys Ser Gly Asn Phe Met Ala Asn
        100 105 110
Tyr Thr Tyr Gly Val Ser Leu Leu Ile Ala Asn Val Ala Ile Ala Ile
   115 120 125
Ser Ala Val Gly Tyr Gly Thr Glu Leu Phe Gly Ala Thr Leu Thr Pro
 130 135 140
Val Gln Ile Gly Leu Ala Thr Ile Gly Val Leu Trp Ile Cys Thr Val
145 150 155 160
Ala Asn Phe Gly Gly Ala Arg Ile Thr Gly Gln Leu Ser Ser Ile Thr 165 170 175
Val Trp Gly Val Ile Ile Pro Val Val Gly Leu Cys Ile Ile Gly Trp
 180 185 190
Phe Trp Phe Ser Pro Thr Leu Tyr Ala Asn Ser Trp Asn Pro His His
195 200 205
Val Pro Phe Phe Thr Ala Val Gly Ser Ser Ile Ala Met Thr Leu Trp
210 215 220
Ala Phe Leu Gly Leu Glu Ser Ala Cys Ala Asn Ala Glu Val Val Glu
225 230
                              235
Asn Pro Glu Lys Asn Val Pro Ile Ala Val Leu Gly Gly Thr Leu Gly
          245 250
Ala Ala Val Ile Tyr Ile Val Ser Thr Asn Val Ile Ala Gly Ile Val
 260 265 270
Pro Asn Met Asp Leu Ala Asn Ser Thr Ala Pro Phe Gly Leu Ala Phe
 275 280
Ala Gln Met Phe Thr Pro Glu Val Gly Lys Val Ile Met Gly Leu Met
 290 295
                                 300
Val Met Ser Cys Cys Gly Ser Leu Leu Gly Trp Gln Phe Thr Ile Ala
305 310 315 320
Gln Val Phe Lys Ser Ser Ala Asp Glu Gly Tyr Phe Pro Lys Ile Phe
           325
                           330 335
Ser Arg Val Thr Lys Ala Asp Ala Pro Val Gln Gly Met Leu Ala Ile
        340 345 350
Val Ile Phe Gln Ser Gly Leu Ser Leu Met Thr Ile Ser Pro Ser Leu
      355 360
                                    365
Asn Ser Gln Phe Asn Val Leu Val Asn Leu Ala Val Val Thr Asn Ile
                 375
                                 380
Ile Pro Tyr Ile Leu Ser Met Ala Ala Leu Val Ile Ile Gln Lys Val
               390
                              395
Ala Lys Val Asp Pro Arg Lys Ala Arg Ala Ala Asn Ile Val Ala Leu
           405
                           410
Ile Gly Ala Ile Tyr Ser Phe Tyr Ala Leu Tyr Ser Ser Gly Gln Glu
        420
                        425 430
Ala Met Leu Tyr Gly Ala Met Val Thr Phe Met Gly Trp Thr Leu Tyr
     435 440
Gly Leu Val Ser Pro Arg Phe Glu Leu Lys Asn Lys His Ser
   450
                  455
```

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<210> 8909
<211> 177
<212> PRT
<213> Enterobacter cloacae
```

<400> 8909

Glu Gly Ile Leu Met Ser Val Gln Gln Thr Lys Ala Glu Leu Leu Leu 10 Ala Ile Asp Lys Asn Phe Ser Lys Leu Ile Ser Tyr Leu Lys Ala Ile 20 25 3.0 Pro Pro Glu Ile Thr Ser Asp Asn Ser Met Asp Gly His Ala Lys Gly 40 35 45 Thr Glu Met Ser Val Arg Asp Leu Val Ser Tyr Leu Ile Gly Trp Asn 55 60 Ala Leu Val Val Lys Trp Ile Thr Ser Asp Ala Lys Gly Leu Pro Val 70 75 Asp Phe Pro Glu Thr Gly Tyr Lys Trp Asn Gln Leu Gly Leu Leu Ala 85 90 Gln Lys Phe Tyr Ser Asp Tyr Ser Gly Leu Thr Tyr Glu Leu Leu Ile 100 105 110 Ile Glu Leu Gln Thr Val Lys Asn Glu Leu Val Lys Leu Ile Asp Glu 115 120 125 Arg Thr Asp Asp Ile Leu Tyr Gly Arg Pro Trp Tyr Thr Lys Trp Thr 130 135 140

Met Gly Arg Met Ile Ser Phe Asn Thr Ser Ser Pro Tyr Ala Asn Ala 145 150 155 160 Asn Gly Arg Leu Arg Lys Trp Ala Lys Asn Asn Asn Ile Ser Leu Lys 170

<210> 8910 <211> 200 <212> PRT <213> Enterobacter cloacae

<400> 8910 Asn Tyr Met Asp Glu Lys Ser Leu Tyr Ala His Ile Leu Asn Leu Thr 10 Ala Pro Trp Gln Val Lys Ser Leu Thr Leu Asp Glu Asn Ala Gly Ser 2.0 25 30 Val Thr Val Thr Val Gly Ile Ala Glu Asn Ile Gln Leu Thr Cys Pro 35 40 Thr Cys Gly Lys Ser Cys Pro Val His Asp His Arg His Arg Lys Trp Arg His Leu Asp Thr Cys Gln Phe Ala Thr Leu Val Glu Ala Asp Val 70 75 8.0 Pro Arg Ile Met Cys Pro Asp His Gly Cys Gln Thr Leu Pro Val Pro 85 90 Trp Ala Gly Pro Gly Ser Arg Tyr Thr Leu Leu Phe Glu Ser Phe Val 110 100 105 Ile Ser Trp Leu Lys Ile Ser Thr Val Asp Ala Val Arg Lys Gln Leu 115 120 125 Arg Leu Ser Trp Asn Ala Val Asp Asn Ile Met Gln Arg Ala Val Lys 130 135 Arg Gly Leu Ala Arg Arg Lys Ala Pro Gln Ser Ala Arg His Leu Cys 145 150 155 Val Asp Glu Val Ala Phe Lys Lys Gly His Gln Tyr Val Thr Val Ile 165 170 Ser Asp Thr Gln Gly Gln Ala Leu Glu Leu Arg Asp Asp Arg Gly Val 180 185

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Glu Ser Leu Ala Gly Tyr Leu
195 20
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<210> 8911

<211> 105

<212> PRT <213> Enterobacter cloacae

<400> 8911

Ser Leu Gly Asp Arg Gln Ile Glu Ser Ile Lys Thr Leu Ser Met Asp 1.0 Met Asn Gln Ala Tyr Ile Ser Ala Ala Arg Ile His Leu Pro Asn Ala 20 25 30 Val Glu Lys Ile Ala Phe Asp His Phe His Val Ala Lys Met Leu Cys 35 40 4.5 Ala Val Val Asp Lys Thr Arg Gln Ser Glu Met Arg Ile Ile Pro Leu 50 55 60 Gln Ala Arg Lys Ser Ala His Arg Ser Arg Tyr Leu Trp Leu Tyr Gly 65 70 75 Arg His Lys Arg His Gly Arg Ile Ala Glu Arg Leu Glu Ala Ala Gln 85

Met Val Leu Pro Cys Gln Arg Gln

100

<210> 8912

<211> 269

<212> PRT

<213> Enterobacter cloacae

<400> 8912

Gly Ala Ala Val Met Tyr Glu Leu Glu Thr Leu Leu Asn Arg Leu Lys 10 Met Glu His Leu Ser Tyr His Val Glu Asn Leu Leu Glu Gln Ala Ala 25 Lys Gln Glu Leu Asn Tyr Arg Glu Phe Leu Cys Met Ala Leu Gln Gln 4.0 Glu Trp Ser Gly Arg His Gln Arg Gly Met Glu Ala Arg Leu Lys Gln 55 60 Ala Arg Leu Pro Trp Val Lys Thr Leu Glu Gln Phe Asp Phe Ser Phe 70 75 Gln Pro Gly Ile Asp Arg Lys Val Val Arg Glu Leu Ala Ser Leu Ala 85 Phe Val Glu Arg Ser Glu Asn Val Ile Leu Leu Gly Pro Pro Gly Val 105 110 Gly Lys Thr His Leu Ala Val Ala Leu Gly Val Lys Ala Ala Asp Ala 115 120 125 Gly His Arg Val Leu Phe Met Pro Leu Asp Arg Leu Val Ala Thr Leu 135 140 Ile Lys Ala Lys Gln Glu Asn Arg Leu Glu Arg Gln Leu Gln Gln Leu 150 155 Ser Tyr Ala Arg Val Leu Ile Leu Asp Glu Ile Gly Tyr Leu Pro Met 165 170 175 Asn Arg Glu Glu Ala Ser Leu Phe Phe Arg Leu Leu Asn Arg Arg Tyr 180 185 190 Glu Lys Ala Ser Ile Ile Leu Thr Ser Asn Lys Gly Phe Ala Asp Trp 195 200 Gly Glu Met Phe Gly Asp Asn Val Leu Ala Thr Ala Ile Leu Asp Arg 210 215 220 Leu Leu His His Ser Thr Thr Leu Asn Ile Lys Gly Glu Ser Tyr Arg 225 230 235

Leu Lys Glu Lys Arg Lys Ala Gly Val Leu Ala Lys Ser Ala Thr Pro

245 250 255 Ile Ser Asp Val Glu Met Val Glu Ser Gly Gln Arg 260 <210> 8913 <211> 400 <212> PRT <213> Enterobacter cloacae <400> 8913 Gly Ser His Thr Glu Lys Asp Ser Ser Met Leu Ser Arg Glu Asp Phe 10 Phe Met Ile Lys Gln Met Arg Gln Gln Gly Ala Tyr Ile Val Asp Ile 20 25 30 Ala Thr Gln Val Gly Cys Ser Glu Arg Thr Val Arg Arg Tyr Leu Lys 35 40 45 Tyr Pro Glu Pro Pro Ala Arg Lys Thr Arg His Lys Met Ala Lys Leu 50 55 60 Lys Pro Phe Met Asp Tyr Ile Asp Met Arg Leu Ala Glu Asn Val Trp 70 75 80 Asn Ser Glu Val Ile Leu Ala Glu Ile Arg Thr Met Gly Tyr Thr Gly 85 90 Gly Arg Ser Met Leu Arg Tyr Tyr Ile Gln Pro Lys Arg Lys Met Arg 100 105 110 Pro Ser Lys Lys Thr Val Arg Phe Glu Thr Gln Pro Gly Tyr Gln Leu 115 120 125 Gln His Asp Trp Gly Glu Val Glu Val Asp Val Ala Gly Gln Arg Cys 130 135 140 Arg Val Asn Phe Ala Val Asn Thr Leu Gly Phe Ser Arg Arg Phe His 145 150 155 160 Val Phe Ala Ala Pro Lys Gln Asp Ala Glu His Thr Tyr Glu Ser Leu 165 170 175 Val Arg Ala Phe Arg Tyr Phe Gly Gly Ser Val Lys Thr Val Leu Val 180 185 190 Asp Asn Gln Lys Ala Ala Val Leu Lys Asn Ser Asn Gly Asn Val Val 195 200 205 Phe Asn Ala Gly Phe Leu Leu Leu Ala Asp His Tyr Gly Phe Leu Pro 210 215 220 Arg Ala Cys Arg Pro Arg Arg Ala Arg Thr Lys Gly Lys Val Glu Arg 225 230 235 240 Met Val Lys Tyr Leu Lys Glu Asn Phe Phe Val Arg Tyr Arg Arg Phe 245 250 255 Asp Ser Phe Pro His Val Asn Gln Leu Leu Glu Gln Trp Ile Ala Asp 260 265 270 Val Ala Asp Arg Arg Glu Leu Arg Gln Phe Arg Glu Thr Pro Ala Glu 275 280 285 Arg Phe Val Val Glu Gln Thr His Leu Gln Pro Leu Pro Ala Thr Asp 295 300 Phe Asp Thr Ser Tyr Phe Asp Ile Arg His Val Ser Trp Asp Gly Tyr 310 315 Ile Glu Val Gly Gly Asn Arg Tyr Ser Val Pro Glu Ser Leu Cys Gly 325 330 335 His Pro Val Ser Ile Arg Ile Ser Leu Asp Asp Glu Leu Arg Ile Tyr 340 345 350 Ser Asn Glu Asn Leu Ala Ala Thr His Arg Leu Ser Gly Ala Ser Ser 355 360 365 Gly Trp Gln Thr Val Pro Glu His His Ala Pro Leu Trp Gln Gln Val 370 375 380

Ser Gln Val Glu His Arg Pro Leu Ser Ala Tyr Glu Glu Leu Leu

395

390

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<210> 8914
<211> 111
<212> PRT
<213> Enterobacter cloacae
<400> 8914
Gln Pro Glu Thr Ser Arg Cys Trp Ala Met Lys Glu Met Ala Arg Glu
                                 10
Leu Trp Asn Arg Arg Tyr Asp Gly His Ser Arg Arg Leu Trp Leu Glu
                              25
           20
                                                 30
Trp Ile Ala Met Ala Lys Asp Val Gly Val Pro Gln Leu Ser Ser Ala
     35
                         4.0
                                           4.5
Ala Arg Thr Leu Arg Lys Arg Leu Tyr Gly Ile Leu Asn Ala Met Lys
                     55
                                        60
His Arg Val Ser Asn Gly Asn Ala Glu Ser Leu Asn Ser Lys Ile Arg
                  7.0
                       75
Leu Leu Arg Ile Lys Ser Arg Gly Tyr Arg Asn Lys Glu Arg Phe Lys
             85 90 95
Ile Ala Val Met Phe His Tyr Gly Arg Leu Asn Met Gly Leu
          100
                             105
<210> 8915
<211> 199
<212> PRT
<213> Enterobacter cloacae
<400> 8915
Cys Ala Pro Asp Thr Pro Arg Ser Arg Gly Val Ser Leu Phe Leu Thr
Gly Glu Met Ile Met Ser Ser Arg Gly Val Asn Lys Val Ile Leu Val
                             25
Gly Asn Leu Gly Gln Asp Pro Glu Val Arg Tyr Ile Pro Asn Gly Ser
                  40
                                           4.5
Ala Val Ala Thr Leu Ser Leu Ala Thr Ser Glu Ser Trp Arg Asp Lys
                      55
Gln Ser Gly Glu Gln Lys Glu Val Thr Glu Trp His Arg Val Val Ile
                  7.0
                                    75
Phe Gly Lys Leu Ala Glu Iie Ala Gly Glu Tyr Leu Arg Lys Gly Ser
              85
                                90
Gln Val Tyr Ile Glu Gly Gln Leu Arg Thr Arg Lys Trp Thr Asp Gln
           100
                            105
Ala Gly Gin Asp Lys Tyr Thr Thr Glu Val Val Val Asn Ile Gly Gly
      115
                          120
                                            125
Thr Met Gln Met Leu Gly Gly Arg Gln Ser Gly Ser Gly Gln Asn Thr
                      135
                                         140
Ser Ser Arg Asn Asp Trp Gly Gln Pro Gln Gln Pro Ser Gly Pro Thr
                150
                                     155
His Ser Gly Gln Ala Ser Gly Ser Ser Ala Gly Ala Pro Pro Met Asp
             165
                                 170
                                                    175
Phe Asp Asp Asp Ile Pro Phe Ile Gly Phe Gly Tyr Gly Val Pro Lys
           180
                              185
Ser Ala Ile His Ala Leu
       195
<210> 8916
<211> 704
<212> PRT
<213> Enterobacter cloacae
<400> 8916
Arg Arg Gln Thr Met Ser Asn Arg Tyr Val Ile Glu Ala Leu Leu Arg
```

Pro Ala Val Glu Leu Asn Thr Ala Val Val Ser Gly Met Ala Ala Tyr 20 25 Val Cys Val Gln Ala Pro Trp Ala Val Ala Leu Ala Pro Ser Val Ser 40 4.5 Tyr Val Thr Ala Ala Gly Phe Ala Ala Leu Ala Val Thr Arg Thr His 55 60 Gln Gly Met Lys Ile Ile Arg Tyr Arg Arg Asn Leu Arg Arg Leu Pro 70 75 80 Arg Tyr Val Met Ser Thr Lys Gln Ile Pro Val Ser His Arg Arg Leu 85 90 95 Phe Leu Gly Arg Gly Phe Arg Trp Thr Gln Lys His Thr Gln Arg Leu 100 105 110 Gln Asp Thr Leu Arg Pro Glu Val Ala Arg Tyr Leu Gln Pro Asn Arg 115 120 125 Phe Tyr Gln Gly Ala Arg Gln Leu Glu Leu Leu Thr Glu His Arg Leu 130 135 140 Pro Trp Leu Gly Lys Leu Leu Ser Ala Asp Thr Pro Leu Asn Pro Val 145 150 155 160 Arg Pro Leu Pro Pro Val Gly Gly Asn Pro Ala Leu His Gly Ile Glu 165 170 175 Pro Asp Glu Lys Asp Val Thr Leu Ala Leu Gly Glu Arg Val Gly His 180 185 190 Thr Val Val Tyr Gly Thr Thr Arg Val Gly Lys Thr Arg Leu Ala Glu 195 200 205 Leu Leu Val Thr Gln Asp Ile Arg Arg Gly Glu Val Thr Ile Val Phe 215 220 Asp Pro Lys Gly Asp Ala Asp Leu Met Lys Arg Val Trp Ala Glu Ala 225 230 235 His Arg Ala Gly Arg Gly Asp Glu Leu Tyr Ile Phe His Leu Gly Trp 245 250 Pro Glu Ile Ser Ala Arg Tyr Asn Ala Val Gly Arg Phe Gly Arg Val 260 265 270 Ser Glu Val Ala Ser Arg Val Ala Gly Gin Leu Ser Gly Glu Gly Asn 280 285 Ser Ala Ala Phe Arg Glu Phe Ala Trp Arg Phe Val Asn Ile Ile Ala 290 295 300 Arg Ala Leu Val Ala Leu Gly Glu Arg Pro Asp Tyr Thr Leu Ile Met 305 310 315 Arg Tyr Val Asn Asn Ile Ala Asp Leu Tyr Ile Arg Tyr Ala Glu Lys 325 330 Ile Ile Gln Ala Gln Leu Pro Ala Leu Gln Thr Gln Ile Glu Asn Asn 340 345 350 Gln Gln Val Leu Gly Glu Asp Asp Val Pro Arg Asn Met Gln Gly Gln 355 360 365 Pro Asp Ala Leu Arg Ile Trp Ala Ile Glu Val Ala Leu Ser Ser Glu 375 370 380 Glu Gly Lys Lys Leu Tyr Asp Pro Ile Leu Asp Gly Leu Arg Ser Ala 390 395 Val Arg Tyr Asp Arg Thr Tyr Phe Asp Lys Ile Val Ala Ser Leu Leu 405 410 Pro Leu Leu Glu Lys Leu Thr Thr Gly Lys Thr Ala Glu Leu Leu Ser 420 425 430 Pro Asp Tyr Gln Asp Ile Asp Asp Thr Arg Pro Ile Phe Asp Trp Glu 440 Gln Ile Ile Arg Lys Lys Ala Val Val Tyr Val Gly Leu Asp Ala Leu 455 460 Ser Asp Ser Glu Val Ala Ser Ala Val Gly Asn Ser Met Phe Ala Asp 465 470 475 Leu Val Ser Val Ala Gly His Ile Tyr Lys His Gly Ile Asn Ala Gly 485 490

210

```
Leu Pro Gly Gly Lys Glu Gly Lys Ser Leu Ile Asn Leu His Cys Asp
              505
      500
Glu Phe Asn Glu Leu Met Gly Asp Glu Phe Ile Pro Leu Ile Asn Lys
   515
          520
                           525
Gly Gly Gly Ala Gly Met Gln Val Thr Ala Tyr Thr Gln Thr Ser Ser
       535 540
Asp Ile Glu Ala Arg Ile Gly Asn Ala Ala Lys Thr Ala Gln Val Gln
545 550 555
Gly Asn Phe Asn Asn Leu Ile Met Leu Arg Val Arg Glu Asn Arg Thr
565 570 575
Ala Glu Leu Leu Thr Thr Gln Leu Pro Gln Val Glu Ile Tyr Thr Lys
    580 585 590
Thr Leu Val Ser Gly His Gln Asp Thr Ala Asp Val Asn Ala Asp Gln
 595 600 605
Asp Phe Thr Ser Ser Thr Gln Asp Arg Val Gly Thr Val Lys Val Pro
                   615 620
Leu Leu Glu Pro Ala Asp Ile Val Thr Leu Pro Lys Gly Gln Ala Phe
                630
                               635
Ala Leu Leu Glu Gly Gly Gln Leu Trp Lys Ile Arg Met Pro Leu Pro
                 650
            645
Ala Gly Asp Ala Asp Asp Val Leu Met Pro Glu Ser Ile Glu Lys Ile
         660
                          665
                                           670
Ala Glu Glu Met Arg Arg Ser Tyr His Ser Gly Glu Ser Trp Trp Arg
675 680
                              685
Asp Gly Pro Ala Leu Asn Val Pro Val Thr Gly Gly Ala Asn Gly
                    695
<210> 8917
<211> 675
<212> PRT
<213> Enterobacter cloacae
<400> 8917
Arg Gly Arg Gln His Met Gln Leu Phe Leu Cys Glu Lys Pro Ser Gln
                             10
Ala Lys Asp Ile Ala Arg Val Leu Gly Ile Ser Lys Arg Glu Gln Gly
         2.0
Phe Ile Ser Gly Gly Asn Ile Val Val Thr Trp Ala Val Gly His Leu
                       40
Leu Glu Thr Ala Ser Pro Glu Ala Tyr Gly Glu Gln Tyr Gly Arg Pro
                 55
Trp Arg Ala Asp Val Leu Pro Val Leu Pro Glu Ala Trp Lys Met Val
             70
65
                                 75
Val Lys Glu Gln Thr Lys Ser Gln Phe Thr Val Ile Ser Lys Leu Leu
                             90
            85
Lys Lys Ala Ser Glu Val Val Ile Ala Thr Asp Ala Asp Arg Glu Gly
         100
                                           110
Glu Val Ile Ala Arg Glu Leu Leu Glu Tyr Cys His Tyr Ser Gly Ala
                       120
Val Arg Arg Leu Trp Leu Ser Ala Leu Asp Glu Ala Ser Val Lys Glu
                  135
                       140
  130
Ala Leu Ser Ser Ile Leu Pro Gly Glu Lys Thr Ala Leu Leu Tyr Asp
145
                150
                                155
Ala Gly Lys Gly Arg Ser Gln Ala Asp Trp Leu Ile Gly Met Asn Leu
             165
                             170
Thr Arg Leu Tyr Thr Leu Lys Ala Arg Asp Ser Gly Val Ser Glu Val
       180
                185
                                           190
Leu Ser Val Gly Arg Val Gln Thr Pro Thr Leu Ala Met Val Val Asn
      195
                       200
                                        205
```

Arg Asp Asn Glu Ile Thr Ser Phe Val Pro Lys Pro Trp Trp Gln Val

215

```
His Ala Leu Ile Glu Lys Glu Gly Val Arg Phe Arg Ala Gly Trp Val
             230
                           235
Pro Val Glu Gln Tyr Cys Asp Glu Glu Lys Arg Cys Ile Asn Pro Gln
         245
                250
                              255
Ala Ala Arg Ala Val Gly Gln Leu Cys Gln Gln Gln Gly Arg Ala Thr
        260
             265 270
Val Leu Glu Val Thr Gln Lys Arg Glu Lys Thr Ala Ala Pro Leu Cys 275 \hspace{1cm} 280 \hspace{1cm} 285 \hspace{1cm}
Phe Asp Leu Gly Thr Leu Gln Gln Val Cys Ser Arg Lys Phe Gly Met
  290 295 300
Gly Ala Asn Asp Val Leu Ala Ile Ala Gln Ser Leu Tyr Glu Thr His
305 310 315 320
Lys Ala Thr Thr Tyr Pro Arg Thr Asp Cys Gly Phe Leu Pro Thr Ser
        325 330 335
Met Gln Glu Ile Pro Asp Val Leu Ala Ala Val Ala Lys Ser Asp
       340 345 350
Pro Ala Val Ala Pro Val Leu Asn Gln Leu Asp Arg Lys Phe Val Ser
 355 360 365
Arg Val Trp Asn Asp Lys Lys Ile Thr Ala His His Ala Ile Ile Pro
 370 375 380
Thr Arg Gln Ala Phe Asp Leu Ser Arg Leu Ser Ala Asp Glu Leu Lys
385 390 395 400
Val Tyr Gln Leu Ile Arg Gln His Tyr Phe Ala Gln Phe Leu Pro Leu
      405 410 415
Gln Glu Ser Asp Val Thr Glu Ala Ser Phe Asn Ile Gly Gly Gln Leu
 420 425 430
Phe Arg Thr Arg Gly Lys Val Gly Val Val Thr Gly Trp Lys Ser Leu
435 440 445
Phe Gln Ala Glu Lys Asp Asp Glu Glu Asp Ala Asp Gly Asp Ser
450 455
                               460
Met Ala Leu Pro Ala Leu Ala Lys Gly Asp Ile Cys Ala Val Thr Gly
     470 475 480
Ala Glu Val Lys Asp Met Lys Thr Ser Pro Pro Lys Pro Phe Thr Glu
           485 490 495
Gly Thr Leu Ile Ala Ala Met Lys Asn Ala Ala Ser Phe Val Ser Asp
        500 505 510
Pro Lys Leu Lys Lys Val Leu Arg Asp Asn Ala Gly Leu Gly Thr Glu
     515 520 525
Glu Lys Lys Gly Lys His Ile His Ser Thr Gln Val Ala Arg Glu Leu
            550 555
Ile Ala Ala Leu Pro Glu Thr Leu Thr Ser Pro Gly Met Thr Ala Leu
           565
                         570 575
Trp Glu Gln Ala Leu Asp Asp Ile Ser Gln Gly Lys Met Ser Leu Ala
        580
                      585 590
Val Phe Met Gln Lys Gln Leu Gln Trp Thr Arg His Leu Val Glu Lys
     595
                   600
                                  605
Gly Arg Gln Asp Ser Val Lys Ile Thr Ala Pro Val Thr Pro Pro Cys
  610 615
                               620
Pro Leu Cys Lys Gly Pro Thr Arg Lys Arg Lys Gly Lys Asn Gly Asp
              630
                            635
Phe Trp Gly Cys Ile Arg Tyr Pro Asp Cys Glu Gly Ile Ile Ser Thr
           645 650 655
Gly Lys Lys Ala Ala Lys Arg Lys Lys Thr Ser Val Lys Ala Lys
        660
                       665
Thr Glu
     675
```

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<210> 8918 <211> 193 <212> PRT <213> Enterobacter cloacae

<400> 8918 Ala Val Met Ser Ala Pro Tyr Ile Asn Gly Leu Leu Met Ala His Pro Tyr Gly Ala Val Ile Leu Val Val Leu Phe Leu Val Val Met Val Phe 20 Leu Asn Leu Arg Arg Glu Lys Ala Ser Thr Arg Arg His Arg Arg Tyr Arg Ala Thr Ala Gly Arg Val Leu Asn Lys Leu Asn Ser Leu Pro 55 60 Gly Asp Gly Gln Arg Leu Thr Tyr Leu Arg Lys Ile Ser Pro Tyr Val 70 7.5 Phe Glu Glu Leu Leu Ser Ala Phe Glu Arg Gln Gly Leu Thr Val 8.5 90 95 Val Arg Asn Ala Ser Tyr Ser Ala Asp Gly Gly Leu Asp Gly Gln Val 100 105 110 Ile Ile Asp Gly Glu Tyr Trp Leu Ile Gln Ala Lys Arg Tyr Ser Arg 115 120 125 Ala Val Ser Pro Ala His Val Glu Asp Phe Asp Arg Leu Leu Gln 130 135 140 Thr Gly Arg Arg Gly Leu Phe Val His Thr Gly Arg Thr Gly Lys Met 145 150 155 Ser Arg Ala Ile Arg Thr Thr Ser Pro Arg Leu Arg Ile Ile Ser Gly 165 170 175 Gln Arg Leu Leu Thr Ile Leu Ala Gly Gln Asp Val Arg Gln Tyr Leu 180 185

<210> 8919 <211> 494 <212> PRT <213> Enterobacter cloacae

<400> 8919 Tyr Leu Met Arg Lys Thr Val Lys Lys Thr Pro Ser Phe Ser Ala Ala 10 Arg Val Ser Leu Leu Thr Gly Ser Leu Leu Thr Val Leu Pro Ala 20 25 Ala His Ala Ala Asp Asp Asp Asn Thr Ile Leu Gly Met Ser Leu Pro Gln Val Asn Asn Ser Ala Ile Gly Tyr Gly Lys Ser Val Asp Gly Ala Val Ser Asp Lys Leu Phe Tyr Thr Leu Gly Gly Gly Ser Val Ile Ser 70 7.5 Gln Pro Ala Thr Arg Gly Asn Met Gln Lys Leu Gly Leu Asn Thr Gly 85 90 Trp Ser Ser Asp Leu Met Cys Gly Asn Phe Asp Leu Lys Thr Thr Val 100 105 Gly Asn Gln Leu Asn Gly Val Thr Ser Gly Phe Lys Asn Leu Met Gly 115 120 Asp Val Ile Gln Gly Ala Thr Gly Ala Val Ala Ser Leu Pro Ala Met 135 140 Val Ile Gln Arg Ala Asn Pro Gly Leu Tyr Asp Met Leu Thr Asn Gly 150 155 Val Leu Gln Ala Asn Val Ser Phe Asp Lys Ala Gln Leu Asn Cys Gln 165 170 175 Asn Met Ala Lys Lys Met Met Asp Phe Ser Asp Ser Ser Asn Trp Thr 180 185

```
Gln Gln Ala Met Met Asp Glu Tyr Lys Ser Val Val Asn Ser Gly Asp
 195
           200
Thr Asp Ala Val Arg Ala Asp Glu Ala Gly Arg Lys Val Thr Gly Thr
                                220
               215
Ser Gly Asn Asn Trp Ile Gly Gly Gln Lys Arg Gly Gly Ala Gly Gln
     230
                   235 240
Pro Ala Ile Arg Val Thr His Asp Leu Val Ala Ala Gly Tyr Asn Met $245$
Met Asn Gly Leu Pro Val Thr Ala Asn Ser Thr Val Gly Glu Ser Ser
        260 265 270
Cys Asn Gly Gly Ala Cys Ser Lys Phe Gly Ser Ala Glu Glu Ala Ala
 275 280 285
Ala Met Thr Val Lys Val Leu Gly Asp Arg Ser Met Arg Thr Cys Ala
 290 295 300
Asn Ala Ser Glu Cys Thr Ser Gly Asp Ala Asp Asp Gln Pro Gly Thr 305 \hspace{1.5cm} 310 \hspace{1.5cm} 315 \hspace{1.5cm} 320
Thr Val Ala Gly Thr Gly Phe Ala Pro Leu Leu Glu Glu Ala Thr Lys
           325 330
Ala Asn Ala Glu Gln Leu Val Arg Leu Val Asn Gly Thr Glu Lys Pro
 340 345
Thr Ala Ala Asn Leu Ala Lys Leu Lys Thr Gly Gly Leu Pro Val Thr
355 360 365
Ala Gly Val Ile Lys Ala Leu Gln Arg Asp Pro Asp Asn Ala Ala Leu
370 375 380
Thr Ala Arg Leu Ala Gly Glu Leu Ala Met Ser Asp Thr Val Glu Thr
385 390 395
Ala Leu Leu Met Arg Arg Met Met Val Thr Gly Met Ser Glu Pro Asn
     405 410 415
Ala Ala Ala Gln Pro Lys Ala Ile Asp Thr Ala Gly Gln Arg Ile Glu
       420 425 430
Ala Leu Asp Arg Glu Ile Ala Ala Leu Lys Asn Glu Met Glu Met Lys
   435 440 445
Arg Glu Leu Ser Arg Asn Ser Val Leu Thr Ile Ile Asp Arg Glu Asn
450 455 460
Gln Arg Val Glu Thr Asn Pro Gln Thr Gln Ser Asp Asp Asn Thr Asp
465 470 475
Ser Arg Phe Asn Gln Met Ala Ala Pro Gln Ser Ala Glu
```

<210> 8920 <211> 98 <212> PRT

<213> Enterobacter cloacae

<400> 8920

Arg Gly Ser Leu Lys Ile Thr Lys His Cys Phe Trp Arg Pro Gly Met 10 Thr Ile Ser Ala Lys Arg Val Ser Phe Asp Glu Ala Thr Met Trp Val 25 20 30 Glu Leu Asn Asp Ala Arg Thr Ile Gly Val Pro Leu Ala Trp Phe Pro 4.0 Arg Leu Leu His Ala Ser Thr Glu Gln Leu Asn Ser Tyr Glu Leu Ser 55 Pro Arg Gly Ile His Trp Asp Ala Leu Asp Glu Asp Ile Ser Ile Ala 75 70 Gly Leu Leu Glu Gly Arg Gly Asp Val Thr His Arg Pro His Lys Val 85 90

Ala

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<211> 506
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<212> PRT

<213> Enterobacter cloacae

<400> 8921

Asn Arg Arg Pro Ala Met Gln Ile Lys Ser Asn Ala Leu Val Lys Phe Ile Val Pro Ala Val Val Ile Ala Gly Leu Ala Val Gly Leu Lys Ser 20 25 3.0 Cys Lys Asn Glu Pro Ala Glu Pro Ser Gln Ala Lys Gln Ser Gly Gly 35 40 45 Pro Leu His Asn Leu Pro Pro Asp Glu Leu Lys Ala Leu Gly Val Glu 50 55 60 Gly Asp Thr Pro Glu Asp Thr Leu Arg Thr Leu Ile Gly Arg Leu Asn 70 7.5 Asp Val Arg Glu Arg Gln Lys Thr Leu Asp Lys Gln Asn Ala Asp Leu 85 90 95 Val Lys Glu Asn Glu Arg Leu Arg Arg Arg Asn Gln Asp Val Ser Gly 100 105 110 Gln Val Asn Glu Ala Val Asn Gly Leu Arg Glu Gln Tyr Asp Lys Arg 115 120 125 Gln Ala Gln Leu Gln Asn Glu Gln Leu Ser Leu Thr Ala Lys Ile Gln 130 135 140 Glu Leu Thr Asp Lys Leu Lys Lys Pro Asp Ser Glu Lys Lys Thr Ala 145 150 155 Asp Ser Asp Ile Pro Leu Gly Leu Gly Leu Asp Gly Met Gly Ser Ser 165 170 175 Thr Gly Gly Ala Ala Ser Gln Gly Ser Asp Gly Met Met Trp Val Ala 180 185 190 Pro Thr Asp Gln Lys Glu Ala Asp Pro Arg Asp Ala Ala Ser Gly Lys 195 200 205 Ala Ser Pro Gln Phe Pro Thr Ser Phe Leu Gly Glu Asn Glu Leu Thr 210 215 220 Arg Gln Lys Ala Ala Tyr Glu Glu Lys Val Lys Gly Arg Thr Asn Glu 230 235 Lys Gly Ala Glu Glu Ser Ala Glu Pro Val Tyr Thr Leu Pro Glu Asn 245 250 Ser Thr Leu Val Gly Ser Arg Ala Met Thr Ala Leu Leu Gly Arg Val 265 270 260 Pro Ile Asn Gly Thr Val Thr Asp Pro Tyr Pro Phe Lys Val Leu Ile 280 285 Gly Lys Asp Asn Leu Thr Ala Asn Gly Ile Glu Leu Pro Asp Val Glu 290 295 300 Gly Ala Ile Val Ser Gly Thr Ala Ser Gly Asp Trp Thr Leu Ser Cys 315 305 310 Val Arg Gly Gln Val Asn Ser Ile Thr Phe Val Phe Ser Asp Gly Thr 325 330 335 Val Arg Thr Leu Pro Arg Pro Asp Thr Ser Asn Asn Ala Gly Gly Gln 345 340 350 Asn Asn Asn Ala Gln Ala Lys Gln Asp Thr Ser Thr Ser Gly Gly Ile 355 360 365 Gly Trp Ile Ser Asp Glu Asn Gly Ile Pro Cys Ile Gly Gly Glu Arg 375 380 370 Lys Ser Asn Ala Ser Thr Tyr Leu Pro Thr Ile Phe Gly Leu Ser Ala 385 390 395 Ala Gly Ala Ala Gly Glu Ala Met Ser Gln Gly Gln Tyr Thr Thr Gln 405 410 Asn Asn Val Asn Gly Ile Ser Ala Thr Met Thr Gly Asp Ala Gly Gln 420 425 Ala Ala Leu Gly Lys Ala Ile Ser Gly Gly Met Ser Glu Thr Thr Asp

440

```
Trp Ile Lys Gln Arg Tyr Gly Met Thr Phe Asp Ala Ile Tyr Val Pro
                       455
Pro Gly Ala Arg Leu Ala Val His Ile Thr Arg Gln Leu Ala Ile Asp
                  470
                                     475
Tyr Glu Glu Lys Gly Arg Lys Val Arg Tyr Asp Phe Thr Leu Pro Gly
                    490
            485
Gly Val Ser Asp Asn Gly Gly Leu Asp
<210> 8922
<211> 109
<212> PRT
<213> Enterobacter cloacae
<400> 8922
Phe Glu Gly Arg Val Met Pro Ile Pro Leu Glu Gln Thr Met Cys Trp
                          10
Asp Lys Ser Ser Gln Lys Asn Ser Ala Asn Thr Pro Val Leu Met Met
                           25
Ala Ala Ile Ala Arg Leu Thr Gly Ser Asn Pro Ser Leu Ala Cys Val
                         4.0
Pro Leu Phe Gly Asp Gly Val Ser Cys Gly Phe Pro Ser Pro Ala Gln
                     55
Asp Tyr Val Glu Lys Arg Leu Ser Leu Asp Asp Leu Cys Ile Arg Tyr
                70
                                     7.5
Pro Glu Ser Thr Tyr Leu Val Arg Ala Glu Gly Asp Ser Met Leu Asn
              85
Ala Gly Ile Lys Asp Gly Asp Leu Leu Ile Val Arg Tyr
<210> 8923
<211> 476
<212> PRT
<213> Enterobacter cloacae
<400> 8923
Gly Phe Met Met Ser Lys Val Lys Gln Thr Asp Ile Asp Gln Leu Ile
                                  1.0
Val Leu Val Gly Gly Arg Asp Asn Ile Ala Thr Val Ser His Cys Ile
                              25
Thr Arg Leu Arg Phe Val Leu Asn Asp Pro Ala Lys Ala Asn Pro Lys
                          40
Ala Ile Glu Glu Leu Ser Met Val Lys Gly Cys Phe Thr Asn Ala Gly
                       5.5
                                          60
Gln Phe Gln Val Val Ile Gly Thr Glu Val Gly Asp Tyr Tyr Gln Ala
                   70
                                      75
Leu Leu Ala Thr Thr Gly His Ser Ser Ala Asp Lys Glu Gln Ala Lys
              85
                                  90
Lys Ala Ala Arg Gln Asn Met Lys Trp His Glu Gln Leu Ile Ser His
           100
                              105
                                                  110
Phe Ala Glu Ile Phe Phe Pro Leu Leu Pro Ala Leu Ile Ser Gly Gly
       115
                           120
                                              125
Leu Ile Leu Gly Phe Arg Asn Val Ile Gly Asp Val Pro Met Ser Asp
                      135
                                          140
Gly Lys Thr Leu Ala Gln Met Tyr Pro Ala Leu Gln Ser Ile Tyr Asp
                  150
                                      155
Phe Leu Trp Leu Ile Gly Glu Ala Ile Phe Phe Tyr Leu Pro Val Gly
                                  170
              165
Ile Cys Trp Ser Ala Val Arg Lys Met Gly Gly Thr Pro Ile Leu Gly
           180
                            185
Ile Val Leu Gly Val Thr Leu Val Ser Pro Gln Leu Met Asn Ala Tyr
```

```
Leu Leu Gly Gln Gln Thr Pro Glu Val Trp Asn Phe Gly Leu Phe Thr
  210
           215
                                  220
Ile Ala Lys Val Gly Tyr Gln Ala Gln Val Ile Pro Ala Leu Leu Ala
               230
                         235
Gly Leu Ala Leu Gly Phe Ile Glu Thr Arg Leu Lys Arg Ile Val Pro
                    250
          245
                                255
Asp Tyr Leu Tyr Leu Val Val Val Pro Val Cys Ser Leu Ile Leu Ala
       260
             265 270
Val Phe Leu Ala His Ala Phe Ile Gly Pro Phe Gly Arg Met Ile Gly
    275 280
                           285
Asp Gly Val Ala Phe Ala Val Arg His Leu Met Thr Gly Ser Phe Ala
 290 295 300
Pro Ile Gly Ala Ala Leu Phe Gly Phe Leu Tyr Ala Pro Leu Val Ile
305 310 315
Thr Gly Val His Gln Thr Thr Leu Ala Ile Asp Met Gln Met Ile Gln
          325 330 335
Ser Leu Gly Gly Thr Pro Val Trp Pro Ile Ile Ala Leu Ser Asn Ile
        340 345 350
Ala Gln Ala Ser Ala Val Thr Gly Ile Ile Ile Val Ser Arg Lys His
355 360 365
Asn Glu Arg Glu Ile Ser Val Pro Ala Ala Ile Ser Ala Tyr Leu Gly
370 375
Val Thr Glu Pro Ala Met Tyr Gly Ile Asn Leu Lys Tyr Arg Phe Pro
385 390
                             395
Met Leu Cys Ala Met Ile Gly Ser Gly Leu Ala Gly Leu Leu Cys Gly
         405 410
                                           415
Leu Asn Gly Val Met Ala Asn Gly Ile Gly Val Gly Gly Leu Pro Gly
   420 425 430
Ile Leu Ser Ile Gln Pro Ala Phe Trp Gln Val Phe Ala Leu Ala Met 435 \hspace{1.5cm} 440 \hspace{1.5cm} 445 \hspace{1.5cm}
Ala Val Ala Ile Ile Ile Pro Met Ala Leu Thr Thr Val Val Tyr Gln
450 455
Arg Lys Phe Arg Gln Gly Thr Leu Gln Ile Val
<210> 8924
<211> 565
<212> PRT
<213> Enterobacter cloacae
<400> 8924
Phe Ser Leu Ser Gly Arg Ser Cys Ala Pro Ser His Leu Gln Glu Arg
Thr Met Asn Thr Leu Pro His Trp Trp Gln Asn Gly Val Ile Tyr Gln
                         25
Ile Tyr Pro Lys Ser Phe Gln Asp Thr Thr Gly Ser Gly Thr Gly Asp
                   40
Leu Arg Gly Val Thr Gln Arg Leu Asp Tyr Leu Lys Thr Leu Gly Ile
 5.0
       55
                                 60
Asp Ala Ile Trp Leu Thr Pro Phe Tyr Ile Ser Pro Gln Val Asp Asn
               70
                               75
Gly Tyr Asp Val Ala Asn Tyr Thr Ala Ile Asp Pro Thr Tyr Gly Thr
          8.5
                            90
                                           95
Leu Asp Asp Phe Asp Glu Leu Val Ala Arg Ala His Glu His Gly Ile
         100
                         105
                                        110
Arg Ile Val Leu Asp Met Val Phe Asn His Thr Ser Thr Gln His Ala
      115 120
```

Trp Phe Arg Glu Ser Leu Asp Lys Ala Ser Pro Tyr Arg Gln Phe Tyr

Ile Trp Arg Asp Gly Thr Pro Asp Thr Leu Pro Asn Asn Trp Arg Ser

135

```
150
                            155
Lys Phe Gly Gly Asn Ala Trp Arg Trp His Ala Glu Ser Glu Gln Tyr
         165
                 170 175
Tyr Leu His Leu Phe Ala Pro Glu Gln Ala Asp Leu Asn Trp Glu Asn
        180
            185
                          190
Pro Ala Val Arg Ala Glu Leu Lys Lys Val Cys Glu Phe Trp Ala Asp
   195 200 205
Arg Gly Val Asp Gly Leu Arg Leu Asp Val Ile Asn Leu Val Ser Lys
 210 215 220
Asp Gln Asp Phe Pro Asp Asp Thr Leu Gly Asp Gly Arg Arg Phe Tyr
225 230 235 240
Thr Asp Gly Pro Arg Ile His Glu Tyr Leu Gln Glu Met Ser Arg Asp
        245 250 255
Val Phe Thr Pro Arg Asn Leu Met Thr Val Gly Glu Met Ser Ser Thr
      260 265 270
Ser Leu Glu Asn Cys Gln Gln Tyr Ala Ser Leu Asp Gly Arg Glu Leu
275 280 285
Ser Met Thr Phe Asn Phe His His Leu Lys Val Asp Tyr Pro Gly Gly
 290 295 300
Glu Lys Trp Thr Lys Ala Lys Pro Asp Phe Val Ala Leu Lys Thr Leu
305 310 315
Phe Arg His Trp Gln Gln Gly Met His Asn Lys Ala Trp Asn Ala Leu
          325 330 335
Phe Trp Cys Asn His Asp Gln Pro Arg Ile Val Ser Arg Phe Gly Asp
      340 345 350
Glu Gly Glu His Arg Val Ala Ala Ala Lys Met Leu Gly Met Val Leu
    355
                   360 365
His Gly Met Gln Gly Thr Pro Tyr Ile Tyr Gln Gly Glu Glu Leu Gly
370
              375
                       380
Met Thr Asn Pro His Phe Ser Arg Ile Thr Asp Tyr Arg Asp Val Glu
   390
                            395
Ser Leu Asn Met Phe Ala Glu Gin Arg Ala Asn Gly Arg Asp Thr Asp
          405 410 415
Glu Leu Leu Ala Ile Leu Ala Ser Lys Ser Arg Asp Asn Gly Arg Thr
       420 425 430
Pro Met Gln Trp Asp Ala Ser His Asn Ala Gly Phe Thr Glu Ala Glu
     435 440
                                445
Pro Trp Ile Gly Val Cys Asp Asn Tyr Glu Thr Val Asn Val Arg Ala
                455
                               460
Ala Leu Asp Asp Pro Asp Ser Val Phe Tyr Thr Tyr Gln Ser Leu Ile
465 470 475 480
Arg Leu Arg Lys Thr Leu Pro Val Leu Thr Trp Gly Asp Tyr Glu Asp
          485
                      490
                                       495
Leu Leu Pro Asp His Pro Ser Leu Trp Cys Tyr Arg Arg Gln Trp Gln
        500
                      505 510
Gly Gln Thr Leu Met Val Val Ala Asn Leu Ser His Leu Pro Gln Glu
    515 520 525
Trp Gln Ala Asp Ala Leu Ser Gly Glu Ser Gln Val Val Ile Ser Asn
 530 535
                    540
Tyr Pro Ala Pro His Thr Ser Met Leu Arg Pro Phe Glu Ala Val Trp
545
              550
                            555
                                           560
Trp Leu Lys Gln
          565
```

<210> 8925 <211> 161

<212> PRT

<213> Enterobacter cloacae

<400> 8925

Gly His Gln Val Asn Ala Met Asn Tyr His Gln Tyr Tyr Pro Val Asp

```
Ile Val Asn Gly Pro Gly Thr Arg Cys Thr Leu Phe Val Ser Gly Cys
         20
                         25
Val His Glu Cys Pro Gly Cys Tyr Asn Lys Ser Thr Trp Arg Leu Asn
     35
                     40
                                    45
Ser Gly Met Pro Phe Thr Ala Glu Met Glu Asp Arg Ile Ile Asn Asp
            5.5
                                   60
Leu Asn Asp Thr Arg Ile Lys Arg Gln Gly Ile Ser Leu Ser Gly Gly
             70
                               7.5
Asp Pro Leu His Pro Gln Asn Val Pro Glu Ile Leu Lys Leu Val Lys
         85 90 95
Arg Ile His His Glu Cys Ala Gly Lys Asp Ile Trp Val Trp Thr Gly
         100 105
Tyr Lys Leu Asp Glu Leu Asn Ala Gln Gln Met Glu Val Val Asp Leu
     115 120 125
Ile Asn Val Leu Val Asp Gly Lys Phe Met Gln Asp Leu Lys Asp Pro
130 135 140
Met Leu Ile Trp Arg Gly Ser Ser Asn Gln Val Val His His Leu Arg
                150
```

```
<210> 8926
<211> 196
<212> PRT
<213> Enterobacter cloacae
<400> 8926
Leu Val Thr Leu Ala Ser Phe Phe Lys Glu Pro Asp Met Thr Lys Gln
                              1.0
Pro Glu Asp Trp Leu Asp Asp Val Pro Gly Asp Asp Ile Glu Asp Glu
                           25
Asp Asp Glu Ile Ile Trp Val Ser Lys Ser Glu Ile Lys Arg Asp Ala
35
                       4.0
Glu Glu Leu Lys Lys Leu Gly Ala Glu Met Val Glu Leu Gly Lys Asn
          55
 50
                                      60
Ala Leu Asp Lys Ile Pro Leu Asp Gln Asp Leu Arg Asp Ala Ile Glu
                 7.0
                       75
Leu Ala Gln Lys Ile Lys Lys Glu Gly Arg Arg Arg Gln Leu Gln Leu
             85
                               90
Ile Gly Lys Leu Leu Arg Gln Arg Asp Val Glu Pro Ile Arg Gln Ala
          100 105
Leu Asp Lys Leu Lys Asn Arg His Asn Gln Gln Val Ala Leu Phe His
      115
                       120
                                         125
Lys Leu Glu Gln Ile Arg Asp Arg Leu Ile Glu Gln Gly Asp Asp Ala
 130
                    135
                                      140
Val Pro Glu Val Leu Asn Leu Trp Pro Asn Ala Asp Arg Gln Gln Leu
145
                150
                                  155
                                                    160
Arg Ser Leu Ile Arg Asn Ala Lys Lys Glu Lys Glu Gly Asn Lys Pro
             165
                             170
                                             175
Pro Lys Ser Ala Arg Leu Ile Phe Gln Tyr Leu Arg Glu Leu Ser Glu
                           185
Asn Glu Glu
   195
```

<211> 156 <212> PRT <213> Ente <400> 8927

<213> Enterobacter cloacae

<210> 8927

```
Pro Val Arg Met Gly Ala Lys Lys Gln Arg His Leu Thr Val Ala Leu
                                 10
Ser Phe Phe Arg Thr Gly Leu Cys Leu Thr Ser Tyr Arg Phe Gln Ser
          2.0
                                               30
                             2.5
Ala Leu Thr Arg Arg Pro Asn Val Gly Thr Arg Thr Ser Met His Cys
      35
                         4.0
Arg Lys Ala Ser Gly Ser Thr Gly Glu Arg Ile His Arg Pro Trp Cys
                     55
                                       60
Ala Arg His Gln Val Arg Pro Ala Trp His Tyr Gln Tyr Asp Lys Pro
                                    75
His Pro Val Pro Phe Arg Ser Pro Glu Leu Arg Leu Asp Ser Gly Pro
            8.5
                                90
Asp Cys Thr Thr Gly Ser Phe Arg Leu Cys Asn Phe Pro Ala Thr Gly
        100 105 110
Arg Trp Ser Ser Ser Gly Cys Cys Leu Ala Trp Phe Val Asn Cys Arg
      115
                        120
Lys Gln Ile Phe Ala Leu Leu Lys Leu Lys Leu Ile Glu Gln Ile Lys
 130 135
Cys Leu Val Tyr Ala Gly His Cys Phe Gln Ile
                 150
<210> 8928
<211> 189
<212> PRT
<213> Enterobacter cloacae
<400> 8928
Gly Asn Thr Met Thr Leu Arg Asn Leu Leu Val Ala Ala Cys Leu Leu
Leu Pro Leu Met Ala Ser Ala His Asn Ile Glu Lys Gly Gln Arg Val
        20
                                               30
Pro Pro Val Gly Ile Ala Asp Arg Gly Glu Leu Ile Leu Asp Asn Asp
 35
                         4.0
                                           45
Lys Phe Ser Tyr Lys Thr Trp Asn Ser Ala Gln Leu Ala Gly Lys Val
50
                     55
Arg Val Val Gln His Ile Ala Gly Arg Thr Ser Ala Lys Glu Lys Asn
               7.0
                                    75
Ala Thr Leu Val Glu Ala Ile Lys Ala Ala Lys Leu Pro His Asp Arg
              8.5
                                 90
Tyr Gln Thr Thr Thr Ile Val Asn Thr Asp Asp Ala Ile Pro Gly Ser
                            105
          1.00
Gly Met Phe Val Arg Ser Ser Leu Glu Asn Asn Lys Lys Leu Tyr Pro
      115
                         120
                                           125
Trp Ser Gln Tyr Met Val Asp Ser Asn Gly Val Thr Arg Lys Ala Trp
                     135
   130
                                        140
Gln Leu Glu Glu Glu Ser Ser Ala Ile Val Val Leu Asp Lys Asn Gly
                 150
                                    155
145
                                                      160
Arg Val Glu Trp Val Lys Asp Gly Ala Leu Thr Gln Asp Glu Val Gln
              165
                                170
Gln Val Val Ala Leu Leu His Lys Leu Leu Thr Gln
          180
                             185
```

<210> 8929

<211> 691

<212> PRT

<213> Enterobacter cloacae

<400> 8929

Thr Ile Pro Leu Ser Val Lys Gln Phe Trp Phe Gln Arg Pro Phe Phe I 5 10 15 Trp Gln His Ser His Phe Cys Lys Gln Gln Ile Leu His Thr Tyr Ser

Phe Val Ala Trp Ile Glu Lys Arg Thr Pro Gln Met Ile Lys Phe Ser Ala Thr Leu Leu Ala Thr Leu Ile Ala Ala Ser Val Gln Ala Ala Thr 55 Val Asp Leu Arg Ile Leu Glu Thr Thr Asp Leu His Ser Asn Met Met 70 75 Asp Phe Asp Tyr Tyr Lys Asp Thr Pro Thr Glu Lys Phe Gly Leu Val 85 90 Arg Thr Ala Ser Leu Ile Asn Ala Ala Arg Gly Glu Val Lys Asn Ser 100 105 Val Leu Val Asp Asn Gly Asp Leu Ile Gln Gly Ser Pro Leu Gly Asp 115 120 125 Tyr Met Ala Ala Lys Gly Leu Lys Lys Gly Glu Ile His Pro Val Tyr 130 135 140 Lys Ala Met Asn Thr Leu Asp Tyr Ala Val Gly Asn Leu Gly Asn His 145 150 155 Glu Phe Asn Tyr Gly Leu Lys Tyr Leu His Asp Ala Leu Ala Gly Ala 165 170 175 Lys Phe Pro Tyr Val Asn Ala Asn Ile Ile Asp Val Lys Thr Lys Lys 180 185 190 Pro Arg Phe Thr Pro Tyr Leu Ile Lys Glu Thr Glu Val Val Asp Gln 195 200 205 Asp Gly Lys Lys Gln Thr Leu Lys Ile Gly Tyr Ile Gly Phe Val Pro 210 215 220 Pro Gln Ile Met Thr Trp Asp Lys Ala Asn Leu Asp Gly Lys Val Thr 225 230 235 Val Asn Asp Ile Thr Glu Thr Ala Arg Lys Tyr Val Pro Lys Met Arg 245 250 Ala Lys Gly Ala Asp Val Val Val Val Ala His Ser Gly Leu Ser 260 265 270 Ala Asp Pro Tyr Gln Val Met Ala Glu Asn Ser Val Tyr Tyr Leu Ser 275 280 285 Gln Val Pro Gly Val Asp Ala Ile Leu Phe Gly His Ala His Ala Val 290 295 Phe Pro Gly Lys Asp Phe Ala Asp Ile Lys Gly Ala Asp Ile Glu Lys 305 310 315 Gly Thr Leu Asn Gly Val Pro Ser Val Met Pro Gly Met Trp Gly Asp 325 330 His Leu Gly Val Val Asp Leu Val Leu Asn Asn Asp Ser Gly Ser Trp 340 345 350 Lys Val Thr Gln Ser Lys Ala Glu Ala Arg Pro Ile Tyr Asp Ala Ala 355 360 365 Ala Lys Lys Ser Leu Ala Gly Glu Asp Lys Lys Leu Val Asp Val Leu 370 375 Lys His Asp His Asp Ala Thr Arg Glu Phe Val Ser Lys Pro Ile Gly 390 395 Lys Ser Ala Asp Asn Met Tyr Ser Phe Leu Ala Leu Val Gln Asp Asp 405 410 Pro Thr Val Gln Val Val Asn Met Ala Gln Lys Ala Tyr Ala Glu His 420 425 430 Tyr Ile Gln Gly Asp Pro Asp Leu Ala Asn Leu Pro Val Leu Ser Ala 440 445 Ala Ala Pro Phe Lys Val Gly Gly Arg Lys Asn Asp Pro Ala Ser Tyr 455 460 Val Glu Val Glu Lys Gly Gln Leu Thr Phe Arg Asn Ala Ala Asp Leu 475 470 Tyr Leu Tyr Pro Asn Thr Phe Val Val Lys Ala Thr Gly Lys Glu 485 490 495 Val Lys Glu Trp Leu Glu Cys Ser Ala Gly Gln Phe Asn Gln Ile Asp 500 505

```
Pro His Ser Ser Lys Pro Gln Ser Leu Ile Asn Trp Asp Glv Phe Arg
                     520
Thr Tyr Asn Phe Asp Met Ile Asp Gly Val Asp Tyr Gln Ile Asp Val
                  535
                                540
Thr Gln Pro Ala Lys Tyr Asp Gly Glu Cys Gln Ala Ile Asn Pro Gln
545
            550 555 560
Ala Glu Arg Ile Lys Asn Leu Thr Phe Asn Gly Lys Ala Ile Asp Pro
           565 570 575
Asn Ala Thr Phe Leu Val Val Thr Asn Asn Tyr Arg Ala Tyr Gly Gly
        580 585 590
Lys Phe Ala Gly Thr Gly Asp Ser His Ile Ala Phe Ala Ser Pro Asp
 595 600 605
Glu Asn Arg Ser Val Leu Ala Ala Trp Ile Ser Ala Glu Ser Lys Lys
      615 620
Ala Gly Glu Ile His Pro Ala Val Asp Asn Asn Trp Arg Leu Ala Pro
625 630 635 640
Ile His Ser Asp Thr Lys Leu Asp Ile Arg Phe Glu Thr Ser Pro Ser
           645 650 655
Asp Lys Ala Ala Ala Phe Ile Lys Asp Lys Ala Gln Tyr Pro Met Gln
  660 665 670
Lys Val Ala Thr Asp Asp Ile Gly Phe Ala Ile Tyr Gln Val Asp Leu
             680
Ser Arq
 690
<210> 8930
<211> 717
<212> PRT
<213> Enterobacter cloacae
<400> 8930
Asn Gly Val Ile Met Thr Pro His Val Met Lys Arg Asp Gly Cys Lys
                         10
                                   1.5
Val Pro Phe Lys Ser Glu Arg Ile Lys Glu Ala Ile Leu Arg Ala Ala
                      25
                                     30
Lys Ala Ala Gly Val Asp Asp Ala Asp Tyr Cys Ala Thr Val Ala Glu
          40
Val Val Ser Ser Gln Met His Glu Arg Ser Gln Val Asp Ile Asn Glu
50 55
Ile Gln Thr Ala Val Glu Asn Gln Leu Met Ser Gly Pro Tyr Lys Gln
            70 75
Leu Ala Arg Ala Tyr Ile Glu Tyr Arg His Asp Arg Asp Val Gln Arg
           85
                          90
Glu Lys Arg Gly Arg Leu Asn Gln Glu Ile Arg Gly Leu Val Glu Gln
        100 105 110
Thr Asn Ser Ser Leu Leu Asn Glu Asn Ala Asn Lys Asp Ser Lys Val
    115 120
Ile Pro Thr Gln Arg Asp Leu Leu Ala Gly Ile Val Ala Lys His Tyr
 130 135 140
Ala Arg Gln His Leu Leu Pro Arg Asp Val Val Ser Ala His Glu Arg
            150
                   155
Gly Glu Ile His Tyr His Asp Leu Asp Tyr Ser Pro Phe Phe Pro Met
           165
                          170 175
Phe Asn Cys Met Leu Ile Asp Leu Lys Gly Met Leu Thr His Gly Phe
        180 185
                                       190
Lys Met Gly Asn Ala Glu Ile Glu Pro Pro Lys Ser Ile Ser Thr Ala
195
                    200
Thr Ala Val Thr Ala Gln Ile Ile Ala Gln Val Ala Ser His Ile Tyr
                 215
                                 220
Gly Gly Thr Thr Ile Asn Arg Ile Asp Glu Val Leu Ala Pro Phe Val
               230
```

235

Thr Glu Ser Phe Asn Lys His Arg Lys Thr Ala Glu Glu Trp Gln Ile 250 245 Pro Asn Ala Asp Gly Tyr Ala Arg Ser Arg Thr Glu Lys Glu Cys Tyr 260 265 Asp Ala Phe Gln Ser Leu Glu Tyr Glu Val Asn Thr Leu His Thr Ala 275 280 Asn Gly Gln Thr Pro Phe Val Thr Phe Gly Phe Gly Leu Gly Thr Ser 290 295 300 Trp Glu Ser Arg Leu Ile Gln Gln Ser Ile Leu Arg Asn Arg Ile Ser 305 310 315 Gly Leu Gly Lys Asn Arg Lys Thr Ala Val Phe Pro Lys Leu Val Phe 325 330 335 Ala Ile Arg Asp Gly Leu Asn His Lys Phe Gly Asp Pro Asn Tyr Asp 340 345 350 Ile Lys Gln Leu Ala Leu Glu Cys Ala Ser Lys Arg Met Tyr Pro Asp 355 360 365 Ile Leu Asn Tyr Asp Gln Val Val Lys Val Thr Gly Ser Phe Lys Thr 370 375 380 Pro Met Gly Cys Arg Ser Phe Leu Gly Val Tyr Glu Asp Glu Asn Gly 385 390 395 400 Glu Gln Ile His Asp Gly Arg Asn Asn Leu Gly Val Ile Ser Leu Asn 405 410 415 Leu Pro Arg Ile Ala Leu Glu Ala Lys Gly Asn Glu Ala Ala Phe Trp 420 425 Thr Leu Leu Asp Glu Arg Leu Glr. Leu Ala Arg Lys Ala Leu Met Thr 435 440 445 Arg Ile Ala Arg Leu Glu Gly Val Lys Ala Arg Val Ala Pro Ile Leu 450 455 460 Tyr Met Glu Gly Ala Cys Gly Val Arg Leu Lys Ala Asp Asp Val 470 475 Ser Glu Ile Phe Lys Asn Gly Arg Ala Ser Ile Ser Leu Gly Tyr Ile 485 490 495 Gly Ile His Glu Thr Ile Asn Ala Leu Phe Gly Asp Lys His Ile Tyr 500 505 Asp Asn Asp Ala Leu Arg Glu Lys Gly Ile Ala Ile Val Gln Arg Leu 515 520 525 Arg Asp Ala Val Asp Gln Trp Lys Glu Glu Thr Gly Tyr Gly Phe Ser 530 535 540 Leu Tyr Ser Thr Pro Ser Glu Asn Leu Cys Asp Arg Phe Cys Arg Leu 545 550 555 Asp Thr Ala Glu Phe Gly Ile Val Glu Gly Val Thr Asp Lys Gly Tyr 565 570 Tyr Thr Asn Ser Phe His Leu Asp Val Glu Lys Lys Val Asn Pro Tyr 580 585 Asp Lys Ile Asp Phe Glu Ala Ala Tyr Pro Pro Ile Ala Asn Gly Gly 600 605 Phe Ile Cys Tyr Gly Glu Tyr Pro Asn Ile Gln His Asn Leu Lys Ala 615 620 Leu Glu Asp Val Trp Asp Tyr Ser Tyr Gln His Val Pro Tyr Tyr Gly 630 635 Thr Asn Thr Pro Ile Asp Glu Cys Tyr Glu Cys Gly Phe Thr Gly Glu 645 650 655 Phe Glu Cys Thr Ser Lys Gly Phe Thr Cys Pro Lys Cys Gly Asn His 660 665 670 Asp Ala Ala Arg Val Ser Val Thr Arg Arg Val Cys Gly Tyr Leu Gly 675 680 685 Ser Pro Asp Ala Arg Pro Phe Asn Ala Gly Lys Gln Glu Glu Val Lys 690 695 700 Arg Arg Val Lys His Leu Gly Asn Gly Gln Ile Gly 705 710 715

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<210> 8931
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 8931
Asp Cys Trp Thr Ser Thr Ala Leu Leu Asn Ile Arg Cys Arg Glu Ser
                       10
Val Met Lys Thr Leu Gly Glu Phe Ile Val Glu Lys Gln His Glu Phe
       2.0
                                        30
                      25
Ser His Ala Thr Gly Glu Leu Thr Ala Leu Leu Ser Ala Ile Lys Leu
 35
                         4.5
                  40
Gly Ala Lys Ile Ile His Arg Asp Ile Asn Lys Ala Gly Leu Val Asp
                55
                                  60
Ile Leu Gly Ala Ser Gly Ala Glu Asn Val Gln Gly Glu Val Gln Gln
               70
                   75
Lys Leu Asp Leu Phe Ala Asn Glu Lys Leu Lys Ala Ala Leu Arg Ala
          85 90
Arg Asp Ile Val Ala Gly Ile Ala Ser Glu Glu Glu Asp Glu Ile Val
      100 105
Val Phe Glu Gly Cys Glu His Ala Lys Tyr Val Val Leu Met Asp Pro
115 120 125
Leu Asp Gly Ser Ser Asn Ile Asp Val Asn Val Ser Val Gly Thr Ile
130 135
                                 140
Phe Ser Ile Tyr Arg Arg Val Thr Pro Val Gly Thr Pro Val Thr Glu
              150
                              155
Glu Asp Phe Leu Gln Pro Gly Ser Lys Gln Val Ala Ala Gly Tyr Val
      165
                           170
Val Tyr Gly Ser Ser Thr Met Leu Val Tyr Thr Thr Gly Cys Gly Val
        180 185 190
His Ala Phe Thr Tyr Asp Pro Ser Leu Gly Val Phe Cys Leu Cys Gln
195
                     200 205
Glu Arg Met Arg Phe Pro Glu Lys Gly Asn Thr Tyr Ser Ile Asn Glu
210 215
                                  220
Gly Asn Tyr Ile Lys Phe Pro Asn Gly Val Lys Lys Tyr Ile Lys Phe
225 230 235
Cys Gln Glu Glu Asp Lys Ala Thr Gln Arg Pro Tyr Thr Ser Arg Tyr
            245
                           250 255
Ile Gly Ser Leu Val Ala Asp Phe His Arg Asn Leu Leu Lys Gly Gly
        260 265
                                        270
Ile Tyr Leu Tyr Pro Ser Thr Ala Ser His Pro Asp Gly Lys Leu Arg
     275 280 285
Leu Leu Tyr Glu Cys Asn Pro Met Ala Phe Leu Ala Glu Gln Ala Gly
                 295
                                  300
Gly Lys Ala Ser Asp Gly Lys Glu Arg Ile Leu Asp Ile Val Pro Glu
             310
                              315
                                              320
Ser Leu His Gln Arg Arg Ser Phe Phe Val Gly Asn Arg His Met Val
           325 330
Asp Asp Val Glu Arg Met Ile Arg Glu Phe Pro Asp Ala
                         345
<210> 8932
<211> 210
<212> PRT
<213> Enterobacter cloacae
<400> 8932
Arg Arg Glu Gly Glu Lys Ser Lys Thr Gly Gly Asp Phe Gln Arg Gln
                         10
Leu Ala Ile Ile Pro Ala Thr Cys Leu Pro Ser Ile Leu Lys Asp Thr
                        25
```

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Asp Met Ser Leu Leu Asn Val Pro Ala Gly Lys Glu Leu Pro Glu Asp
       35
                        40
Ile Tyr Val Val Ile Glu Ile Pro Ala Asn Ala Asp Pro Ile Lys Tyr
Glu Ile Asp Lys Asp Thr Gly Ala Leu Phe Val Asp Arg Phe Met Ser
                                   75
                  70
Thr Ala Met Phe Tyr Pro Cys Asn Tyr Gly Tyr Ile Asn His Thr Leu
Ser Leu Asp Gly Asp Pro Val Asp Val Leu Val Pro Thr Pro Tyr Pro
         100
                            105
                                               110
Leu Gln Pro Gly Ser Val Ile Arg Cys Arg Pro Val Gly Val Leu Lys
     115
                        120
                                         125
Met Thr Asp Glu Ala Gly Glu Asp Ala Lys Leu Val Ala Val Pro His
                    135
 130
                          140
Thr Lys Leu Ser Lys Glu Tyr Asp His Ile Lys Asp Val Asn Asp Leu
    1.50
                      155
Pro Glu Leu Leu Lys Ala Gln Ile Ala His Phe Phe Glu His Tyr Lys
      165 170 175
Asp Leu Glu Lys Gly Lys Trp Val Lys Val Glu Gly Trp Asp Asn Ala
    180 185 190
Glu Ala Ala Lys Ala Glu Ile Ile Ala Ser Phe Glu Arg Ala Ala Lys
 195
                        200
  210
<210> 8933
<211> 224
<212> PRT
<213> Enterobacter cloacae
<400> 8933
Pro Lys Gln Arg Tyr Pro Gly Gly Pro Thr Val Ser Leu Phe Asp Lys
                            10
Lys His Leu Val Ser Gln Ala Asp Ala Leu Pro Gly Arg Asn Thr Pro
                           25
Met Pro Val Ala Thr Leu His Ala Val Asn Asn His Ser Met Thr Asn
                        40
Val Pro Asp Gly Met Glu Ile Ala Leu Phe Ala Met Gly Cys Phe Trp
Gly Val Glu Arg Leu Phe Trp Gln Leu Pro Gly Val Tyr Ser Thr Ala
                 70
                                 75
Ala Gly Tyr Thr Gly Gly Tyr Thr Pro Asn Pro Thr Tyr Arg Glu Val
             85
                               90
Cys Ser Gly Glu Thr Gly His Ala Glu Ala Val Arg Val Val Tyr Asp
                            105
Pro Ser Val Ile Ser Tyr Glu Gln Leu Leu Gln Val Phe Trp Glu Asn
                        120
                                          125
His Asp Pro Ala Gln Gly Met Arg Gln Gly Asn Asp His Gly Thr Gln
                    135
 130
                                       140
Tyr Arg Ser Ala lle Tyr Pro Leu Thr Pro Glu Gln Glu Ala Ala Ala
                 150
                                   155
145
His Ala Ser Leu Thr Arg Phe Gln Glu Ala Met Gln Ala Ala Gly Asp
                                170
              165
Lys Arg Gln Val Thr Thr Glu Ile Ala Thr Ala Lys Pro Phe Tyr Tyr
                                             190
         180
                            185
Ala Glu Asp Asp His Gln Gln Tyr Leu His Lys Asn Pro Tyr Gly Tyr
      195
                        200
Cys Gly Ile Gly Gly Ile Gly Val Cys Leu Pro Pro Gln Gln Asp
   210
                     215
```

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<211> 447
<212> PRT
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<213> Enterobacter cloacae

<400> 8934

Thr Met Leu Asn Ser Ile Leu Val Ile Leu Cys Leu Ile Ala Val Ser 10 Ala Phe Phe Ser Ile Ser Glu Ile Ser Leu Ala Ala Ser Arq Lys Ile 20 25 Lys Leu Lys Leu Leu Ala Asp Glu Gly Asn Ile Asn Ala Ser Arg Ile 35 40 45 Leu Lys Met Gln Glu Asn Pro Gly Met Phe Phe Thr Val Val Gln Ile 50 55 60 Gly Leu Asn Ala Val Ala Ile Leu Gly Gly Ile Val Gly Asp Ala Ala 70 75 Phe Ser Pro Ala Phe Tyr Gly Leu Phe Val Lys Tyr Met Ser Val Glu 85 90 95 Leu Ala Glu Gln Leu Ser Phe Ile Leu Ser Phe Ser Leu Val Thr Gly 100 105 110 Leu Phe Ile Leu Phe Ala Asp Leu Thr Pro Lys Arg Ile Gly Met Ile 115 120 125 Ala Pro Glu Ala Val Ala Leu Arg Ile Ile Asn Pro Met Arg Phe Cys 130 135 140 Leu Tyr Val Phe Arg Pro Leu Val Trp Phe Phe Asn Gly Leu Ala Asn 145 150 155 160 Val Ile Phe Arg Ile Phe Lys Leu Pro Met Val Arg Lys Asp Asp Ile 165 170 175 Thr Ser Asp Asp Ile Tyr Ala Val Val Glu Ala Gly Ala Leu Ala Gly 180 185 190 Val Leu Arg Lys Gln Glu His Glc Leu Ile Glu Asn Val Phe Glu Leu 195 200 205 Glu Ser Arg Thr Val Pro Ser Ser Met Thr Gly Arg Glu Asn Ile Ile 210 215 220 Trp Phe Asp Leu His Glu Asp Glu Gln Ser Leu Lys Thr Lys Val Ala 225 230 235 240 Gln His Pro His Ser Lys Phe Leu Val Cys Asn Glu Asp Ile Asp His 250 245 Ile Ile Gly Tyr Val Asp Ser Lys Asp Leu Leu Asn Arg Val Leu Ala 260 265 270 Asn Gln Ser Leu Ala Leu Asn Ser Gly Val Gln Ile Arg Asn Thr Leu 275 280 285 Ile Val Pro Asp Thr Leu Thr Leu Ser Glu Ala Leu Glu Ser Phe Lys 295 300 Thr Ala Gly Glu Asp Phe Ala Val Ile Met Asn Glu Tyr Ala Leu Val 310 315 305 Val Gly Ile Ile Thr Leu Asn Asp Val Met Thr Thr Leu Met Gly Asp 325 330 Leu Val Gly Gln Gly Leu Glu Glu Gln Ile Val Gln Arg Asp Glu Asn 340 345 Ser Trp Leu Ile Asp Gly Gly Tar Pro Ile Glu Asp Val Met Arg Val 360 355 365 Leu Asp Ile Asp Glu Phe Pro Gln Ser Gly Asn Tyr Glu Thr Ile Gly 375 370 Gly Phe Met Met Phe Met Leu Arg Lys Ile Pro Lys Arg Thr Asp Ser 390 395 Val Lys Phe Ser Gly Phe Lys Phe Glu Val Val Asp Ile Asp Asn Tyr 410 405 Arg Ile Asp Gln Leu Leu Val Thr Arg Ile Asp Ser Lys Pro Thr Val 425 Leu Val Pro Lys Leu Pro Asp Ala Glu Glu Lys Val Ser Ala 435 44C

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<210> 8935
<211> 75
<212> PRT
<213> Enterobacter cloacae
<400> 8935
Phe Ala Gly Asp Thr Arg Met Lys Ile Phe Gln Arg Tyr Asn Pro Leu
                              10
Gln Val Ala Lys Tyr Val Lys Ile Leu Phe Arg Gly Arg Leu Tyr Ile
                   25
Lys Asp Val Gly Ala Phe Glu Phe Asp Lys Gly Lys Ile Leu Ile Pro
                   40
                                         4.5
Lys Val Lys Asp Lys Gln His Leu Ser Val Met Ser Glu Val Asn Arg
                  55 60
Gln Val Met Arg Leu Gln Thr Glu Met Ala
                  7.0
<210> 8936
<211> 980
<212> PRT
<213> Enterobacter cloacae
<400> 8936
Ile Met Ser Leu Trp Lys Lys Ile Ser Leu Gly Val Leu Ile Phe Ile
                                1.0
Val Leu Leu Gly Thr Val Ala Phe Leu Val Gly Thr Thr Thr Gly
 20
                             25
Leu His Leu Leu Phe Asn Ala Ala Asn Arg Trp Val Pro Gly Leu Glu
35
                        40
Ile Gly Gln Val Thr Gly Gly Trp Arg Asp Leu Arg Leu Lys Asn Ile
 50
                     55
                                       60
Arg Tyr Glu Gln Pro Gly Val Ala Val Asn Ala Gly Glu Phe His Leu
65
                 7.0
                                   7.5
Ala Val Lys Leu Gly Cys Leu Arg Asp Ser Gln Leu Cys Val Asn Asp
              85
                               90
Leu Ser Leu Lys Asp Val Asn Val Ala Ile Asp Ser Lys Lys Met Pro
          100
                             105
                                               110
Lys Ser Glu Pro Val Glu Glu Glu Asp Ser Gly Pro Leu Asn Leu Ser
Thr Pro Tyr Pro Ile Ala Leu Tyr Arg Val Ala Leu Asp Asn Val Asn
   130
                     135
                                       140
Ile Lys Ile Asp Asp Thr Thr Val Ser Val Met Asp Phe Thr Ser Gly
                  150
                                    155
                                                      160
Leu Arg Trp Gln Glu Lys Asn Leu Thr Leu Thr Pro Thr Ser Leu Gln
              165
                                 170
Gly Leu Leu Ile Ala Leu Pro Lys Val Ala Asp Val Ala Gln Glu Glu
          180
                            185
                                               190
Ile Val Glu Pro Lys Ile Gln Asn Pro Gln Pro Glu Glu Lys Pro Leu
                         200
                                           205
       195
Gly Glu Thr Leu Lys Asp Leu Phe Ser Lys Pro Val Leu Pro Glu Met
                     215
Thr Asp Val His Leu Pro Leu Asn Leu Asn Ile Glu Glu Phe Lys Gly
                  230 235
                                                      240
Glu Gln Leu Arg Leu Thr Gly Asp Thr Asp Leu Thr Val Phe Asn Met
              245
                                250
                                                   255
Leu Leu Lys Val Ser Ser Ile Asp Gly Asn Met Lys Leu Asp Ala Leu
                            2.65
                                               270
Asp Ile Asp Ser Ser Gln Gly Ser Val Asn Ala Ser Gly Asn Ala Gln
                         280
Leu Arg Asp Asn Trp Pro Val Asp Ile Thr Leu Asn Ser Ala Leu Asn
```

295 Ile Asp Pro Leu Lys Gly Glu Lys Val Lys Val Lys Val Gly Gly Ala 310 315 Leu Arg Glu Lys Leu Glu Phe Gly Val Asn Leu Ser Gly Pro Val Asp 325 330 335 Met Val Leu Arg Gly Gln Thr Gln Leu Ala Glu Ala Gly Leu Pro Leu 340 345 350 Asn Leu Glu Val Val Ser Lys Gln Leu Tyr Trp Pro Phe Thr Gly Glu 355 360 365 Lys Gln Phe Gln Ala Asp Asp Leu Lys Leu Lys Leu Ser Gly Lys Met 370 375 380 Thr Asp Tyr Thr Leu Ser Phe Arg Thr Ala Val Lys Gly Gln Gly Val 385 390 395 Asn Leu Asp Lys Leu Thr Val Ala Ala Leu Glu Gly Lys Thr Glu Leu 420 425 430 Thr Ala Leu Leu Asp Trp Gln Gln Ala Ile Ser Trp Arg Gly Glu Leu 435 440 445 Lys Leu Thr Gly Ile Asn Thr Ala Lys Glu Val Pro Asp Trp Pro Ser 450 455 460 Lys Leu Asp Gly Leu Ile Lys Thr Arg Gly Ser Leu Tyr Gly Gly Thr 465 470 475 Trp Gln Met Asp Val Pro Glu Leu Lys Leu Thr Gly Asn Val Lys Gln 485 490 495 Asn Lys Val Asn Val Glu Gly Ser Leu Lys Gly Asn Ser Tyr Leu Gln 500 505 510 Trp Val Ile Pro Gly Leu His Val Ala Leu Gly Arg Asn Thr Ala Asp 515 520 525 Ile Lys Gly Glu Leu Gly Val Lys Asp Leu Asp Leu Asp Ala Thr Ile 530 535 540 Asp Ala Pro Asn Leu Asp Asn Ala Leu Pro Gly Leu Gly Gly Thr Ala 545 550 555 560Lys Gly Leu Val Lys Val Arg Gly Thr Val Glu Ala Pro Gln Leu Leu 565 570 575 Ala Asp Ile Thr Ala Asn Asn Leu Arg Trp Gln Glu Leu Ser Ile Ala 585 590 580 Arg Val Arg Val Glu Gly Asp Val Lys Ser Thr Asp Gln Ile Gly Gly 595 600 605 Asn Leu Asp Leu Arg Val Glu Arg Ile Ser Gln Pro Asp Val Asn Ile 615 620 610 Ser Leu Val Thr Leu Ala Ala Lys Gly Asn Glu Lys Gln His Asp Leu 630 635 Gln Leu Arg Val Gln Gly Glu Pro Val Ser Gly Gln Leu His Leu Thr 645 650 Gly Ser Phe Asp Arg Gln Ala Thr Arg Trp Lys Gly Val Leu Asp Asn 660 665 670 Thr Arg Phe Ser Thr Pro Val Gly Pro Leu Val Leu Ser Arg Ser Ile 675 680 685 Ala Leu Asp Tyr Arg Asn Ala Glu Gln Lys Leu Ser Ile Gly Pro His 690 695 700 Cys Trp Thr Asn Pro Asn Ala Glu Leu Cys Val Pro Gln Thr Ile Asp 710 715 720 Ala Gly Ala Glu Gly Arg Ala Gln Ile Asn Leu Asn Arg Phe Asp Leu 730 735 Ala Met Leu Lys Pro Phe Met Pro Glu Thr Thr Gln Ala Ser Gly Val 740 745 750 Phe Ser Gly Lys Ala Asp Val Ala Trp Asp Thr Thr Lys Glu Gly Leu 755 760 765 Pro Gln Gly Ser Val Thr Leu Ser Gly Arg Asn Val Lys Val Thr Gln 780

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Glu Val Asn Asp Ala Pro Leu Pro Val Ala Phe Asp Thr Leu Asn Val
              790
                              795
Asn Ala Asp Leu Arg Asn Asn Arg Ala Glu Leu Gly Trp Leu Ile Arg
          805 810
Leu Thr Asn Asn Gly Gln Phe Asp Gly Gln Val Gln Ile Thr Asp Pro
        820 825
Gln Gly Arg Arg Asn Leu Gly Gly Asn Val Asn Ile Arg Asn Phe Asn
     835 840
                                  845
Leu Ala Met Val Asn Pro Ile Phe Ser Arg Gly Glu Lys Ala Ala Gly
 850 855 860
Met Leu Ser Ala Asn Leu Arg Leu Ala Gly Asp Ala Gln Ser Pro Gln
865 870 875 880
Leu Phe Gly Gln Met Arg Leu Asn Gly Val Asp Ile Asp Gly Asn Phe
      885 890 895
Met Pro Phe Asp Met Gln Pro Ser Gln Leu Thr Met Asn Phe Asn Gly
    900 905 910
Gln Ser Ser Thr Leu Ser Gly Ser Val Leu Thr Gln Gln Gly Gln Ile
     915 920 925
Asn Leu Ser Gly Asp Ala Asp Trp Ser Gln Leu Asp Asn Trp Arq Ala
 930 935 940
Arg Ile Ala Ala Lys Gly Ser Arg Val Arg Ile Thr Val Pro Pro Met 945 950 950 955 960
Val Arg Leu Thr Phe Arg Arg Thr Gly Ala Trp Arg Gln Pro Gly Phe
                           970
Phe His Pro
```

<210> 8937

<211> 278 <212> PRT

<213> Enterobacter cloacae

210

<400> 8937 Arg Arg Val Asp Val Pro Trp Arg Ala Ser Cys Ser Arg Ser Pro Gly 10 Lys Arg Gly Gly Val Ser Ser Asp Gly Val Met Leu Asn Glu Asn Leu 25 Lys Pro Val Glu Gln Lys Ser Ala Gly Ile Pro Ile Asn Ser Asn Leu 3.5 4.0 Ile Val His Val Gly Asn Asn Val Arg Leu Asp Ala Phe Gly Leu Lys 50 5.5 Ala Arg Leu Thr Gly Asp Leu Lys Val Ala Gln Asp Gln Gln Gly Leu 70 75 Gly Leu Asn Gly Gln Ile Asn Ile Pro Glu Gly Arg Phe His Ala Tyr 85 90 Gly Gln Asp Leu Ile Val Arg Lys Gly Glu Leu Leu Phe Ser Gly Pro 100 105 110 Pro Asp Gln Pro Val Leu Asn Ile Glu Ala Ile Arg Asn Pro Glu Ala 120 115 Thr Glu Asp Asp Val Ile Ala Gly Val Arg Val Thr Gly Ser Ala Asp 135 140 130 Glu Pro Lys Ala Glu Ile Phe Ser Asp Pro Ala Met Ser Gln Glu Glu 155 145 150 160 Ala Leu Ser Tyr Leu Leu Arg Gly Gln Gly Leu Asp Ser Gln Gln Gly 170 165 Asp Gly Ala Ala Met Thr Ser Met Leu Val Gly Leu Gly Val Ala Gln 180 185 190 Ser Gly Gln Val Val Gly Lys Ile Gly Glu Thr Phe Gly Val Ser Asn 205 200 Leu Ala Leu Asp Thr Gln Gly Val Gly Asp Ser Ser Gln Val Val 215 220

```
    Ser Gly Tyr
    Val
    Leu
    Pro
    Gly
    Leu
    Gly
    Leu
    Gly
    Ile

    225
    230
    235
    240

    Phe
    Asp
    Ser
    Leu
    Ala
    Thr
    Leu
    Arg
    Try Arg
    Leu
    Met
    Pro
    240

    265
    250
    255

    Leu
    Tyr
    Leu
    Ala
    Val
    Ser
    Gly
    Val
    Asp
    Gln
    Ala
    Leu
    Asp
    Leu
    Leu

    Tyr
    Gln
    Phe
    Glu
    Phe
    275
```

<210> 8938 <211> 351 <212> PRT <213> Enterobacter cloacae

...

<400> 8938 Met Pro Ser Arg Arg Lys Glu Ser Asn Val Met Ser Arg Ser Leu Ser 10 Gln Thr Gly Glu Ala Lys Arg Arg Phe Thr Trp Pro Thr Gly Thr Pro 25 Gln Ile Val Ala Leu Leu Val Leu Leu Val Asp Ser Leu Val Ala 35 40 Pro His Phe Phe Gln Ile Val Val Gln Asp Gly Arg Leu Phe Gly Ser 55 Pro Ile Asp Ile Leu Asn Arg Ala Ala Pro Val Ala Leu Leu Ala Ile 65 70 75 80 Gly Met Thr Leu Val Ile Ala Thr Gly Gly Ile Asp Leu Ser Val Gly 85 90 Ala Val Met Ala Ile Ala Gly Ala Thr Ala Ala Ser Met Thr Val Ala 100 105 Gly His Ser Leu Pro Val Val Leu Leu Ala Ala Leu Gly Ser Gly Val 115 120 Leu Ala Gly Leu Trp Asn Gly Ile Leu Val Ala Val Leu Lys Ile Gln 130 135 140 Pro Phe Val Ala Thr Leu Ile Leu Met Val Ala Gly Arg Gly Val Ala 145 150 155 Gln Leu Ile Thr Ser Gly Gln Ile Val Thr Phe Asn Ser Pro Ser Leu 165 170 175 Ala Trp Ile Gly Ser Gly Asn Phe Leu Phe Phe Pro Thr Pro Val Ile 180 185 190 Val Ala Leu Val Thr Leu Val Val Phe Trp Leu Phe Thr Arg Lys Thr 195 200 205 Ala Leu Gly Met Phe Ile Glu Ala Val Gly Ile Asn Ile Arg Ala Ala 210 215 220 Lys Asn Ala Gly Val Asn Thr Arg Leu Met Val Met Leu Thr Tyr Val 230 235 Leu Ser Gly Val Cys Ala Ala Ile Ala Gly Val Ile Val Ala Ala Asp 245 250 Ile Arg Gly Ala Asp Ala Asn Asn Ala Gly Leu Trp Leu Glu Leu Asp 260 265 270 Ala Ile Leu Ala Val Val Ile Gly Gly Gly Ser Leu Met Gly Gly Arg 280 275 285 Phe Asn Leu Leu Ser Val Val Gly Ala Leu Ile Ile Gln Gly Met 295 290 300 Asn Thr Gly Ile Leu Leu Ser Gly Phe Gln Pro Glu Leu Asn Gln Val 305 310 315 Val Lys Ala Val Val Leu Ile Val Leu Ile Val Gln Ser Pro Arg 330 Phe Ile Thr Leu Ile Lys Arg Phe Arg Gly His Asp Lys Thr 340 345

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<211> 403
<212> PRT
<213> Enterobacter cloacae
<400> 8939
Ser Ser Pro Leu Pro Phe Gly Glu Arg Val Arg Val Arg Gly Asn Lys
                        10
Pro His Thr Pro Glu Gly Ala Thr Met His Thr Arg Thr Leu Leu Val
    20 25
Ala Ser Leu Ser Met Leu Ala Thr Ala Ala Val Ala Gln Thr Gln Tyr
35 40 45
Ala Trp Val Gly Thr Tyr Asn Pro Asn Gly Glu Gly Leu Tyr Arg Phe
50 55 60
Thr Val Asp Pro Gln Thr Gly Ala Leu Asn Asp Lys Thr Leu Val Ser
   70 75
Lys Leu Pro Asn Ala Ala Gln Leu Thr Val Ser His Asp Gly Lys Thr
     85 90 95
Leu Tyr Leu Ala Ser Glu Val Glu Gln Gly Val Val Gln Ala Leu Arg
      100 105 110
Ile Gly Asp Asn Gly Thr Leu Ser Glu Leu Asn Gln Val Ala Ser Gly
115 120 125
Gly Ala Gly Pro Val Tyr Leu Ser Leu Thr Pro Asn Gly Lys His Leu
130 135 140
Leu Val Ala Asn Tyr Ile Ser Gly Thr Val Ala Val Leu Pro Val Asn
145 150 155 160
Ala Asp Gly Ser Leu Ser Asp Ala Thr Asp Thr His Gln Asp Lys Gly
        165 170 175
Glu Pro Gly Ala Ala Lys Pro Glu Ala Ala Val Glu Gly Ser Phe Ala
   180 185 190
Ile Ser Asp His Asn Gly Pro His Ala His Met Ile Ala Ala Asp Pro
   195 200
                               205
Ser Gly Lys Tyr Val Phe Ser Thr Asp Leu Gly Leu Asp Arg Ile Tyr
210 215 220
Gln Tyr Arg Phe Asp Asp Gln Tnr Gly Lys Leu Thr Pro Asn Asp Pro
225 230 235 240
Pro Phe Ile Ser Ala Ser Ser Lys Gly Ala Gly Pro Arg His Phe Val
          245 250 255
Phe Thr Pro Lys Gly Asp Ala Leu Trp Leu Ile Asn Glu Glu Ala Ser
       260 265 270
Thr Leu Thr His Tyr Ala Leu Asp Ser Asn Gly Arg Leu Lys Glu Gly
275 280 285
Lys Thr Val Ser Ala Leu Pro Asp Gly Tyr Lys Gly Thr Ser Phe Ala
  290 295
                              300
Ala Gly Leu Ala Leu Ser Ala Asp Gly Lys Gln Leu Tyr Val Ala Asn
305
   310 315
Arg Leu His Asn Ser Ile Gly His Phe Thr Val Thr Ala Glu Gly Thr
          325 330
                                       335
Leu Thr His Gln Asp Asp Val Trp Thr Arg Gly Asp Tyr Pro Arg Thr
                      345 350
        340
Leu Thr Leu Asp Lys Gln Gly Arg Trp Leu Tyr Val Met Asn Gln Arg
                   360
                         365
     355
Ser Asp Asn Ile Thr Arg Phe Arg Val Ala Pro Asp Gly Lys Leu Ser
                    380
                375
Ala Glu Pro Asp Tyr Thr Pro Val Gly Ser Pro Ser Gin Met Val Ile
                           395
385
              390
Ser Pro
```

<210> 8940 <211> 258 <212> PRT

<213> Enterobacter cloacae

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<400> 8940
Val Met Pro Thr Ala Leu Thr Lys Arg Trp Arg Met Leu Asp Lys Ile
                              1.0
Cys Gln Leu Ala Arg Asp Ala Gly Asp Ala Ile Met Gln Val Tyr Asp
        20
                          25
Gly Ala Lys Pro Met Asp Val Val Ser Lys Ala Asp Asp Ser Pro Val
     35
                     40
                                        4.5
Thr Ala Ala Asp Ile Ala Ala His Ala Val Ile Leu Lys Gly Leu Gln
              55
                                    60
Ala Leu Thr Pro Asp Ile Pro Val Leu Ser Glu Glu Ala Pro Gln Ser
                    75
               7.0
Trp Asp Glu Arg Gln His Trp Gln Arg Tyr Trp Leu Val Asp Pro Leu
            85
                    90
Asp Gly Thr Lys Glu Phe Ile Lys Arg Asn Gly Glu Phe Thr Val Asn
             105 110
Ile Ala Leu Ile Glu Asn Gly Lys Ala Val Leu Gly Val Val Tyr Ala
      115 120
Pro Val Met Lys Val Met Tyr Ser Ala Ala Glu Gly Lys Ala Trp Lys
                135 140
Glu Glu Cys Gly Val Arg Lys Gln Ile Gln Val Arg Asp Ala Arg Pro
                               155
                150
Pro Leu Val Val Ile Ser Arg Ser His Ser Asp Ser Glu Leu Glu Glu
             165
                             170
Tyr Leu Gln Gln Leu Gly Glu His Gln Thr Thr Ser Ile Gly Ser Ser
       180
                          185
                                           190
Leu Lys Phe Cys Leu Val Ala Glu Gly Gln Ala Gln Leu Tyr Pro Arg
      195
                       200 205
Phe Gly Pro Thr Asn Val Trp Asp Thr Ala Ala Gly His Ala Val Ala
210
                    215
                                     220
Ala Ala Ala Gly Ala His Val His Asp Trp Gln Gly Lys Pro Leu Asp
                230 235
Tyr Thr Pro Arg Glu Ser Phe Leu Asn Pro Gly Phe Arg Val Ser Leu
             245
```

<210> 8941 <211> 620 <212> PRT

<213> Enterobacter cloacae

<400> 8941 Glu Ile Phe Gly Cys Tyr Thr Leu Phe Gln Pro Val Ile Trp Val Phe 1.0 Gly Phe Gln Ala Val Phe Cys Arg Gly Ala Ala Leu His Leu Leu Pro 25 30 Gly Trp Lys Gln Gly Tyr Ser Gly Glu Asn Val Thr Lys Ile Arg Gln 4.0 45 35 Leu Cys Leu Val Ser Leu Leu Leu Thr Ser Gly Ile Ala Ser Ala Ala 5.5 60 50 Asn Val Arg Leu Gln Val Glu Gly Leu Ser Gly Ala Leu Glu Lys Asn 7.0 7.5 Val Arg Ala Gln Leu Ser Thr Ile Gln Ser Asp Glu Val Thr Pro Asp 90 85 Arg Arg Phe Arg Ala Arg Val Asp Asp Ala Ile Arg Glu Gly Leu Lys 100 105 110 Ala Leu Gly Tyr Tyr Glu Pro Thr Ile Asp Phe Asp Leu Arg Pro Pro Pro Ala Lys Gly Arg Gln Val Leu Ile Ala Arg Val Ser Pro Gly Glu

```
135
Pro Val Leu Ile Gly Gly Thr Asn Val Val Leu Arg Gly Gly Ala Arg
      150
Thr Asp Arg Asp Tyr Leu Asp Leu Leu Ser Thr Arg Pro Lys Val Gly
        165 170 175
Thr Val Leu Asn His Gly Asp Tyr Asp Arg Phe Lys Lys Ser Leu Thr
     180 185 190
Ser Val Ser Leu Arg Lys Gly Tyr Phe Asp Ser Gln Phe Asn Lys Ser
195 200 205
Gln Leu Gly Val Ala Leu Glu Arg Arg Gln Ala Phe Trp Asp Ile Asp
210 215 220
Tyr Asp Ser Gly Glu Arg Tyr Arg Phe Gly Asp Val Thr Phe Glu Gly
225 230 235 240
Ser Gln Ile Arg Asp Glu Tyr Leu Gln Asn Leu Val Pro Phe Lys Lys
      245 250 255
Gly Asp Tyr Tyr Gln Ser Ser Asp Leu Gly Glu Leu Asn Arg Arg Leu
     260 265 270
Ser Ala Thr Gly Trp Phe Asn Ser Val Val Val Ala Pro Glu Phe Asp
  275 280 285
Lys Ser Arg Lys Thr Lys Val Leu Pro Leu His Gly Val Val Ser Pro
290 295 300
Arg Thr Glu Asn Thr Ile Glu Thr Gly Val Gly Tyr Ser Thr Asp Val
305 310 315 320
Gly Pro Arg Val Lys Ala Ser Trp Lys Lys Pro Trp Met Asn Ser Tyr
        325 330 335
Gly His Ser Leu Thr Thr Ser Val Ser Leu Ser Ala Pro Glu Gln Gln
 340 345 350
Leu Asp Phe Ser Tyr Lys Met Pro Leu Leu Lys Asn Pro Leu Glu Gln
355 360 365
Tyr Tyr Leu Val Gln Gly Gly Phe Lys Arg Thr Asp Leu Asn Asp Thr
370 375 380
Glu Gln Asp Ser Thr Thr Lea Ala Val Ser Arg Phe Trp Asp Leu Ser
385 390 395 400
Ser Gly Trp Gln Arg Ala Ile Asn Leu Arg Trp Ser Leu Asp His Phe
      405 410 415
Thr Gln Ala Asn Val Thr Asn Thr Thr Met Leu Leu Tyr Pro Gly Val
   420 425 430
Met Ile Ser Arg Thr Arg Ser Arg Gly Gly Leu Met Pro Thr Trp Gly
435 440 445
Asp Ser Gln Arg Tyr Ser Ile Asp Tyr Ser Asn Thr Ala Trp Gly Ser
450 455 460
Asp Val Asp Phe Ser Val Phe Gln Ala Gln Asn Val Trp Ile Arg Thr
465 470 475 480
Leu Tyr Asp Lys His Arg Phe Val Met Arg Gly Asn Leu Gly Trp Ile
        485 490 495
Glu Thr Gly Asp Phe Glu Arg Val Pro Pro Asp Leu Arg Phe Phe Ala
     500 505 510
Gly Gly Asp Arg Ser Ile Arg Gly Tyr Lys Tyr Lys Ser Ile Ser Pro
    515 520 525
Glu Asn Asp Lys Gly Gln Leu Thr Gly Ala Ser Lys Leu Ala Thr Gly
     535
                   540
Ser Leu Glu Tyr Gln Tyr Asn Val Ser Gly Lys Trp Trp Gly Ala Met
545 550 555 560
Phe Val Asp Gly Gly Glu Ala Val Asp Ile Arg Arg Ser Asp Phe
          565 570 575
Lys Thr Gly Ala Gly Val Gly Val Arg Trp Gln Ser Pro Val Gly Pro
       580 585 590
Ile Lys Leu Asp Phe Ala Val Pro Val Gly Asp Lys Asp Glu His Gly
     595
                  600
Leu Gln Phe Tyr Ile Gly Leu Gly Pro Glu Leu
                615
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<210> 8942
<211> 363
<212> PRT
<213> Enterobacter cloacae
<400> 8942
Ile Arg Ser Ser Lys Arg Ser Trp Cys Leu Ser Cys Leu Ser Cys Ser
           5
                               10
Arq Arq Ala Leu Ser Leu Ser Leu Arg Gly Ser Ala Val Met Ile Lys
         20 25
                                              3.0
Arg Asn Leu Pro Leu Met Ile Thr Leu Gly Val Phe Val Leu Gly Tyr
                     40
                                          45
Leu Tyr Cys Leu Thr Gln Phe Pro Gly Phe Ala Ser Thr Arg Val Ile
        55
                                      60
Cys Asn Ile Leu Thr Asp Asn Ala Phe Leu Gly Ile Ile Ala Val Gly
                      75
                  7.0
Met Thr Phe Val Ile Leu Ser Gly Gly Ile Asp Leu Ser Val Gly Ser
              85
Val Ile Ala Phe Thr Gly Val Phe Leu Ala Lys Ala Ile Gly Phe Trp
                         105
          100
Gly Ile Ser Pro Leu Leu Ala Phe Pro Leu Val Leu Val Met Gly Cys
       115
                        120
Ala Phe Gly Ala Phe Met Gly Leu Leu Ile Asp Ala Leu Lys Ile Pro
 130
                    135
                                       140
Ala Phe Ile Ile Thr Leu Ala Gly Met Phe Phe Leu Arg Gly Val Ser
                 150
                                   155
                                                      160
Tyr Leu Val Ser Glu Glu Ser Ile Pro Ile Asn His Pro Ile Tyr Asp
              165
                                170
                                                  175
Thr Leu Ser Ser Leu Ala Trp Lys Ile Pro Gly Gly Gly Arg Leu Ser
          180
                            185
Ala Met Gly Leu Leu Met Leu Gly Val Val Val Ile Gly Ile Phe Leu
                         200
                                           205
       195
Ala His Arg Thr Arg Phe Gly Asn Gln Val Tyr Ala Ile Gly Gly Ser
                     215
                                        220
   210
Ala Thr Ser Ala Asn Leu Met Gly Ile Ser Thr Arg Ser Thr Thr Ile
                  230
                                    235
225
Arg Ile Tyr Met Leu Ser Thr Gly Leu Ala Thr Leu Ala Gly Ile Val
              245
                                250
Phe Ser Val Tyr Thr Gln Ala Gly Tyr Ala Leu Ala Gly Val Gly Val
                             265
                                               270
           260
Glu Leu Asp Ala Ile Ala Ser Val Val Ile Gly Gly Thr Leu Leu Ser
       275
                         280
                                           285
Gly Gly Val Gly Thr Val Leu Gly Thr Leu Phe Gly Val Ala Ile Gln
                      295
                                        300
   290
Gly Leu Ile Gln Thr Tyr Ile Asn Phe Asp Gly Thr Leu Ser Ser Trp
                                    315
                  310
Trp Thr Lys Ile Ala Ile Gly Ile Leu Leu Phe Ile Phe Ile Ala Leu
              325
Gln Arg Gly Leu Thr Val Leu Trp Glu Asn Arg Gln Ser Ser Pro Val
                             345
           340
Thr Arg Val Asn Thr Ser Leu Thr Glu Arg
       355
                         360
<210> 8943
<211> 541
<212> PRT
<213> Enterobacter cloacae
<400> 8943
Arg Pro Ile Leu Phe Phe Tyr Ala Gln Lys Tyr Leu Ala Thr Gly Asn
```

10 Asn Ile Met Leu Lys Thr Leu Ser Ile Arg Thr Gly Leu Leu Ser Leu 20 25 Leu Ala Val Met Thr Leu Leu Leu Leu Ile Val Ser Gly Ile Gly Ile 35 40 Tyr Ala Leu Thr Gln Ser Ser Ala Ser Leu Gln Arg Ile Asn His Leu 50 55 60 Gln Gly Glu Gln Met Val Gln Leu Asn Ala Gly Tyr Thr Leu Ile Leu 75 70 Arg Ala Arg Asn Glu Ala Gly Gln Ala Val Arg Met Met Glu Val Gly 85 90 95 Leu Leu Asp Asp Ala Ala Arg Ala Val Lys Thr Ile Asn Gln Glu Val 100 105 Ala Leu Ala Gln Lys Thr Leu Lys Asp Val Ile Gly Ser Gly Val Ala 115 120 125 Asp Glu Gln Gly Gln Lys Leu Leu Asp Asn Val Ala Ala Ser Leu Ala 130 135 140 Val Tyr Asn Gln Gln Gly Ile Ser Pro Met Leu Lys Ala Leu Asn Glu 145 150 155 160 Gln Ser Ala Asp Ser Tyr Tyr Asp Leu Leu Glu Asn Lys Leu Val Pro 170 175 165 Val Ala Lys Gln Phe Asp Asn Asp Met Gln Ala Phe Gln Ala Trp Ser 180 185 Glu Ala Arg Gly Lys Ala Glu Val Ser Ala Val Gln Ala Ser Lys Thr 195 200 205 Arg Val Leu Ile Leu Ile Ile Val Ala Ala Leu Leu Thr Ala Gly Ile 210 215 220 Ile Val Leu Ala Trp Leu Val Leu Arg His Met Leu Leu Glu Pro Leu 230 235 Ser Ala Ser Ile Ala Gln Leu Glu His Val Ala Ala Gly Asp Leu Thr 245 250 255 His Thr Leu Asn Ala Pro Ala Ser Gln Glu Phe Asn Arg Leu Asn Ala 265 270 260 Ala Ile Glu Gly Met Arg Gln Ser Leu Met Asp Ser Val Leu Arg Val 275 280 285 Arg Asp Ala Ser Ser Gln Ile Asp Thr Gly Ser Arg Glu Leu Thr Ala 295 300 Gly Asn Met Asn Leu Ala Gln Arg Thr Glu Ser Thr Ala Thr Ser Leu 305 310 315 Glu Gln Thr Ala Ala Ser Met Glu Glu Ile Thr Ala Thr Val Lys Leu 325 330 335 Asn Ala Asp Asn Ala Glu Gln Ala His Gln Leu Ala Lys Ser Val Ser 345 350 340 Asp Thr Ala Asp His Gly Ser Glu Met Val Cys Tyr Val Ile Glu Lys 360 365 355 Met Arg Asp Ile Ser Gly Ser Ser Ala Arg Ile Ala Asp Ile Leu Ser 375 370 380 Val Ile Asp Gly Ile Ala Phe Gln Thr Asn Ile Leu Ala Leu Asn Ala 390 395 400 Ser Val Glu Ala Ala Arg Ala Gly Glu Gln Gly Arg Gly Phe Ala Val 405 410 Val Ala Gly Glu Val Arg Asn Leu Ala Ser Arg Ser Ala Asp Ala Ala 425 420 430 Lys Glu Ile His Ser Leu Ile Ser Asp Ser Gln Thr His Val Asn Glu 440 445 Gly Ser Glu Leu Ala Gln Gln Ala Gly Glu Thr Met Asp Glu Ile Ala 455 450 460 Thr Glu Val Leu Arg Met Thr Lys Leu Met Arg Glu Ile Ala Thr Ala 475 470 Ser Gln Glu Gln Ser Arg Gly Ile Glu Gln Val Asn Ile Ala Val Asn 485 490

Gln Met Asp Glu Thr Ala Gln Gln Asn Ala Ala Leu Val Gln Gln Ser 505 500 Ser Ala Ala Thr Arg Ser Leu Glu Glu Gln Ser Arg Glu Leu Met Glu 515 520 Ala Met Ala Ser Phe Lys Leu Thr Thr Gln Thr Ala

530 535

<210> 8944 <211> 459 <212> PRT

<213> Enterobacter cloacae

<400> 8944 Arg Met Arg Ile His Ile Leu Gly Ile Cys Gly Thr Phe Met Gly Gly 5 10 Leu Ala Met Leu Ala Arg Ser Leu Gly His Glu Val Thr Gly Ser Asp 25 3.0 Ala Asn Val Tyr Pro Pro Met Ser Thr Leu Leu Glu Lys Gln Gly Ile 40 45 Ser Leu Ile Gln Gly Tyr Asp Ala Ser Gln Leu Glu Pro Gln Pro Asp 5.5 Leu Val Ile Val Gly Asn Ala Met Thr Arg Gly Asn Pro Cys Val Glu 75 70 Ala Val Leu Glu Arg Asn Ile Pro Tyr Met Ser Gly Pro Gln Trp Leu 8.5 His Asp Phe Val Leu Arg Asp Arg Trp Val Val Ala Val Ala Gly Thr 100 105 110 His Gly Lys Thr Thr Thr Ala Gly Met Ala Thr Trp Ile Leu Glu Ala 115 120 Cys Gly Tyr Lys Pro Gly Phe Val Ile Gly Gly Val Pro Gly Asn Phe 135 130 Asp Val Ser Ala Arg Leu Gly Asp Ser Pro Phe Phe Val Ile Glu Ala 150 155 145 Tyr Cys Pro Arg Thr Leu Ile Leu Asn Asn Leu Glu Phe Asp His Ala 180 185 Asp Ile Phe Asp Asp Leu Lys Ala Ile Gln Lys Gln Phe His His Leu 195 200 205 Val Arg Ile Val Pro Gly Gln Gly Arg Ile Ile Leu Pro Glu Asn Asp 215 220 210 Ile Asn Leu Lys Gln Thr Met Ala Met Gly Cys Trp Ser Glu Gln Glu 235 230 Leu Val Gly Glu Gln Gly His Trp Gln Ala Lys Lys Leu Asn Ala Asp 250 245 Ala Ser Glu Trp Glu Val Leu Leu Asp Gly Glu Lys Val Gly Glu Val 265 270 260 Lys Trp Gly Leu Val Gly Glu His Asn Met His Asn Gly Leu Met Ala 285 280 Ile Ala Ala Ala Arg His Val Gly Val Leu Pro Ala Asp Ala Ala Asn 295 300 290 Ala Leu Gly Thr Phe Ile Asn Ala Arg Arg Arg Leu Glu Leu Arg Gly 315 310 Glu Ala His Gly Val Thr Val Tyr Gly Asp Phe Ala His His Pro Thr 330 Ala Ile Leu Ala Thr Leu Ala Ala Leu Arg Gly Lys Val Gly Gly Thr 340 345 Ala Arg Ile Leu Ala Val Leu Glu Pro Arg Ser Asn Thr Met Lys Met 355 360 365 Gly Ile Cys Lys Asp Asp Leu Ala Pro Ser Leu Gly Arg Ala Asp Glu

375

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4644
Val Phe Leu Leu Gln Pro Gln His Ile Pro Trp Gln Val Ala Glu Val
                 390
                               395
Ala Asp Ala Cys Ile Gln Pro Ala His Trp Ser Ala Asp Val Asp Val
             405
                               410
Leu Ala Asp Met Val Val Lys Ala Ala Gln Pro Gly Asp His Ile Leu
         420
                            425
Val Met Ser Asn Gly Gly Phe Gly Gly Ile His Gln Lys Leu Leu Asp
    435 440
Gly Leu Ala Lys Lys Ala Ala Ala Ala Glu
  450 455
<210> 8945
<211> 392
<212> PRT
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<213> Enterobacter cloacae

340

<400> 8945 Tyr Pro Arg Ala Leu Arg Arg Pro Pro Tyr Gln Glu Asn Pro Met Phe 1.0 Asp Leu Leu Arg Arg Ala Arg Leu Ala Asp Asp Thr Leu Thr Asp 25 Ile Ala Ile Gln Asp Gly Lys Ile Ala Ala Thr Gly Asp Ile Asn Ala 40 Pro Ala Arg Lys Thr Val Glu Leu Asn Gly Asp Val Phe Val Ser Ala 5.5 Gly Trp Ile Asp Ser His Val His Cys Tyr Pro Asn Ser Pro Ile Tyr 65 7.5 His Asp Glu Pro Asp Ser Val Gly Ile Ala Thr Gly Val Thr Thr Val 85 90 Val Asp Ala Gly Ser Thr Gly Ala Asp Asp Val Asp Asp Phe Tyr Ala 100 105 110 Ile Thr Arg Lys Ala Ser Thr Glu Val Phe Ala Leu Leu Asn Ile Ser 115 120 125 Arg Val Gly Leu Ile Ala Gln Asn Glu Leu Ala Asn Met Ala Asn Ile 135 140 Asp Ala Asp Ala Val Lys Glu Ala Val Lys Arg His Pro Asp Phe Ile 145 150 155 160 Val Gly Leu Lys Ala Arg Met Ser Ser Ser Val Val Gly Glu Asn Gly 165 170 175 Ile Thr Pro Leu Ala Arg Ala Lys Ala Ile Gln Lys Glu Asn Gly Asp 185 190 180 Leu Pro Leu Met Val His Ile Gly Asn Asn Pro Pro Asn Leu Asp Glu 195 200 205 Ile Ala Glu Leu Leu Ser Ser Gly Asp Ile Ile Thr His Cys Tyr Asn 215 Gly Lys Pro Asn Arg Ile Leu Thr Pro Ser Gly Glu Leu Arg Ala Ser 225 230 235 Ile Thr Ser Ala Leu Lys Arg Gly Val Arg Leu Asp Val Gly His Gly 245 250 Thr Ala Ser Phe Ser Phe Glu Val Ala Lys Arg Ala Ile Ala Met Gly 265 260 Ile Leu Pro His Thr Ile Ser Ser Asp Ile Tyr Cys Arg Asn Arg Ile 275 280 285 Asn Gly Pro Val Gly Ser Leu Ala Ser Val Met Ser Lys Phe Leu Ala 295 300 Ile Gly Met Ser Leu Pro Gln Val Ile Asp Cys Val Thr Ala Asn Ala 305 310 315 Ala Asp Gly Leu Arg Leu Thr Arg Lys Gly Arg Ile Gln Pro Gly Leu 325 330 Asp Ala Asp Leu Thr Leu Phe Thr Leu Lys Arg Gln Pro Thr Val Leu

345

370

Thr Asp Ala Glu Asn Asp Ser Leu Gln Ala Glu His Ile Leu Val Pro 355 360 Leu Ala Ala Ile Arg Ala Gly Lys Gly Tyr Met Thr Glu Gln Gly Ser 375 380 Thr Glu His Ala Phe Asp Leu <210> 8946 <211> 641 <212> PRT <213> Enterobacter cloacae <400> 8946 Glu Asp Asn Asp Val Arg Phe Pro Asn Gln Arg Leu Ala Gln Leu Phe 10 Asp Leu Leu Gln Asn Glu Thr Leu Pro Gln Asp Glu Leu Ala Gln Arg 20 25 Leu Ser Val Ser Thr Arg Thr Val Arg Ala Asp Ile Thr Ala Leu Asn 40 Ala Leu Leu Ala Ser His Gly Ala Gln Phe Ile Leu Ser Arg Gly Asn 5.5 Gly Tyr Gln Leu Lys Ile Asn Asp Val Ala Arg Tyr Gln Gln Leu Gln 7.0 7.5 Ala Ser His Pro Arg Ala Leu Arg Ile Pro Arg Thr Gly Pro Glu Arg 8.5 90 Val His Tyr Leu Val Val Arg Phe Leu Thr Ser Ala Phe Ser Ile Lys 100 105 Leu Glu Asp Leu Ala Asp Glu Trp Phe Val Ser Arg Ala Thr Leu Gln 120 115 Ser Asp Met Val Glu Val Arg Glu Trp Phe His Arg Tyr Asn Leu Thr 130 135 140 Leu Glu Thr Arg Pro Arg His Gly Met Lys Leu Phe Gly Ser Glu Met 150 155 160 Ala Ile Arg Ala Cys Leu Thr Asp Leu Leu Trp Glu Leu Ala Gln Gln 165 170 Asp Ser Leu Asn Pro Leu Val Thr Asp Val Ala Leu Asn Ala Gly Val 185 190 180 Ala Glu Lys Met Val Pro Val Leu His Asp Ala Leu Thr Arg His His 195 200 205 Ile Arg Leu Thr Asp Glu Gly Glu Leu Phe Leu Arg Leu Tyr Cys Ala 215 220 210 Val Ser Val Arg Arg Ile Ser Glu Gly Tyr Pro Leu Pro Glu Phe His 225 230 235 Ala Glu Asp Val Glu Glu Asn Val His Glu Ala Ala Lys Asp Ile Ala 245 250 Val Ala Ile Gln Glu Leu Ala Gly Lys Ala Leu Ser Pro Ser Glu Glu 260 265 Ser Trp Leu Cys Val His Ile Ala Ala Arg Gln Ile Gln Glu Ile Ala Pro Ser Ala Ile Asn Ala Asp Asp Glu Ala Leu Val Asn Tyr Ile 290 295 300 Leu Arg Tyr Ile Asn Thr His Tyr Asn Tyr Asn Leu Leu Ser Asp Glu 310 305 315 Gln Leu His Ala Asp Leu Leu Thr His Ile Lvs Thr Met Ile Thr Arg 325 330 Val Arg Tyr Gln Ile Met Ile Pro Asn Pro Leu Leu Asp Asn Ile Lys 340 345 Gln His Tyr Pro Met Ala Trp Asp Met Thr Leu Ala Ala Val Ser Ser 355 360 Trp Gly Lys Tyr Thr Pro Tyr Val Ile Ser Glu Asn Glu Ile Gly Phe

Leu Val Leu His Ile Gly Val Gly Leu Glu Arg His Tyr Asn Ile Gly 395 390 Tyr Gln Arg Gln Pro Arg Val Leu Leu Val Cys Asp Ala Gly Asn Ala 405 410 415 Met Val Arg Met Ile Glu Ala Val Leu Gln Arg Lys Tyr Pro Gln Ile 420 425 430 Glu Val Thr Arg Thr Leu Thr Leu Arg Glu Tyr Glu Leu Ala Asp Ala 435 440 445 Ile Gly Glu Asp Phe Val Ile Ser Thr Ala Arg Val Ser Glu Lys Ser 450 455 460 Lys Pro Val Val Met Ile Ala Pro Phe Pro Thr Asp Tyr Gln Leu Glu 470 475 480 Gln Ile Gly Lys Leu Val Leu Val Asp Arg Thr Arg Pro Trp Met Leu 485 490 495 Glu Lys Tyr Phe Asp Ala Ala His Phe Arg Ile Ile Asp Lys Pro Val 505 510 500 Asp Gln Gln Thr Leu Phe Arg Glu Leu Cys Glu Gln Leu Glu Ala Glu 520 525 515 Gly Phe Val Gly Ala Glu Phe Leu Asp Ser Val Ile Glu Arg Glu Ala 535 530 540 Ile Val Ser Thr Met Leu Gly Asp Gly Ile Ala Leu Pro His Ser Leu 550 555 545 Gly Leu Leu Ala Gln Lys Thr Val Val Tyr Thr Val Leu Ala Pro Gln 565 570 Gly Ile Gln Trp Gly Asp Glu Thr Ala His Val Ile Phe Leu Leu Ala 585 590 580 Ile Ser Lys Ser Glu Tyr Glu Glu Ala Met Ala Ile Tyr Asp Ile Phe 600 605 595 Val Thr Phe Leu Arg Glu Arg Ala Met Ala Arg Leu Cys Gln Cys Glu 610 615 620 Asn Phe Ala Ala Phe Lys Ala Val Ala Met Glu Ser Leu Ser Arg Phe 625 630 635

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<210> 8947
<211> 118
<212> PRT
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<213> Enterobacter cloacae

<400> 8947

Val Leu Ala Met Arg Ile Phe Val Tyr Gly Ser Leu Arg Thr Arg Gln 10 15 Gly Asn Ser His Trp Met Thr Asn Ala Gln Leu Leu Gly Asn Tyr Thr 25 20 Ile Glu Asn Tyr Gln Leu Tyr Ser Leu Gly His Tyr Pro Gly Ala Val 40 4.5 Pro Gly Asn Gly Thr Val Gln Gly Glu Val Tyr Arg Ile Asp Asn Ala 50 5.5 Thr Leu Ala Glu Leu Asp Ala Leu Arg Thr Arg Gly Gly Glu Tyr Ala 75 70 Arg Gln Leu Ile Gln Thr Pro Tyr Gly Ser Ala Trp Met Tyr Val Tyr 90 95 Gln Arg Ser Val Asp Gly Leu Thr Leu Ile Glu Ser Gly Asn Trp Leu 100 110 Asp Arg Asp Gln Phe

<210> 8948 <211> 368 <212> PRT

<213> Enterobacter cloacae

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<400> 8948
Asn Glu Ser Asp Tyr Lys Leu Val Ile Asn Val Leu Phe Thr Phe Leu
Lys Cys Asp Val Thr Gln Ser Val Thr Tyr Ser Ile Gly Tyr Ser Ser
        20
                       25
Ser Ala Glu His Leu Leu Thr Asn Asn Asn Leu Pro Tyr Glu Asp Val
   35
               4.0
His Met Trp Lys Arg Leu Leu Leu Val Thr Ala Val Ser Ala Ala Met
               55
                                60
Ser Ser Met Ala Met Ala Ala Pro Leu Thr Val Gly Phe Ser Gln Val
        70
                           7.5
Gly Ser Glu Ser Gly Trp Arg Ala Ala Glu Thr Asn Val Ala Lys Ser
           8.5
               90
Glu Ala Glu Lys Arg Gly Ile Thr Leu Lys Ile Ala Asp Gly Gln Gln
        100 105 110
Lys Gln Glu Asn Gln Ile Lys Ala Val Arg Ser Phe Ile Ala Gln Gly
    115 120 125
Val Asp Ala Ile Phe Ile Ala Pro Val Val Ala Thr Gly Trp Glu Pro
130 135 140
Val Leu Lys Glu Ala Lys Asp Ala Glu Ile Pro Val Phe Leu Leu Asp
   150
                             155 160
Arg Ser Ile Asp Val Lys Asp Lys Ser Leu Tyr Met Thr Thr Val Thr
         165 170 175
Ala Asp Asn Val Leu Glu Gly Lys Leu Ile Gly Asp Trp Leu Val Lys
      180
                     185
Gln Val Asp Gly Lys Pro Cys Asn Val Val Glu Leu Gln Gly Thr Val
                  200 205
   195
Gly Ala Ser Val Ala Ile Asp Arg Lys Lys Gly Phe Ala Glu Ala Ile
 210
               215 220
Ala Lys Ala Pro Asn Ile Lys Ile Ile Arg Ser Gln Ser Gly Asp Phe
              230 235
Thr Arg Ser Lys Gly Lys Glu Val Met Glu Ser Phe Ile Lys Ala Glu
           245 250 255
Asn Asn Gly Lys Asn Ile Cys Met Val Tyr Ala His Asn Asp Asp Met
         260 265 270
Val Ile Gly Ala Ile Gln Ala Ile Lys Glu Ala Gly Leu Lys Pro Gly
     275 280
Lys Asp Ile Leu Thr Gly Ser Ile Asp Gly Val Pro Asp Ile Tyr Lys
                 295 300
   290
Ala Met Ile Asp Gly Glu Ala Asn Ala Ser Val Glu Leu Thr Pro Asn
           310
                             315
Met Ala Gly Pro Ala Phe Asp Ala Leu Glu Lys Phe Lys Lys Asp Gly
            325
                          330
Thr Gln Pro Glu Lys Leu Thr Ile Thr Lys Ser Thr Leu Tyr Leu Pro
                        345 350
         340
Asp Thr Ala Lys Glu Glu Leu Glu Lys Lys Lys Asn Met Gly Tyr
                     360
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<210> 8949 <211> 538 <212> PRT

<213> Enterobacter cloacae

Thr Glu Gly Leu Ser Lys Phe Phe Pro Gly Val Lys Ala Leu Asp Asn 55 Val Asp Phe Ser Leu Arg Arg Gly Glu Ile Met Ala Leu Leu Gly Glu 70 Asn Gly Ala Gly Lys Ser Thr Leu Ile Lys Thr Leu Thr Gly Val Tyr 85 90 His Ala Asp Arg Gly Ala Ile Trp Leu Glu Gly Asn Ala Ile Ser Pro 105 Lys Asn Thr Ala His Ala Gln Gln Leu Gly Ile Gly Thr Val Tyr Gln 115 120 Glu Val Asn Leu Leu Pro Asn Met Ser Val Ala Asp Asn Leu Phe Ile 135 140 Gly Arg Glu Pro Arg Arg Phe Gly Leu Leu Arg Arg Lys Glu Met Glu 145 150 155 160 Ala Arg Ala Ala Lys Leu Met Glu Ser Tyr Gly Phe Ser Leu Asp Val 165 170 175 Arg Glu Pro Leu Asn Arg Phe Ser Val Ala Met Gln Gln Ile Val Ala 180 185 190 Ile Cys Arg Ala Ile Asp Leu Ser Ala Lys Val Leu Ile Leu Asp Glu 195 200 205 Pro Thr Ala Ser Leu Asp Thr Gln Glu Val Glu Met Leu Phe Thr Leu 210 215 220 Met Arg Gln Leu Arg Asn Gln Gly Val Ser Leu Ile Phe Val Thr His 225 230 235 240 Phe Leu Asp Gln Val Tyr Glu Val Ser Asp Arg Ile Thr Val Leu Arg 245 250 255 Asn Gly Ser Phe Val Gly Cys Arg Glu Thr Arg Glu Leu Pro Gln Ile 260 265 270 Glu Leu Val Lys Met Met Leu Gly Arg Glu Leu Glu Thr Asn Ala Leu 275 280 285 Gln Arg Ala Gly Arg Thr Leu Leu Ser Glu Lys Pro Ile Ala Ala Phe 290 295 300 His Asp Tyr Gly Arg Lys Gly Thr Ile Ala Pro Phe Asn Leu Glu Val 305 310 315 Arg Pro Gly Glu Ile Val Gly Leu Ala Gly Leu Leu Gly Ser Gly Arg 325 330 335 Thr Glu Thr Ala Glu Val Ile Phe Gly Ile Lys Pro Ala Asp Ser Gly 340 345 350 Thr Ala Leu Ile Lys Gly Lys Leu Gln Thr Leu Arg Ser Pro His Gln 360 365 Ala Ser Cys Leu Gly Val Gly Phe Cys Pro Glu Asp Arg Lys Thr Asp 375 380 Gly Ile Ile Ala Ala Ala Ser Val Arg Glu Asn Ile Ile Leu Ala Leu 390 395 Gln Ala Gln Arg Gly Trp Leu Arg Pro Ile Pro Lys Arg Glu Gln Asn 405 410 Ala Ile Ala Glu Arg Phe Ile Arg Gln Leu Gly Ile Arg Thr Pro Ser 425 420 Ala Glu Gln Pro Ile Glu Phe Leu Ser Gly Gly Asn Gln Gln Lys Val 435 440 445 Leu Leu Ser Arg Trp Leu Leu Thr Lys Pro Gln Phe Leu Ile Leu Asp 450 455 460 Glu Pro Thr Arg Gly Ile Asp Val Gly Ala His Ala Glu Ile Ile Arg 470 475 Leu Ile Glu Thr Leu Cys Ala Asp Gly Leu Ala Leu Leu Val Ile Ser 485 490 Ser Glu Leu Glu Glu Leu Val Gly Tyr Ala Asp Arg Val Ile Ile Met 500 Arg Asp Arg Arg Gln Val Ala Glu Ile Pro Leu Asp Lys Leu Ser Val 520

Pro Ala Ile Met Asn Ala Ile Ala Ala 530 <210> 8950 <211> 478 <212> PRT <213> Enterobacter cloacae <400> 8950 Lys Lys Arg Leu Met Leu Pro Val Lys Thr Arg Thr Glu Lys Arg Phe 1.0 Ser Val Arg Leu His Leu Thr Leu Ser Tyr Ser Met Ala Phe Ala Met 25 Lys Val Thr Ser Gln Val Glu Ala Gln Arg Lys Ile Leu Glu Glu Ala 35 40 45 Val Ser Thr Ala Leu Thr Leu Ala Ser Gly Lys Ser Asp Gly Ala Glu 50 55 60 Val Ala Val Ser Lys Thr Thr Gly Ile Ser Val Ser Thr Arg Tyr Gly 70 - 75 Glu Val Glu Asn Val Glu Phe Asn Ser Asp Gly Ala Leu Gly Ile Thr 85 90 95 Val Tyr His Gln Asn Arg Lys Gly Ser Ala Ser Ser Thr Asp Leu Ser 100 105 110 Pro Asp Ala Ile Ala Arg Thr Val Gln Ala Ala Leu Asp Ile Ala Arg 115 120 125 Tyr Thr Ser Pro Asp Pro Tyr Ala Gly Val Ala Asp Lys Glu Leu Leu 130 135 140 Ala Phe Asp Ala Pro Asp Leu Asp Leu Phe His Pro Ala Glu Val Thr 145 150 155 160 Pro Asp Glu Ala Ile Glu Leu Ala Ala Arg Ala Glu Gln Ala Ser Leu 165 170 Gln Ala Asp Lys Arg Ile Thr Asn Thr Glu Gly Gly Ser Phe Asn Ser 180 185 His Tyr Gly Ile Lys Val Phe Gly Asn Ser His Gly Met Leu Gln Gly 195 200 205 Tyr Cys Ser Thr Arg His Ser Leu Ser Ser Cys Val Ile Ala Glu Glu 210 215 220 Asn Gly Asp Met Glu Arg Asp Tyr Ala Tyr Thr Ile Gly Arg Ala Leu 225 230 235 Gly Asp Leu Gln Ser Pro Glu Trp Val Gly Lys Ala Cys Ala Glu Arg 245 250 255 Thr Leu Ser Arg Leu Ser Pro Arg Lys Leu Ser Thr Met Lys Ala Pro 260 265 270 Val Ile Phe Ala Asn Glu Val Ala Thr Gly Leu Phe Gly His Leu Val 275 280 285 Gly Ala Ile Ala Gly Gly Ser Val Tyr Arg Lys Ser Thr Phe Leu Leu 290 295 300 Asp Ser Leu Gly Lys Gln Ile Leu Pro Glu Trp Leu Thr Ile Glu Glu 305 310 315 His Pro His Leu Leu Lys Gly Leu Ala Ser Thr Pro Phe Asp Ser Glu 325 330 Gly Val Arg Thr Glu Arg Arg Asp Ile Val Lys Asp Gly Ile Leu Thr 340 345 Gln Trp Leu Leu Thr Asn Tyr Ser Ala Arg Lys Leu Gly Leu Lys Ser 355 360 365 Thr Gly His Ala Gly Gly Ile His Asn Trp Arg Ile Ala Gly Gln Gly 370 375 Leu Asn Phe Glu Gln Met Leu Lys Glu Met Gly Thr Gly Leu Val Val 385 390 400 Thr Glu Leu Met Gly Gln Gly Val Ser Gly Ile Thr Gly Asp Tyr Ser

410

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And the second s
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```
Arg Gly Ala Ala Gly Phe Trp Val Glu Asn Gly Glu Ile Gln Tyr Pro
                             425
Val Ser Glu Ile Thr Ile Ala Gly Asn Leu Lys Asp Met Trp Arg Asn
                         440
                                 445
 Ile Val Thr Val Gly Asn Asp Ile Glu Thr Arg Ser Asn Ile Gln Cys
         455
                             460
Gly Ser Val Leu Leu Pro Glu Met Lys Ile Ala Gly Gln
 465 470 475
<210> 8951
<211> 130
<212> PRT
<213> Enterobacter cloacae
<400> 8951
Ala Met Arg Lys His Leu Leu Ala Ile Val Ala Ala Ser Thr Leu Val
Leu Gly Ser Ser Ala Phe Ala Ala Asp Leu Glu Asp Asn Met Asp Ile
        20
                              25
                                                30
Leu Ser Gln Asn Leu Lys Val Val Lys Lys Thr Asp Asn Ala Ala Glu
 35
                          4.0
Met Lys Asp Ala Leu Thr Lys Met Arg Glu Ala Ala Leu Asp Ala Gln
 50
                                        60
Lys Ala Thr Pro Pro Lys Leu Glu Ser Lys Ala Ala Asp Ser Ala Glu
     70
                                     75
Met Lys Asp Tyr Arg His Gly Phe Asp Val Leu Val Gly Gln Ile Asp
              85
                                 90
Gly Ala Leu Lys Leu Ala Asn Glu Gly Lys Val Lys Glu Ala Gln Ala
          100 105
Ala Ala Asp Gln Phe Ala Ala Thr Arg Asn Ala Tyr His Lys Lys Tyr
                          120
   130
<210> 8952
<211> 380
<212> PRT
<213> Enterobacter cloacae
<400> 8952
Pro Asn Lys Gly Ala Arg Asn Met Pro Ser Ile Tyr Glu Lys Tyr Asn
Leu Lys Gln Val Ile Asn Thr Ser Gly Arg Met Thr Ala Leu Gly Val
                             25
Ser Thr Pro Arg Pro Glu Val Val Gln Ala Ala Met Asn Gly Met Asn
       3.5
                         40
His Tyr Phe Glu Met Lys Glu Leu Val Asn Lys Thr Gly Glu Tyr Ile
   50
                      55
Ala Lys Leu Leu Glu Val Glu Gly Ala Thr Val Val Ser Cys Ala Ser
                  70
                                     75
Ala Gly Ile Ala Gln Ser Val Ala Ala Val Leu Val Lys Asp Ser Asp
              85
                                 90
Trp Leu Leu Glu Asn Leu His Val Thr Pro Ile Glu Asn Asn Glu Ile
          100
                              105
Val Leu Pro Lys Gly His Asn Val Asn Phe Gly Ala Pro Val Gly Thr
       115
                         120
                                            125
Met Val Ala Leu Gly Gly Gly Lys Leu Val Glu Ala Gly Tyr Ala Asn
                      135
                                        140
Glu Cys Ser Ala Asp Gln Leu Ala Ala Ala Ile Thr Pro Arg Thr Ala
                  150
                              155
Ala Ile Leu Tyr Ile Lys Ser His His Cys Val Gln Lys Ser Met Leu
```

```
170
Ser Val Glu Gln Ala Ala Val Val Ala Arg Lys His Asp Leu Pro Leu
        180
                       185
                                190
Ile Val Asp Ala Ala Ala Glu Glu Asp Leu His Thr Tyr Tyr Arg Ser
     195
            200
                          205
Gly Ala Asp Leu Val Ile Tyr Ser Gly Ala Lys Ala Ile Glu Gly Pro
210
               215 220
Thr Ser Gly Leu Val Ile Gly Lys Thr Gln Tyr Val Glu Trp Val Lys
     230 235 240
Arg Gln Thr Ala Gly Ile Gly Arg Ala Met Lys Val Gly Lys Glu Gly
        245 250 255
Ile Leu Gly Leu Thr Cys Ala Ile Glu His Tyr Leu Thr Ala Thr Lys
        260 265 270
Glu Ser Gly Ala Glu Met Val Ala Lys Met Thr Pro Phe Ile Glu Ala
    275
         280 285
Leu Asn Thr Leu Asn Gly Val Thr Ala Arg Val Val Trp Asp Ser Ala
 290 295 300
Gly Arg Asp Ile Ala Arg Thr Glu Ile Lys Phe Asp Glu Ala Thr Thr
   310
                  315
Gly Val Gly Thr Gly Asp Leu Val Asn Ala Leu Lys Gln Gly Glu Tyr
325 330 335
Ala Ile Tyr Phe Arg Gly Tyr Lys Ala Asn Glu Gly Ile Ile Glu Ala
      340 345 350
Asp Val Arg Ser Val Asn Ala Asp Gln Leu Asn Ile Val Tyr Arg Arg
355 360
Ile Ser Glu Val Leu Gly Gln Glu Lys Asn Ala
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<210> 8953 <211> 263 <212> PRT

<213> Enterobacter cloacae

<400> 8953 Lys Asp Leu Ile Arg Ser Leu Ser Arg Leu Lys Ser Ala Arg Ser Asn 10 Ala Val Ile Ala Phe Phe Phe Thr Phe Asn Arg Pro Asp Met Thr Asn 25 Ser Asn Arg Ile Lys Leu Thr Trp Ile Ser Phe Phe Ser Tyr Ala Leu 40 Thr Gly Ala Leu Val Ile Val Thr Gly Met Val Met Gly Asn Ile Ala 55 60 Asp Tyr Phe Gln Leu Pro Val Ser Ser Met Ser Asn Thr Phe Thr Phe 70 7.5 Leu Asn Ala Gly Ile Leu Ile Ser Ile Phe Leu Asn Ala Trp Leu Met 85 90 Glu Ile Val Pro Leu Lys Thr Gln Leu Arg Phe Gly Phe Val Leu Met 100 105 110 Val Ala Ala Val Ala Gly Leu Met Leu Ser His Ser Ile Ala Leu Phe 120 Ser Ala Ala Met Phe Val Leu Gly Leu Val Ser Gly Ile Thr Met Ser 135 140 Ile Gly Thr Phe Leu Ile Thr His Met Tyr Glu Gly Arg Gln Arg Gly 145 150 155 Ala Arg Leu Leu Phe Thr Asp Ser Phe Phe Ser Met Ala Gly Met Ile 165 170 Phe Pro Met Val Ala Ala Tyr Leu Leu Ala Arg Ser Ile Glu Trp Tyr 180 185 190 Trp Val Tyr Ala Cys Ile Gly Leu Val Tyr Val Ala Ile Phe Ile Leu

195 200 205 Thr Phe Gly Cys Glu Phe Pro Val Leu Gly Lys Lys Ala Gln Thr Thr

Ser Glu Pro Val Ala Lys Glu Lys Trp Gly Ile Gly Val Leu Phe Leu 230 235 Ser Ile Ala Ala Leu Cys Tyr Ile Leu Gly Gln Leu Gly Phe Ile Ser 245 Leu Gly Ser Arg Val Cys 260 <210> 8954 <211> 120 <212> PRT <213> Enterobacter cloacae <400> 8954 Thr Tyr Ser Gly Asp Ala Gly Gly Gly Lys Arg Met Ser Gln Trp Val Asn Ile Cys Asn Ile Asn Asp Ile Leu Pro Ala Thr Gly Val Cys Ala 20 Leu Leu Gly Asn Glu Gln Val Ala Ile Phe Arg Pro Arg His Asp Glu 35 40 Gln Val Tyr Ala Ile Ser Asn Ile Asp Pro Phe Phe Glu Ala Ser Val 5.5 60 Leu Ser Arg Gly Leu Ile Ala Glu His Gln Gly Glu Leu Trp Val Ala 75 70 Ser Pro Leu Lys Lys Gln Arg Phe Arg Leu Thr Asp Gly Arg Cys Met 85 90 Glu Asp Glu Ser Phe Ser Val Lys His Tyr Asp Val Arg Val Lys Asp 100 105 Gly Glu Val Gln Leu Lys Gly <210> 8955 <211> 252 <212> PRT <213> Enterobacter cloacae <400> 8955 Ser Asp Asn Val Pro Ala Arg Gln Val Val Leu Pro Cys Arg Ala Arg 10 Phe Phe Trp Leu Glu Phe Pro Leu Met His Leu Asp Ile Asp Trp Gln 25 30 Ala Val Asp Thr Val Leu Leu Asp Met Asp Gly Thr Leu Leu Asp Leu 40 Ala Phe Asp Asn Tyr Phe Trp Gln Lys Leu Val Pro Glu Thr Tyr Gly 55 Glu Gln Gln Gly Ile Ser Pro Ala Glu Ala Gln Glu Phe Ile Arg Ser 75 7.0 Gln Tyr Ser Ala Val Gln His Thr Leu Asn Trp Tyr Cys Leu Asp Tyr 85 90 Trp Ser Glu Arg Leu Gly Leu Asp Ile Cys Ala Met Thr Thr Ala Gln 100 105 Gly Ala Arg Ala Val Leu Arg Glu Asp Thr Val Pro Phe Leu Asp Ala

120

125

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Thr Leu Phe Ile Asp Asp Ser Glu Pro Ile Leu Asp Ser Ala Ala Ala
                        200
Phe Gly Ile Arg Tyr Cys Leu Gly Val Thr Asn Pro Asp Ser Gly Leu
 210
                      215
                           220
Ala Glu Lys Ser Tyr Leu Arg His Pro Gly Leu Asn Asp Tyr Arg Arg
               230
                       235
Met Ile Pro Ser Leu Thr Val Lys Glu Thr Pro
               245
<210> 8956
<211> 83
<212> PRT
<213> Enterobacter cloacae
<400> 8956
Pro Leu Val Glu Ser Gly Ala Met Gln Phe Thr Pro Asp Ser Ala Trp
                                 10
Lys Ile Ile Gly Phe Thr Arg Glu Ile Ser Pro Ala Tyr Arg Gln Lys
          20
                             25
                                                 30
Leu Leu Ser Leu Gly Met Leu Pro Gly Ser Ser Phe Gln Val Val Arg
35
                       40
Val Ala Pro Leu Gly Asp Pro Val His Ile Glu Thr Arg Arg Val Asn
                    55
Leu Val Leu Arg Lys Lys Asp Leu Ala Leu Ile Glu Val Glu Ser Leu
                  70
Ser Arg
<210> 8957
<211> 783
<212> PRT
<213> Enterobacter cloacae
<400> 8957
Gln Ala Ser Gly Phe Ser Glu Ser Ile Thr Met Lys Lys Leu Thr Ile
                                  10
Gly Leu Ile Gly Asn Pro Asn Ser Gly Lys Thr Thr Leu Phe Asn Gln
          2.0
                              25
                                                 3.0
Leu Thr Gly Ala Arg Gln Arg Val Gly Asn Trp Ala Gly Val Thr Val
                          40
                                             45
Glu Arg Lys Glu Gly Gln Phe Thr Thr Thr Asp Asn Gln Val Thr Leu
                      5.5
                                         60
Val Asp Leu Pro Gly Thr Tyr Ser Leu Thr Thr Ile Ser Ser Gln Thr
                  70
Ser Leu Asp Glu Gln Ile Ala Cys His Tyr Ile Leu Ser Gly Asp Ala
              85
                                 90
Asp Leu Leu Ile Asn Val Val Asp Ala Ser Asn Leu Glu Arg Asn Leu
          100
                              105
                                                 110
Tyr Leu Thr Leu Gln Leu Glu Leu Gly Ile Pro Cys Ile Val Ala
       115
                          120
Leu Asn Met Leu Asp Ile Ala Glu Lys Gln Lys Leu Arg Ile Asp Val
  130
                      135
                                         140
Asp Ala Leu Ser Ala Arg Leu Gly Cys Pro Val Val Pro Leu Val Ser
145
                  150
                                     155
Thr Arg Ala Arg Gly Ile Asp Ala Leu Lys Leu Ala Ile Asp Arg His
              165
                                  170
                                                    175
Thr Gly Asn Ala Asp Val Glu Leu Val His Tyr Ala Gln Pro Leu Leu
           180
                             185
                                                190
Arg Glu Ala Gly Gln Leu Ala Gln Glu Met Asp Asn Ser Met Pro Ala
       195
                         200
Arg Gln Arg Leu Trp Leu Gly Leu Gln Met Leu Glu Gly Asp Ile Tyr
```

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210
                  215
Ser Arg Ala Tyr Ala Gly Asp Ala Ala Asp Lys Leu Gly Val Ala Gln
        230 235 240
Ala Arg Leu Ser Asp Glu Leu Asp Asp Pro Ala Leu His Ile Ala Asp
       245 250 255
Ala Arg Tyr Gln Ala Ile Ala Ala Ile Cys Asp Val Val Ser Asn Ala
       260 265 270
Leu Thr Ala Glu Pro Ser Arg Phe Thr Ala Ala Val Asp Lys Ile Val
 275 280 285
Leu Asn Arg Phe Leu Gly Leu Pro Ile Phe Leu Leu Val Met Tyr Val
290 295 300
Met Phe Leu Leu Ala Ile Asn Ile Gly Gly Ala Leu Gln Pro Ile Phe
305 310 315 320
Asp Gly Gly Ser Val Ala Ile Phe Val His Gly Ile Gln Trp Leu Gly
           325 330
Tyr Thr Leu His Phe Pro Glu Trp Leu Thr Ile Phe Leu Ala Gln Gly
        340 345 350
Ile Gly Gly Gly Ile Asn Thr Val Leu Pro Leu Val Pro Gln Ile Gly
 355 360 365
Met Met Tyr Leu Phe Leu Ser Phe Leu Glu Asp Ser Gly Tyr Met Ala
       375
                                380
Arg Ala Ala Phe Val Met Asp Arg Leu Met Gln Ala Leu Gly Leu Pro
      390
                              395
Gly Lys Ser Phe Val Pro Leu Ile Val Gly Phe Gly Cys Asn Val Pro
         405 410 415
Ser Val Met Gly Ala Arg Thr Leu Asp Ala Pro Arg Glu Arg Leu Met
   420
                       425
Thr Ile Met Met Ala Pro Phe Met Ser Cys Gly Ala Arg Leu Ala Ile
435
                     440
                                    445
Phe Ala Val Phe Ala Ala Ala Phe Phe Gly Gln Glu Gly Ala Leu Ala
450
                  455
                              460
Val Phe Ser Leu Tyr Val Leu Gly Ile Val Met Ala Ile Leu Thr Gly
465 470
                              475
Leu Met Leu Lys His Thr Ile Met Arg Gly Glu Ala Ser Pro Phe Val
           485
                        490 495
Met Glu Leu Pro Val Tyr His Val Pro His Leu Lys Ser Leu Ile Ile
       500
                        505 510
Gln Thr Trp Gln Arg Leu Lys Gly Phe Val Leu Arg Ala Gly Lys Val
     515 520 525
Ile Val Val Val Ser Ile Phe Leu Ser Ala Leu Asn Ser Phe Thr Leu
               535
                     540
Ser Gly Gln Ala Ala Asp Asn Ile Asn Asp Ser Ala Leu Ala Ser Val
     550 555
Ser Arg Ile Ile Thr Pro Val Phe Lys Pro Ile Gly Val Gln Glu Asp
               570
            565
Asn Trp Gln Ala Thr Val Gly Leu Phe Thr Gly Ala Met Ala Lys Glu
        580
             585
Val Val Val Gly Thr Leu Asn Thr Leu Tyr Thr Ala Glu Asn Ile Gln
     595
            600 605
Glu Glu Glu Phe Asn Pro Ala Ala Phe Asn Leu Gly Asp Glu Leu Leu
       615
 610
Gly Ala Val Glu Glu Thr Trp Gln Ser Leu Lys Asp Thr Phe Ser Leu
              630
                            635
Ser Val Leu Ala Asn Pro Ile Glu Ala Ser Lys Gly Asp Gly Glu Met
           645
                          650 655
Ala Thr Gly Ala Met Gly Val Met Gly Gln Lys Phe Gly Ser Ala Ser
        660
                        665
Ala Ala Tyr Ser Tyr Leu Ile Phe Val Leu Leu Tyr Ile Pro Cys Ile
     675
                     680
Ser Val Met Gly Ala Ile Ala Arg Glu Ser Ser Arg Gly Trp Met Gly
  690
                 695
```

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Phe Ser Ile Leu Trp Gly Leu Asn Ile Ala Tyr Ser Leu Ala Thr Val
                                  71.5
Phe Tyr Gln Ala Val Asn Tyr Ser Gln His Pro Arg Tyr Ser Leu Val
               725
                          730
                                                    735
Cys Ile Leu Ala Val Ile Leu Phe Asn Val Met Val Ile Gly Leu Leu
          740 745
Arg Arg Ala Arg Ser Arg Val Asp Ile Asn Leu Leu Ala Thr Arg Lys
       755 760 765
Thr Pro Thr Thr Cys Cys Asn Ser Pro Ala Gly Asp Cys His
                     775
<210> 8958
<211> 195
<212> PRT
<213> Enterobacter cloacae
<400> 8958
Ala Lys Ala Met Ile Arg Ile Ser Asp Ser Ala Gln Ala His Phe Ala
                                 10
Lys Leu Leu Ala Asn Gln Glu Glu Gly Thr Gln Ile Arg Val Phe Val
                              25
                                                 30
Ile Asn Pro Gly Thr Pro Asn Ala Glu Cys Gly Val Ser Tyr Cys Pro
                         4.0
                                            4.5
Pro Asp Ala Val Glu Ala Thr Asp Thr Ala Leu Lys Phe Glu Gln Leu
                      55
Thr Ala Tyr Val Asp Glu Leu Ser Ala Pro Tyr Leu Glu Asp Ala Glu
                  70
                                     75
                                                       8.0
Ile Asp Phe Val Thr Asp Gln Leu Gly Ser Gln Leu Thr Leu Lys Ala
              85
                                 90
                                                    95
Pro Asn Ala Lys Met Arg Lys Val Ser Asp Asp Ala Pro Leu Met Glu
          100
                             105
Arg Val Glu Tyr Leu Leu Gln Ser Gln Ile Asn Pro Gln Leu Ala Gly
       115
                          120
His Gly Gly Arg Val Ser Leu Met Glu Ile Thr Glu Asp Gly Leu Ala
 130
                      135
                                         140
Ile Leu Gln Phe Gly Gly Gly Cys Asn Gly Cys Ser Met Val Asp Val
                                     155
                 150
Thr Leu Lys Glu Gly Ile Glu Lys Gln Leu Leu Asn Glu Phe Pro Glu
                   170
              165
Leu Lys Gly Val Arg Asp Leu Thr Glu His Gln Arg Gly Glu His Ser
           180
                             185
                                                190
Tyr Tyr
       195
<210> 8959
<211> 249
<212> PRT
<213> Enterobacter cloacae
<400> 8959
Phe Ser Arg Trp Ser Pro Arg Ile Phe Trp Arg Ala Ala Leu Ser Gly
                                 10
Thr Gly Tyr Met Pro Ala Leu Val Trp Ser Met Ser Arg Ser Leu Phe
                              25
                                                30
Ser Pro Ser Ala Ala Ser Ser Arg Cys Trp Ala Lys Lys Arg Arg Leu
       35
                                            4.5
His Pro Ser Arg Leu Arg Lys Lys Asn Gly Val Ser Ala Tyr Cys Ser
                     55
                                        60
Ser Pro Ser Pro Arg Cys Val Thr Ser Ser Ala Ser Trp Ala Leu Ser
```

Pro Trp Val Pro Glu Tyr Ala Lys Gly Leu Gly Met Ser Leu Asn Asp

```
Ala Gly Lys Leu Val Ser Asp Phe Trp Met Ser Tyr Met Phe Gly Met
         100
                      105
                                      110
Trp Ala Phe Ser Phe Ile Leu Arg Phe Phe Asp Leu Gln Arg Ile Leu
               120
Thr Val Leu Ala Gly Leu Ala Thr Val Leu Met Tyr Leu Phe Ile Asn
          135
                     140
Gly Ser Pro Glu His Met Pro Trp Phe Ile Leu Thr Leu Gly Phe Phe
        150 155
Ser Ser Ala Ile Tyr Thr Ser Ile Ile Thr Leu Gly Ser Leu Gln Thr
          165 170 175
Lys Val Ala Ser Pro Lys Leu Val Asn Phe Val Leu Thr Cys Gly Thr
      180 185
Ile Gly Thr Met Leu Thr Phe Val Val Thr Gly Pro Ile Val Ala His
     195 200 205
Ser Gly Pro Leu Ala Ala Leu His Thr Ala Asn Gly Leu Tyr Ala Val
 210 215 220
Val Phe Ile Met Cys Phe Val Leu Gly Phe Val Thr Arg His Arg Gln
225 230
His Asn Pro Ser Thr Ala Thr His
           245
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<210> 8960 <211> 823 <212> PRT <213> Enterobacter cloacae

<400> 8960 Ala Asp Ala Glu Gln Phe Asp Ile Thr Val Phe Cys Glu Glu Pro Arg 1.0 Lys Ala Tyr Asp Arg Val His Leu Ser Ser Tyr Phe Ser His His Thr 25 Ala Glu Glu Leu Ser Leu Val Arg Glu Gly Phe Tyr Glu Lys His Gly 4.0 Val Lys Val Leu Val Gly Glu Arg Ala Ile Thr Ile Asn Arg Gln Glu 55 60 Lys Val Ile His Ser Ser Ala Gly Arg Thr Val Phe Tyr Asp Lys Leu 75 70 Ile Met Ala Thr Gly Ser Tyr Pro Trp Ile Pro Pro Ile Lys Gly Ser 90 Glu Thr Gln Asp Cys Phe Val Tyr Arg Thr Ile Glu Asp Leu Asn Ala 105 110 Ile Glu Ser Cys Ala Arg Arg Ser Lys Arg Gly Ala Val Val Gly Gly 120 Gly Leu Leu Gly Leu Glu Ala Ala Gly Ala Leu Lys Asn Leu Gly Val 135 140 Glu Thr His Val Ile Glu Phe Ala Pro Met Leu Met Ala Glu Gln Leu 150 155 Asp His Met Gly Gly Asp Gln Leu Arg Arg Lys Ile Glu Ser Met Gly 170 165 Val Lys Val His Thr Ser Lys Asn Thr Lys Glu Ile Val Gln Glu Gly 180 185 Thr Glu Ala Arg Lys Thr Met Arg Phe Ala Asp Gly Ser Glu Leu Glu 200 205 Val Asp Phe Ile Val Phe Ser Thr Gly Ile Arg Pro Arg Asp Lys Leu 215 220 Ala Thr Gln Cys Gly Leu Ala Val Ala Gln Arg Gly Gly Ile Met Ile 230 235 Asn Asp Thr Cys Gln Thr Ser Asp Pro Asp Ile Tyr Ala Ile Gly Glu 250 245

Cys Ala Ser Trp Asn Asn Arg Val Phe Gly Leu Val Ala Pro Gly Tyr

```
260
                      265
Lys Met Ala Gln Val Ala Val Asp His Ile Leu Gly Ser Glu Asn Ala
                         285
     275
            280
Phe Thr Gly Ala Asp Met Ser Ala Lys Leu Lys Leu Leu Gly Val Asp
       295
                     300
Val Gly Gly Ile Gly Asp Ala His Gly Arg Thr Pro Asn Ser Arg Ser
      310 315
Tyr Val Tyr Leu Asp Glu Ser Lys Glu Val Tyr Lys Arg Leu Ile Val
      325 330 335
Ser Gln Asp Asn Lys Thr Leu Leu Gly Ala Val Leu Val Gly Asp Thr
    340 345 350
Ser Asp Phe Gly Asn Leu Leu Gln Leu Val Leu Asn Ala Ile Glu Leu
 355 360 365
Pro Glu Asn Pro Asp Ala Leu Ile Leu Pro Ala His Ala Ser Ser Gly
 370 375 380
Lys Pro Ser Ile Gly Val Asp Lys Leu Pro Asp Ser Ala Gln Ile Cys
385 390 395 400
Ser Cys Phe Asp Val Thr Lys Gly Met Leu Ile Ser Ala Ile Asn Lys
      405 410 415
Gly Cys His Thr Val Ala Ala Leu Lys Ala Glu Thr Lys Ala Gly Thr
   420 425 430
Gly Cys Gly Gly Cys Ile Pro Leu Val Thr Gln Val Leu Asn Ala Glu
 435 440 445
Leu Ala Lys Gln Gly Ile Glu Val Asn Asn Asn Leu Cys Glu His Phe
450 455 460
Ala Tyr Ser Arg Gln Glu Leu Tyr His Leu Ile Arg Val Glu Gly Ile
465 470 475
Lys Ser Phe Asp Glu Leu Leu Glu Lys His Gly Gln Gly Tyr Gly Cys
      485 490
                                       495
Glu Val Cys Lys Pro Thr Val Gly Ser Leu Leu Ala Ser Cys Trp Asn
      500 505 510
Glu Tyr Val Leu Lys Pro Glu His Thr Pro Leu Gln Asp Thr Asn Asp
515 520 525
Asn Phe Leu Ala Asn Ile Gln Lys Asp Gly Thr Tyr Ser Val Ile Pro
530 535 540
Arg Ser Ala Gly Glu Glu Thr Pro Glu Gly Leu Val Ala Val Gly 545 550 555
Arg Ile Ala Arg Glu Phe Asn Leu Tyr Thr Lys Ile Thr Gly Ser Gln
       565 570
Arg Ile Gly Leu Phe Gly Ala Gln Lys Asp Asp Leu Pro Glu Ile Trp
      580 585
Arg Gln Leu Ile Glu Ala Gly Phe Glu Thr Gly His Ala Tyr Ala Lys
   595 600
                                  605
Ala Leu Arg Met Ala Lys Thr Cys Val Gly Ser Thr Trp Cys Arg Tyr
                615
Gly Val Gly Asp Ser Val Gly Phe Gly Val Glu Leu Glu Asn Arg Tyr
   630
                           635
Lys Gly Ile Arg Thr Pro His Lys Met Lys Phe Gly Val Ser Gly Cys
           645
                         650 655
Thr Arg Glu Cys Ala Glu Ala Gln Gly Lys Asp Val Gly Ile Ile Ala
       660
                      665
Thr Glu Lys Gly Trp Asn Leu Tyr Val Cys Gly Asn Gly Gly Met Lys
675 680
Pro Arg His Ala Asp Leu Leu Ala Ala Asp Leu Asp Arg Asp Thr Leu
      695 700
Ile Lys Tyr Leu Asp Arg Phe Met Met Phe Tyr Ile Arg Thr Ala Asp
705 710 715
Lys Leu Thr Arg Thr Ala Ser Trp Leu Asp Asn Leu Glu Gly Gly Ile
           725 730
Asp Tyr Leu Lys Ser Val Ile Ile Asp Asp Lys Leu Gly Leu Asn Glu
        740
                      745
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Gln Leu Glu Ser Glu Met Thr Arg Leu Arg Glu Ala Val Ile Cys Glu 760 7.65 Trp Thr Glu Thr Val Asn Thr Pro Ala Ala Gln Thr Arq Phe Lys His 770 775 780 Phe Ile Asn Ser Thr Gln Arg Asp Pro Asn Val Gln Val Val Pro Glu 790 795 800 Arg Glu Gln His Arg Pro Ala Thr Pro Tyr Glu Arg Ile Pro Val Met 805 810 Leu Val Glu Glu Asn Ala 820 <210> 8961 <211> 61 <212> PRT <213> Enterobacter cloacae <400> 8961 Gln Gly Met His Met Phe Lys Leu Ala Lys Ala Ala Val Leu Val Gly 10 Leu Leu Thr Thr Leu Thr Ala Cys Thr Gly His Val Gln Asn Thr Lys 20 Asn Asn Cys Ser Tyr Asp Tyr Leu Leu His Pro Ala Ile Ser Ile Ser 4.0 Lys Ile Ile Gly Gly Cys Gly Pro Ala Ala Gln Gln 5.5 <210> 8962 <211> 875 <212> PRT <213> Enterobacter cloacae <400> 8962 Ile Arg Leu Ala Phe Ile Leu Pro Arg Asp Cys Leu Glu Thr Ala Gln 10 Ala Lys Pro Asn Gly Lys Ser Pro Val Lys Phe Val Lys Tyr Leu Leu 2.0 25 3.0 Ile Leu Ala Val Cys Cys Ile Leu Leu Gly Ala Gly Ser Ile Ile Gly 35 40 Leu Tyr Lys Tyr Val Glu Pro Gln Leu Pro Asp Val Ala Thr Leu Arg 5.5 60 Asp Val Arg Leu Gln Ile Pro Met Gln Val Tyr Ser Ala Asp Gly Glu 7.0 75 Leu Met Ala Gln Tyr Gly Glu Lys Arg Arg Ile Pro Leu Thr Leu Asn 85 90 Gln Ile Pro Pro Val Met Val Lys Ala Phe Ile Ala Thr Glu Asp Ser 100 105 110 Arg Phe Tyr Glu His His Gly Val Asp Pro Val Gly Ile Phe Arg Ala 115 120 125 Ala Ser Val Ala Leu Phe Ser Gly His Ala Ser Gln Gly Ala Ser Thr 130 135 140 Ile Thr Gln Gln Leu Ala Arg Asn Phe Phe Leu Ser Pro Glu Lys Thr 145 150 155 Leu Met Arg Lys Ile Lys Glu Val Phe Leu Ala Ile Arg Ile Glu Gln 165 170 Leu Leu Ser Lys Asp Glu Ile Leu Glu Leu Tyr Leu Asn Lys Ile Tyr 180 185 190 Leu Gly Tyr Arg Ala Tyr Gly Val Gly Ala Ala Ala Gln Val Tyr Phe 195 200 205 Gly Lys Pro Ile Asp Gln Leu Thr Leu Ser Glu Met Ala Thr Ile Ala 215 220 Gly Leu Pro Lys Ala Pro Ser Thr Phe Asn Pro Leu Tyr Ser Gln Asp

230 235 Arg Ala Thr Ala Arg Arg Asn Val Val Leu Ser Arg Met Leu Ser Glu 245 250 255 Gly Tyr Ile Ser Gln Ser Glu Tyr Asp Lys Ala Arg Ser Asp Val Ile 260 265 270 Asp Ala Asn Tyr His Ala Pro Glu Ile Ala Phe Ser Ala Pro Tyr Leu 275 280 285 Thr Glu Met Val Arg Gln Glu Met Val Ser Arg Tyr Gly Asp Lys Ala 290 295 300 Tyr Glu Asp Gly Tyr Arg Val Tyr Thr Thr Val Thr Arg Lys Val Gln 305 310 315 Gln Ala Ala Gln Gln Ala Val Arg Asn Asn Val Met Asp Tyr Asp Met 325 330 335 Arg His Gly Tyr Arg Gly Pro Ser Asn Val Leu Trp Lys Val Gly Glu 340 345 350 Gly Ala Trp Asp Ser Lys Lys Ile Thr Asp Ser Leu Lys Ala Leu Pro 355 360 365 Thr Tyr Gly Pro Leu Arg Pro Ala Val Val Thr Gln Ala Asp Pro Gln 370 375 380 Glu Ala Val Ala Met Met Ala Asp Gly Thr Ser Val Ser Leu Arg Met 385 390 395 Glu Gly Val Arg Trp Ala Arg Pro Tyr Arg Ser Asp Thr Leu Gln Gly 405 410 415 Pro Thr Pro Arg Lys Val Thr Asp Val Val Gln Thr Gly Gln Gln Ile 420 425 Trp Val Arg Gln Val Gly Asp Ala Trp Trp Leu Ala Gln Val Pro Asp 435 440 445 Val Asn Ser Ala Leu Val Ser Ile Asn Pro Gln Asn Gly Ala Val Met 450 455 460 Ala Leu Val Gly Gly Phe Asp Phe Asn Gln Ser Lys Phe Asn Arg Ala 470 475 Thr Gln Ala Leu Arg Gln Val Gly Ser Asn Ile Lys Pro Phe Leu Tyr 485 490 Thr Ala Ala Met Asp Lys Gly Leu Thr Leu Ala Ser Ile Leu Asn Asp 500 505 Val Pro Ile Ser Arg Trp Asp Ala Gly Ala Gly Ser Asp Trp Gln Pro 515 520 525 Lys Asn Ser Pro Ala Gln Tyr Ala Gly Pro Ile Arg Leu Arg Gln Gly 530 535 540 Leu Gly Gln Ser Lys Asn Val Val Met Val Arg Ala Met Arg Ala Met 545 550 555 Gly Val Asp Tyr Ala Ala Glu Tyr Leu Gln Arg Phe Gly Phe Pro Ala 565 570 Gln Asn Ile Val His Thr Glu Ser Leu Ala Leu Gly Ser Ala Ser Phe 585 580 Thr Pro Leu Gln Val Ala Arg Gly Tyr Ser Val Met Ala Asn Gly Gly 595 600 Phe Leu Val Asp Pro Tyr Phe Ile Ser Asn Ile Glu Asn Asp Gln Gly 610 615 Gly Val Leu Phe Glu Ala Lys Pro Lys Ile Ala Cys Pro Glu Cys Asp 630 Ile Pro Val Ile Tyr Gly Asp Thr Pro Lys Ser Asn Val Leu Glu Asn 645 650 655 Lys Asp Met Glu Asp Val Ala Ile Ser Gln Glu Arg Gln Asn Leu Ala 665 660 Val Pro Gln Pro Gln Leu Glu Gln Ala Asn Gln Ala Leu Val Ala Gln 675 680 Ser Gly Val Gln Glu Tyr Ala Pro His Val Ile Ser Thr Pro Leu Ser 695 700 Phe Leu Ile Lys Ser Ala Leu Asn Thr Asn Ile Phe Gly Glu Pro Gly 710

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Trp Gln Gly Thr Gly Trp Arg Ala Gly Arg Asp Leu Gln Arg His Asp
Ile Gly Gly Lys Thr Gly Thr Thr Asn Ser Ser Lys Asp Ala Trp Phe
           740
                             745
                                              750
Ser Gly Tyr Gly Pro Gly Val Val Thr Ser Val Trp Ile Gly Phe Asp
       755
                         760
                                            765
Asp His Arg Arg Thr Leu Gly Arg Thr Thr Ala Ser Gly Ala Ile Lys
                                       780
Asp Gln Ile Ser Gly Tyr Glu Gly Gly Ala Lys Ser Ala Gln Pro Ala
                  790
                       795 800
Trp Asp Ala Tyr Met Lys Ala Ala Leu Glu Gly Val Pro Glu Gln Pro
          805 810 815
Leu Thr Pro Pro Pro Gly Ile Val Thr Ile Asn Ile Asp Arg Ser Thr
         820 825 830
Gly Gln Leu Ala Asn Gly Gly Asn Ser Arg Ala Glu Tyr Phe Ile Glu
  835 840 845
Gly Thr Gln Pro Thr Thr Gln Ala Val His Glu Val Glv Thr Glu Ile
 850 855
Ile Asp Asn Gly Glu Thr His Glu Leu Phe
                 870
<210> 8963
<211> 117
<212> PRT
<213> Enterobacter cloacae
<400> 8963
Leu Ala Cys Cys Ala Gly Arg Val Ala Ala Leu Thr Leu Thr Cys Trp
                             10
                                                15
Gln Arg Ala Lys Pro Gln Arg Pro Ala Val Thr Ala Gln Gln Ala Thr
         20
                          25
                                              30
Val Thr Glu Gly Lys Lys Met Ala Ser Leu Ile Gln Val Arg Asp Leu
                                         4.5
Leu Ala Leu Gln Gly Arg Met Glu Ala Lys Gln Leu Ser Leu Ser Leu
                     55
His Thr Pro Gln Pro Met Ile Asp Ala Met Leu Glu Arg Leu Glu Ala
               70
                                   75
Met Gly Lys Ala Val Arg Ile Gln Glu Glu Pro Asp Gly Cys Leu Ser
                                90
Gly Ser Cys Lys Ser Cys Pro Glu Gly Lys Ala Cys Leu Arg Glu Trp
          100
                            105
Trp Thr Leu Arg
       115
<210> 8964
<211> 461
<212> PRT
<213> Enterobacter cloacae
<400> 8964
Gly Asn Val Val Asp His Leu Pro Ile Phe Cys Gln Leu Arg Asn Arg
Asp Cys Leu Leu Val Gly Gly Gly Asp Val Ala Glu Arg Lys Ala Arg
         20
                            25
                                               30
Leu Leu Leu Glu Ala Gly Ala Arg Leu Thr Val Asn Ala Leu Thr Phe
                         4.0
Ala Pro Gln Phe Asp Val Trp Ala Gln Glu Gly Met Leu Thr Gln Val
                     55
Gln Gly Glu Phe Asp Glu Ser Leu Leu Asp Thr Cys Trp Leu Thr Ile
                 70
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Ala Ala Thr Asp Asn Asp Asp Val Asn Gln Arg Val Ser Asp Ala Cys

```
Glu Ala Arg Arg Ile Phe Cys Asn Val Val Asp Ala Pro Lys Glu Ala
        100
                       105 110
Ser Phe Ile Met Pro Ser Ile Ile Asp Arg Ser Pro Leu Met Ile Ala
     115
            120
                          125
Val Ser Ser Gly Gly Arg Ser Pro Val Leu Ala Arg Leu Leu Arg Glu
            135 140
Lys Leu Glu Ala Val Leu Pro Gln His Leu Gly Gln Ile Ala Gln Tyr
    150 155 160
Ala Gly Leu Leu Arg Ser Arg Val Lys Gln Thr Phe Ala Thr Val Gly
       165 170 175
Glu Arg Arg Arg Phe Trp Glu Lys Phe Phe Val Asn Asp Arg Leu Ala
     180 185 190
Gln Ser Leu Ala Asn Gln Asp Thr Lys Ala Val Glu Glu Thr Thr Glu
 195 200 205
Gln Leu Leu Ser Glu Pro Leu Asp His Arg Gly Glu Val Val Leu Val
 210 215 220
Gly Ala Gly Pro Gly Asp Ala Gly Leu Leu Thr Leu Lys Gly Leu Gln
225 230 235
Gln Ile Gln Gln Ala Asp Ile Val Val Tyr Asp Arg Leu Val Ser Asp
       245 250 255
Asp Ile Met Asn Leu Val Arg Arg Asp Ala Asp Arg Val Phe Val Gly
      260 265 270
Lys Arg Ala Gly Tyr His Cys Val Pro Gln Glu Glu Ile Asn Gln Ile
275 280 285
Leu Leu Arg Glu Ala Gln Lys Gly Lys Arg Val Val Arg Leu Lys Gly
290 295
                                300
Gly Asp Pro Phe Ile Phe Gly Arg Gly Gly Glu Glu Leu Glu Thr Leu
    310 315
Cys Asn Ala Gly Ile Pro Phe Ser Val Val Pro Gly Ile Thr Ala Ala
325 330 335
Ser Gly Cys Ser Ala Tyr Ser Gly Ile Pro Leu Thr His Arg Asp Tyr
        340 345 350
Ala Gln Ser Val Arg Leu Val Thr Gly His Leu Lys Thr Gly Ser Glu
                    360
                                   365
Leu Asp Trp His Asn Leu Ala Ala Glu Lys Gln Thr Leu Val Phe Tyr
 370 375
                                 380
Met Gly Leu Asn Gln Ala Ala Thr Ile Gln Ala Lys Leu Leu Glu His
385 390
                             395
Gly Met Glu Ala Asp Met Pro Val Ala Leu Val Glu Asn Gly Thr Ala
          405 410
Ile Thr Gln Arg Val Val Asp Gly Val Leu Thr Gln Leu Gly Glu Leu
        420 425
Ala Gln Gln Val Glu Ser Pro Ala Leu Ile Val Val Gly Arg Val Val
     435 440
                                 445
Ala Leu Arg Glu Lys Leu Asn Trp Phe Ser Ser His
                 455
<210> 8965
<211> 717
<212> PRT
<213> Enterobacter cloacae
<400> 8965
Asp Gly Glu Ser Met Ser Thr Ile Leu Ile Phe Leu Ala Ala Val Leu
                          10
Ala Cys Ala Ser Ile Ala Val Trp Val Phe Arg Arg Arg Val His Arg
      20
                       25
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Arg Tyr Arg Leu Pro Phe Leu Asn Ala Phe Ala Gly Ala Asn Thr Arg 35 40 Lys Leu Ser Pro Glu Glu Arg Ser Thr Val Glu Gln Tyr Leu Asp Thr

Leu Asn Arg Ser Arg Leu Ser Pro Gly Pro Thr Gly Ala Ser Thr Ala 75 Pro Val Ser Leu Asn Leu Asn Ala Gln Ser Asp Thr Val Leu Cys Val 8.5 90 Thr Arg Ser Ile Thr Arg Tyr Gly Ile Thr Thr Asp Asp Pro Asn Lys 100 105 110 Trp Arg Tyr Tyr Leu Asp Ser Val Glu Val His Leu Pro Pro Phe Trp 115 120 125 Glu Gln Tyr Ile Asn Asp Glu Asn Ser Val Glu Leu Ile His Thr Asp 135 140 Thr Leu Pro Leu Val Ile Ser Leu Asn Gly His Thr Leu Ser Glu Tyr 145 150 155 Val Gln Glu Ala Pro Arg Phe Ala Leu Glu Arg Ala Ser Gly Thr Gln 165 170 175 Ala Ser Ile Arg Gly Glu Glu Thr Glu Gln Ile Glu Leu Leu Asn Ile 180 185 190 Arg Gln Glu Thr His Glu Glu Tyr Val Leu Ser Arg Pro Asp Gly Ile 195 200 205 Arg Glu Ala Val Leu Ile Val Ala Ser Phe Leu Leu Phe Phe Ile Cys 210 215 220 Leu Leu Thr Pro Asp Val Phe Val Pro Trp Leu Ala Gly Gly Ala Val 225 230 235 Leu Leu Leu Ala Ala Gly Leu Trp Gly Ile Phe Ala Pro Pro Ala Lys 245 250 255 Thr Ser Leu Arg Glu Ile His Cys Leu Arg Gly Thr Pro Lys Arg Trp 260 265 Gly Leu Phe Gly Glu Asn Asp Gln Glu His Ile Asn Asn Ile Ser Leu 275 280 285 Gly Ile Ile Asp Leu Ile Tyr Pro Arg His Trp Gln Pro Trp Ile Ala 290 295 300 Gln Asp Leu Gly His Lys Thr Asp Ile Asp Ile Tyr Leu Asp Arg His 305 310 315 Val Val Arg Gln Gly Arg Tyr Leu Ser Leu His Asp Glu Val Lys Asn 325 330 Phe Pro Leu Gln His Trp Leu Arg Ser Ala Val Ile Ala Gly Gly Ala 345 350 Ala Leu Ile Phe Leu Met Leu Leu Leu Phe Val Pro Leu Asp Met Pro 360 365 Ile Lys Phe Thr Leu Ser Trp Ile Lys Gly Ala Gln Thr Val Glu Ala 370 375 380 Thr Ser Val Gln Gln Leu Glu Glu Ala Gly Val Arg Val Gly Asp Thr 385 390 395 Leu Arg Leu Lys Gly Thr Gly Met Cys Asn Ile His Ser Pro Gly Ala 410 405 Trp Asn Thr Arg Gln Asn Ser Pro Phe Ala Pro Phe Asp Cys Ser Gln 420 425 Ile Ile Trp Asn Asp Ala Ser Pro Leu Pro Leu Pro Glu Ser Asp Val 435 440 Val Asn Lys Ala Thr Ala Leu Thr Gln Thr Ile Asn Arg Gln Leu His 450 455 460 Pro Lys Pro Asp Asp Asp Ser Arg Val Ser Pro Ala Leu Arg Ser Ala 465 470 475 Ile Gln Lys Ser Gly Met Val Leu Leu Asp Asp Phe Gly Glu Ile Val 485 490 Leu Lys Thr Glu Asp Leu Cys Ser Ala Gln Asp Asp Cys Ile Arg Leu 505 510 Lys Asn Ala Leu Val Asn Leu Gly Asn Ser Lys Asp Trp Asp Ala Leu 520 525 Val Lys Arg Ala Glu Ala Gly Arg Leu Asp Gly Val Asn Val Leu Leu 530 535

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Arg Pro Val Ser Ala Glu Ser Leu Asp Asn Leu Val Ala Thr Ser Thr
545
                               555
Ala Pro Phe Val Met Arg Glu Thr Thr Arg Ala Ala Gln Ala Leu Asn
             565
Ser Pro Ala Pro Gly Gly Phe Val Ile Ala Ser Asp Glu Gly Ser Asp
                           585
          580
                                             590
Leu Val Asp Gln Pro Tyr Pro Gln Val Ser Leu Tyr Asp Tyr Pro Ala
      595
                        600
                                       605
Gln Glu Gln Trp Ser Glu Phe Gln Arg Leu Ala Gln Met Leu Met Gln
                    615 620
Thr Pro Phe Ser Ala Glu Gly Ile Val Thr Thr Leu Phe Thr Asp Ala
       630 635
Asn Gly Thr Arg His Ile Gly Leu His Arg Met Pro Asp Ser Ala Gly
          645 650 655
Leu Trp Arg Tyr Ile Gly Thr Ser Leu Leu Leu Ile Ala Met Leu Ala
          660 665 670
Cys Ile Val Trp Asn Gly Tyr Gln Ala Val Arg Arg Tyr Gln Arg Ser
    675 680
Arg Thr Arg Leu Ala Glu Ile Gln Ala Tyr Tyr Glu Asn Cys Leu Asn
 690 695 700
Pro Lys Leu Ile Ser Ser Ser Glu Ser Leu Ile Gly
705 710
<210> 8966
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 8966
Lys Lys Leu Ser Ala Thr Ser Gly Ala Glu Arg Leu Ser Pro Asp Asp
                            2.0
Pro Leu Thr His Arg Glu Gly Asp Ala Met Lys Glu Lys Pro Ser Asp
   20
                           2.5
                                             30
Gly Val Arg Leu Asp Lys Trp Leu Trp Ala Ala Arg Phe Tyr Lys Thr
                      40
                                         4.5
Arg Ala Leu Ala Arg Glu Met Val Asp Gly Gly Lys Val His Tyr Asn
                    55
Gly Gln Arg Ser Lys Pro Ser Lys Leu Val Glu Leu Asn Ala Thr Leu
                 70
                                  75
                                                    8.0
Thr Leu Arg Gln Gly Asn Asp Glu Lys Thr Val Val Val Lys Ala Ile
                              90
Thr Glu Gln Arg Arg Pro Ala Thr Glu Ala Val Leu Leu Tyr Glu Glu
         100
                           105
                                            110
Thr Ala Glu Ser Ile Glu Lys Arg Glu Lys Thr Ala Leu Ala Arg Lys
      115
                        120
Met Asn Ala Leu Thr Met Pro His Pro Asp Arg Arg Pro Asp Lys Lys
                 135
                                      140
Glu Arg Arg Asp Leu Met Lys Phe Lys His Gly Glu Ser Glu
                 150
<210> 8967
<211> 301
<212> PRT
<213> Enterobacter cloacae
<400> 8967
Pro Ser Pro Ala Arg Glu Met Lys Met Ala Gln His Asp Gln Leu His
                               10
Arg Tyr Leu Phe Glu Gln Phe Ala Val Arg Gly Glu Leu Val Thr Val
                           25
Ser Glu Thr Trp Lys Gln Ile Leu Glu Asn His Asn Tyr Pro Leu Pro
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Val Lys Thr Leu Leu Gly Glu Leu Leu Val Ala Thr Ser Leu Leu Thr Ala Thr Leu Lys Phe Ala Gly Asp Ile Thr Val Gln Leu Gln Gly Asp 7.0 Gly Pro Met Ser Leu Ala Val Ile Asn Gly Asn Asn Gln Gln Met 8.5 90 Arg Gly Val Ala Arg Val Gln Gly Asp Ile Pro Glu Asn Ala Asp Leu 100 105 Lys Thr Leu Val Gly Asn Gly Tyr Leu Val Ile Thr Ile Ser Pro Glu 120 125 Glu Gly Glu Arg Tyr Gln Gly Val Val Gly Leu Glu Gly Asp Thr Leu 140 135 Ala Ala Cys Leu Glu Asp Tyr Phe Met Arg Ser Glu Gln Leu Pro Thr 155 150 Arg Leu Phe Ile Arg Thr Gly Glu Val Asp Gly Gln Pro Ala Ala Gly 170 175 165 Gly Met Leu Leu Gln Val Leu Pro Ala Gln Asp Ala Gln Thr Asn Asp 180 185 190 Phe Glu His Leu Ala Thr Leu Thr Glu Thr Ile Lys Ala Glu Glu Leu 195 200 205 Phe Thr Leu Ser Ala Thr Asp Val Leu Trp Arg Leu Tyr His Glu Glu 210 215 220 Glu Val Thr Val Tyr Asp Pro Gln Asp Val Glu Phe Lys Cys Thr Cys 225 230 235 Ser Arg Glu Arg Cys Ala Gly Ala Leu Lys Thr Leu Pro Asp Glu Glu 245 250 Ile Asp Ser Ile Met Ala Glu Asp Gly Glu Ile Asp Met His Cys Asp 260 265 270 Tyr Cys Gly Thr His Tyr Val Phe Asn Ser Met Asp Ile Ala Glu Ile 275 280 285 Arg Asn Asn Ala Ser Pro Ala Asp Pro Gln Val His 295

<210> 8968

<211> 559 <212> PRT

<213> Enterobacter cloacae

<400> 8968

His Pro Gln Lys Asn Pro Thr Ile Ser Gly Ser Thr Tyr Trp Leu Arg 10 Ser Ser Asp Met Arg Val Asn Gly Leu Thr Pro Gln Asp Leu Lys Ala 25 Tyr Gly Ile His Asp Val Gln Glu Val Val Tyr Asn Pro Asp Tyr Asp 4.0 Thr Leu Tyr Gln Glu Glu Leu Asn Pro Ala Leu Glu Gly Tyr Glu Arg 55 60 Gly Val Leu Thr Asn Leu Gly Ala Ile Ala Val Asp Thr Gly Ile Phe 7.0 75 Thr Gly Arg Ser Pro Lys Asp Lys Tyr Ile Val Arg Asp Asp Thr Thr 85 90 Arg Asp Thr Leu Trp Trp Ala Asp Lys Gly Lys Gly Lys Asn Asp Asn 100 105 Lys Pro Leu Ser Pro Glu Thr Trp Gln His Leu Lys Gly Leu Val Thr 115 120 His Gln Leu Ser Gly Lys Arg Leu Phe Ile Ile Asp Ala Phe Cys Gly 135 140 Ala Asn Ala Asp Thr Arg Leu Ser Val Arg Phe Ile Thr Glu Val Ala 150 Trp Gln Ala His Phe Val Lys Asn Met Phe Ile Arg Pro Thr Asp Glu

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165
                          170
Glu Leu Gln Asp Phe Thr Pro Asp Phe Ile Val Met Asn Gly Ala Lys
      180
              185 190
Cys Thr Asn Pro Gln Trp Lys Glu Gln Gly Leu Asn Ser Glu Asn Phe
    195 200 205
Ile Ala Phe Asn Leu Thr Glu Arg Ile Gln Leu Ile Gly Gly Thr Trp
  210 215 220
Tyr Gly Glu Met Lys Lys Gly Met Phe Ser Val Met Asn Tyr Leu
225 230 235 240
Leu Pro Leu Arg Gly Ile Ala Ser Met His Cys Ser Ala Asn Val Gly
      245 250 255
Glu Lys Gly Asp Val Ala Val Phe Phe Gly Leu Ser Gly Thr Gly Lys
       260 265 270
Thr Thr Leu Ser Thr Asp Pro Lys Arg Arg Leu Ile Gly Asp Asp Glu
     275 280 285
His Gly Trp Asp Asp Asp Gly Val Phe Asn Phe Glu Gly Gly Cys Tyr
290 295 300
Ala Lys Thr Ile Arg Leu Ser Glu Glu Ala Glu Pro Asp Ile Tyr His
    310 315
Ala Ile Arg Arg Asp Ala Leu Leu Glu Asn Val Thr Val Arg Ala Asp
            325
                          330
                                         335
Gly Ser Ile Asp Phe Asp Asp Ala Ser Lys Thr Glu Asn Thr Arg Val
                           350
        340
                       345
Ser Tyr Pro Ile Tyr His Ile Glu Asn Ile Val Lys Pro Val Ser Lys
     355 360
                                   365
Ala Gly His Ala Thr Lys Val Ile Phe Leu Thr Ala Asp Ala Phe Gly
370
                 375
                                380
Val Leu Pro Pro Val Ser Arg Leu Thr Ala Ser Gln Thr Gln Tyr His
385 390
                             395
Phe Leu Ser Gly Phe Thr Ala Lys Leu Ala Gly Thr Glu Arg Gly Val
           405 410
                                         415
Thr Glu Pro Thr Pro Thr Phe Ser Ala Cys Phe Gly Ala Ala Phe Leu
      420 425
                                     430
Ser Leu His Pro Thr Gln Tyr Ala Glu Val Leu Val Lys Arg Met Gln
4 3 5
                  440
                                   445
Ala Ser Gly Ala Gln Ala Tyr Leu Val Asn Thr Gly Trp Asn Gly Thr
                 455 460
Gly Lys Arg Ile Ser Ile Lys Asp Thr Arg Ala Ile Ile Asp Ala Ile
465
              470
                             475
Leu Asp Gly Ser Leu Asp Asn Ala Glu Thr Phe Thr Leu Pro Met Phe
           485 490 495
Asp Leu Ala Ile Pro Thr Ala Leu Pro Gly Val Asp Thr Arg Ile Leu
        500
                    505
                                      510
Asp Pro Arg Asn Thr Tyr Gly Ser Pro Glu Gln Trp Arg Glu Lys Ala
                    520
  515
                                   525
Glu Ser Leu Ala Lys Leu Phe Ile Glu Asn Phe Glu Lys Tyr Thr Asp
                 535
 530
Thr Pro Ala Gly Ala Ala Leu Val Ser Ala Gly Pro Lys Leu
<210> 8969
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<211> 267 <212> PRT <213> Enterobacter cloacae

<400> 8969

Arg Ser Ile Thr Ala Cys Gly Gln Thr Asn Phe Ala Ala Arg Ser Ala 10 Phe Ala Ser Cys Phe Arg Ala Val Arg Asp Lys His Val Ala Gln Thr 25 Pro Asn Gly Leu Asn Ile Thr Arg Met Arg Arg Ile Phe Phe His His

40 Ala Thr Gln Thr Arg Asp Leu His Val Asp Arg Thr Leu His Arg Gly Val Phe Thr Thr Arg Gln Val His Gln Leu Val Thr Gly Glu Arg 70 7.5 Leu Thr Arg Val Ala Asp Gln Arg Phe Gln His Arg Glu Leu Thr Ala 85 90 Gly Glu Arg His Trp Leu Ile Phe Thr Glu His Leu Thr Gly Ala Glu 100 105 110 Val Gln Leu Glu Leu Thr Glu Cys Asn Asp Gly Leu Phe Leu Arg Trp 115 120 125 Arg Ala Arg Gln Phe Val Arg Leu Thr Thr Gln His Gly Ala Asn Thr 130 135 140 Arg Gln Gln Phe Thr Arg Val Lys Arg Leu Trp Asn Val Val Ile Ser 145 150 155 160 Ala Asn Leu Lys Ala Asp Asn Thr Val Asp Phe Phe Thr Leu Arg Arg 165 170 175 His His Asp Asp Arg His Arg Val Ala Leu Ala Ala Gln Thr Ala Ala 180 185 190 Asn Arg Glu Pro Val Phe Ala Arg Gln His Gln Val Gln His His Gln 195 200 205 Val Glu Arg Phe Thr Arg Gln Gln Thr Ile His Leu Phe Arg Val Arg 210 215 220 Asp Ala Thr Asn Leu Glu Ala Leu Leu Gly Gln Ile Thr Phe Gln Gln 225 230 235 240 Arg Thr Gln Ala His Val Val Ile Tyr Asp Gln Asn Phe Val Val Leu 245 250 255 Leu His Cys Val Tyr Ser Gln Arg Phe Gly

<210> 8970 <211> 218 <212> PRT

<213> Enterobacter cloacae

<400> 8970 Lys Ser Ala Arg Val Arg Pro Ala Asn Ser Gly Ile Asn Ser Arg Arg 1.0 Asn Cys Tyr Lys Ala Tyr Leu Thr Ala Ala Tyr Leu Phe Ile Ser Ser 20 25 30His Lys Ser Leu Leu Ile Leu Ser Val Thr Leu Cys Ala Thr Tyr Cys 40 Ala Gln Arg Gln Leu Thr Gly Ile Lys Gly Cys Thr Met Lys Thr Pro 55 Leu Ile Thr Arg Glu Gly Tyr Glu Lys Leu Lys Lys Glu Met Asp Tyr 70 Leu Trp Arg Glu Glu Arg Pro Glu Val Thr Lys Lys Val Thr Trp Ala 85 90 95 Ala Ser Leu Gly Asp Arg Ser Glu Asn Ala Asp Tyr Gln Tyr Asn Lys 100 105 110 Lys Arg Leu Arg Glu Ile Asp Arg Arg Val Arg Tyr Leu Thr Lys Cys 120 115 Leu Glu Asn Leu Lys Ile Val Asp Tyr Ser Pro Gln Gln Glu Gly Lys 130 135 140 Val Phe Phe Gly Ala Trp Val Glu Ile Glu Asn Asp Asn Gly Asp Thr 150 155 Leu Arg Phe Arg Ile Val Gly Tyr Asp Glu Ile Phe Gly Arg Lys Asp 165 170 Tyr Ile Ser Ile Asp Ser Pro Met Ala Arg Ala Leu Leu Lys Lys Glu 180 185 Val Gly Asp Leu Ala Val Val Gin Thr Pro Ala Gly Glu Ala Ser Trp

195 205 Tyr Val Asn Glu Ile Val Tyr Val Lys 210 <210> 8971 <211> 806 <212> PRT <213> Enterobacter cloacae <400> 8971 Ser Glu Ser Ala Leu Pro Gly Trp His Phe Leu Val Ser Ala Arg Ile 10 Thr Ile Pro Leu Ile Phe Asp Pro Gln Asp Glu Leu Thr Met Met Lys 20 25 Glu Ser Leu Cys Arg Ile Ile Ala Gly Glu Leu Gln Ala Arg Ala Glu 4.0 Gln Val Glu Ala Ala Val Arg Leu Leu Asp Glu Gly Asn Thr Val Pro 55 60 Phe Ile Ala Arg Tyr Arg Lys Glu Val Thr Gly Gly Leu Asp Asp Thr 70 75 Gln Leu Arg Asn Leu Glu Thr Arg Leu Gly Tyr Leu Arg Glu Leu Glu 85 90 Asp Arg Arg Gln Ala Ile Leu Lys Ser Ile Gly Glu Gln Gly Lys Leu 100 105 110 Thr Ser Asp Leu Glu Lys Ala Ile Asn Gly Thr Leu Ser Lys Thr Glu 115 120 Leu Glu Asp Leu Tyr Leu Pro Tyr Lys Pro Lys Arg Arg Thr Arg Gly 135 140 Gln Ile Ala Ile Glu Ala Gly Leu Glu Pro Leu Ala Asp Leu Leu Trp 150 155 Asn Glu Pro Ser His Asp Pro Glu Thr Glu Ala Ala Lys Phe Ile Asp 165 170 Ala Asp Lys Gly Val Ala Asp Thr Lys Ala Ala Leu Asp Gly Ala Arg 185 190 Tyr Ile Leu Met Glu Arg Phe Ala Glu Asp Ala Ala Leu Leu Ala Lys 200 205 Val Arg Asp Tyr Leu Trp Lys Asn Ala His Ile Val Ser Ser Val Val 215 220 Ser Gly Lys Glu Glu Glu Gly Ala Lys Phe Arg Asp Tyr Phe Asp His 230 235 240 His Glu Pro Ile Ser Thr Ala Pro Ser His Arg Ala Leu Ala Met Phe 245 250 Arg Gly Arg Asn Glu Gly Val Leu Gln Leu Ser Leu Asn Ala Asp Pro 260 265 270 Gln Phe Asp Glu Pro Pro Lys Glu Ser His Cys Glu Gln Ile Ile Met 275 280 285 Asp His Leu Gly Leu Arg Leu Asn Asn Ala Pro Ala Asp Ser Trp Arg 295 300 Lys Gly Val Val Ser Trp Thr Trp Arg Ile Lys Val Leu Met His Leu 310 315 Glu Thr Glu Leu Met Gly Thr Val Arg Glu Arg Ala Glu Asp Glu Ala 325 330 Ile Asn Val Phe Ala Arg Asn Leu His Asp Leu Leu Met Ala Ala Pro 340 345 350 Ala Gly Leu Arg Ala Thr Met Gly Leu Asp Pro Gly Leu Arg Thr Gly 355 360 365 Val Lys Val Ala Val Val Asp Gly Thr Gly Lys Leu Val Ala Thr Asp 370 375 380 Thr Ile Tyr Pro His Thr Gly Gln Ala Ala Lys Ala Ala Val Val Val 390 395 Ala Ala Leu Cys Glu Lys Tyr Asn Val Glu Leu Val Ala Ile Gly Asn

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405
Gly Thr Ala Ser Arg Glu Thr Glu Arg Phe Tyr Leu Asp Val Gln Lys
                     425
                              430
Gln Phe Pro Lys Val Thr Ala Gln Lys Val Ile Val Ser Glu Ala Gly
     435
                 440
                                 445
Ala Ser Val Tyr Ser Ala Ser Glu Leu Ala Ala Gln Glu Phe Pro Asp
         455 460
Leu Asp Val Ser Leu Arg Gly Ala Val Ser Ile Ala Arg Arg Leu Gln
465 470 475 480
Asp Pro Leu Ala Glu Leu Val Lys Ile Asp Pro Lys Ser Ile Gly Val
      485 490 495
Gly Gln Tyr Gln His Asp Val Ser Gln Tnr Gln Leu Ala Arg Lys Leu
       500 505 510
Asp Ala Val Val Glu Asp Cys Val Asn Ala Val Gly Val Asp Leu Asn
     515 520 525
Thr Ala Ser Val Pro Leu Leu Thr Arg Val Ala Gly Leu Thr Arg Met
 530 535 540
Met Ala Gln Asn Ile Val Ala Trp Arg Asp Glu Asn Gly Gln Phe Gln
545 550 555
Asn Arg Gln Gln Leu Leu Lys Val Ser Arg Leu Gly Pro Lys Ala Phe
          565 570 575
Glu Gln Cys Ala Gly Phe Leu Arg Ile Asn His Gly Asp Asn Pro Leu
             585 590
Asp Ala Ser Thr Val His Pro Glu Ala Tyr Pro Val Val Glu Arg Ile
595 600 605
Leu Ala Ala Thr Gln Gln Ala Leu Lys Asp Leu Met Gly Asp Ser Ser
610 615
                      620
Ala Leu Arg Asn Leu Lys Ala Val Asp Phe Thr Asp Glu Gln Phe Gly
625 630
                    635
Val Pro Thr Val Thr Asp Ile Ile Lys Glu Leu Glu Lys Pro Gly Arg
           645
                         650
                                        655
Asp Pro Arg Pro Glu Phe Lys Thr Ala Thr Phe Ala Asp Gly Val Glu
   660 665
                          670
Thr Met Asn Asp Leu Leu Pro Gly Met Val Leu Glu Gly Ala Val Thr
675 680
                       685
Asn Val Thr Asn Phe Gly Ala Phe Val Asp Ile Gly Val His Gln Asp
690 695
                               700
Gly Leu Val His Ile Ser Ser Leu Ala Asp Lys Phe Val Glu Asp Pro
           710 715
His Thr Val Val Lys Ala Gly Asp Ile Val Lys Val Lys Val Leu Glu
                         730
           725
Val Asp Leu Gln Arg Lys Arg Ile Ala Leu Thr Met Arg Leu Asp Glu
      740 745
Gln Pro Gly Asp Thr Asn Ala Arg Arg Gly Gly Asn Gly Gly Gly Arg
     755 760 765
Glu Gln Gln Arg Pro Ala Ala Lys Ala Ala Lys Pro Arg Gly Arg Asp
                775
Ala Gln Pro Ala Gly Asn Ser Ala Met Met Asp Ala Leu Ala Ala Ala
   790
                             795
Met Gly Lys Lys Arg
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<210> 8972

<211> 285

<212> PRT

<213> Enterobacter cloacae

<400> 8972

Ile His Gln Val Tyr Arg Glu Leu Arg Gly Gln Phe Leu Thr Tyr Ala 1 $$ 5 $$ 10 $$ 15

l 5 10 15 Thr Pro His Phe Gly Val Gln Ser Pro Ser Val Gln Gln His Lys Met

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Thr Ile Ser Arg Pro Asn Gly Leu Pro Pro Gln Arg Leu His Gln Leu
                    4.0
Thr Phe Ser Phe Phe Thr Trp Arg Leu Arg Met Leu Thr Val Pro Gly
                 55
Leu Cys Trp Leu Cys Arg Met Pro Leu Ala Leu Ser Ala Trp Gly Val
            70
                       75
Cys Ser Val Cys Thr Arg Ala Leu Gly Tyr Leu Lys Gly Cys Pro Gln
         8.5
                         90
Cys Gly Leu Pro Ala Val Ser Gln Thr Leu Pro Cys Gly Arg Cys Leu
      100 105 110
Lys Lys Ala Pro Pro Trp Ser Ala Leu Val Ala Val Asp Asp Tyr Val
   115 120 125
Leu Pro Leu Ser Arg Leu Val His Gln Phe Lys Phe Ser Ser Gln Ile
130 135 140
Ala Leu Ala Gln Pro Leu Ala Arg Leu Leu Leu Ala Val Leu Gln
145 150 155 1600
Ala Arg Arg Thr Arg Gly Leu Pro Pro Val Asp Thr Leu Val Asn Val
      165 170 175
Pro Leu Phe Gln Arg Arg His Trp Arg Arg Gly Tyr Asn Gln Ser Asp
   180 185 190
Leu Leu Cys Arg Pro Leu Ala Arg Trp Leu Gly Cys Arg Tyr Pro Ala
                    200 205
Ser Ala Leu Lys Arg Ile His Ala Thr Ala Val Gln His Arg Leu Asn
210 215
                                220
Ala Arg Ser Arg Lys Arg Asn Leu Lys Asn Ala Phe Arg Leu Glu Leu
225 230 235 240
Pro Val Asn Gly Leu His Ile Ala Ile Val Asp Asp Val Val Thr Thr
          245 250
Gly Ser Thr Val Ala Glu Leu Ser Arg Leu Leu Gln Ser Gly Ala
      260 265
Ala Ser Val Gln Val Trp Cys Leu Cys Arg Thr Leu
                    280
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<210> 8973

<211> 400 <212> PRT

<213> Enterobacter cloacae

<400> 8973

Asn Asn Asp Val Thr His Asn Asn Ser Lys Ala Arg Ser Ile Met Pro 1.0 Leu Phe Ile Val Ala Ile Gly Val Val Leu Leu Leu Leu Met Ile 20 25 3.0 Arg Phe Lys Met Asn Gly Phe Ile Ala Leu Val Leu Val Ala Leu Ala 35 40 Val Gly Leu Met Gln Gly Met Pro Leu Val Lys Val Ile Ser Ser Ile 55 60 Lys Ala Gly Val Gly Gly Thr Leu Gly Ser Leu Ala Leu Ile Met Gly 70 7.5 Phe Gly Ala Met Leu Gly Lys Met Leu Ala Asp Cys Gly Gly Ala Gln 85 Arg Ile Ala Thr Thr Leu Ile Asp Lys Phe Gly Lys Gln His Ile Gln 105 110 100 Trp Ala Val Val Leu Thr Gly Phe Thr Val Gly Phe Ala Leu Phe Tyr 115 120 125 Glu Val Gly Phe Val Leu Met Leu Pro Leu Val Phe Thr Ile Ala Ala 130 135 140 Ala Ala Asn Ile Pro Leu Leu Phe Val Gly Val Pro Met Ala Ala Ala 150 155 Leu Ser Val Thr His Gly Phe Leu Pro Pro His Pro Gly Pro Thr Ala

170 Ile Ala Thr Ile Phe His Ala Asp Met Gly Lys Thr Leu Leu Phe Gly 180 185 190 Thr Ile Leu Ala Ile Pro Thr Val Ile Leu Ala Gly Pro Val Tyr Ala 195 200 205 Arg Phe Leu Lys Gly Ile Asp Lys Pro Ile Pro Glu Gly Leu Tyr Ser 210 215 220 Ala Lys Thr Phe Thr Glu Glu Asp Met Pro Gly Phe Gly Val Ser Val 225 230 235 Trp Thr Ser Leu Val Pro Val Ile Leu Met Ala Met Arg Ala Ile Ala 245 250 255 Glu Met Val Leu Pro Lys Gly His Ala Phe Leu Ser Val Ala Glu Phe 260 265 270 Leu Gly Asp Pro Val Met Ala Thr Leu Ile Ala Val Leu Ile Ala Met 275 280 285 Phe Thr Phe Gly Leu Asn Arg Gly Arg Ser Met Asp Gln Ile Asn Asp 290 295 300 Thr Leu Thr Ser Ser Ile Lys Ile Ile Ala Met Met Leu Leu Ile Ile 305 310 315 Gly Gly Gly Gly Ala Phe Lys Gln Val Leu Val Asp Ser Gly Val Asp 325 330 Lys Tyr Ile Ala Ala Met Met His Glu Thr Asn Val Ser Pro Leu Leu 340 345 350 Met Ala Trp Ser Ile Ala Ala Vai Leu Arg Ile Ala Leu Gly Ser Ala 355 360 365 Thr Val Ala Ala Ile Thr Ala Gly Gly Ile Val Ala Pro Leu Ile Ala 370 375 380 Thr Thr Gly Val Ser Pro Glu Leu Met Val Ile Ala Val Gly Ser Gly 395

<210> 8974 <211> 450 <212> PRT

<213> Enterobacter cloacae

<400> 8974 Ser Met Arg Arg Met Arg Phe Ser Pro Arg Ser Ser Phe Ala Arg Thr 1 Leu Leu Leu Ile Val Thr Leu Leu Phe Val Ser Leu Val Thr Thr Tyr 2.5 Leu Val Val Leu Asn Phe Ala Ile Leu Pro Ser Leu Gln Gln Phe Asn 35 4.0 45 Lys Val Leu Ala Tyr Glu Val Arg Met Leu Met Thr Asp Lys Leu Gln 55 60 Leu Glu Asp Gly Thr Gln Leu Val Val Pro Pro Ala Phe Arg Arg Glu 70 75 Ile Tyr Arg Glu Leu Gly Ile Ser Leu Tyr Ser Asn Glu Ala Ala Glu 8.5 90 Asp Ala Gly Leu Arg Trp Ala Gln His Tyr Glu Phe Leu Ser Gln Gln 100 105 Met Ala Gln Gln Leu Gly Gly Pro Thr Glu Val Arg Val Glu Val Asn 115 120 Lys Ser Ser Pro Val Val Trp Leu Lys Thr Trp Leu Ser Pro Asn Ile 135 140 Trp Val Arg Val Pro Leu Thr Glu Ile His Gln Gly Asp Phe Ser Pro 150 155 Leu Phe Arg Tyr Thr Leu Ala Ile Met Leu Leu Ala Ile Gly Gly Ala 165 170 175 Trp Leu Phe Ile Arg Ile Gln Asn Arg Pro Leu Val Asp Leu Glu His 185 190 Ala Ala Leu Gln Val Gly Lys Gly Ile Ile Pro Pro Pro Leu Arg Glu

```
200
                                    205
Tyr Gly Ala Ser Glu Val Arg Ser Val Thr Arg Ala Phe Asn His Met
                 215
                        220
Ala Ala Gly Val Lys Gln Leu Ala Asp Asp Arg Thr Leu Leu Met Ala
            230
                   235 240
Gly Val Ser His Asp Leu Arg Thr Pro Leu Thr Arg Ile Arg Leu Ala
          245 250 255
Thr Glu Met Met Gly Glu Gln Asp Gly Tyr Leu Ala Glu Ser Ile Asn
    260 265 270
Lys Asp Ile Glu Glu Cys Asn Ala Ile Ile Glu Gln Phe Ile Asp Tyr
 275 280 285
Leu Arg Thr Gly Gln Glu Met Pro Met Glu Met Ala Asp Leu Asn Ala
 290 295
                                300
Val Leu Gly Glu Val Val Ala Ala Glu Ser Gly Tyr Glu Arg Glu Ile
    310 315
Ala Thr Asp Leu Gln Ala Gly Glu Ile Gln Val Arg Met His Pro Leu
         325 330
Ser Ile Lys Arg Ala Val Ala Asn Met Val Val Asn Ala Ala Arg Tyr
        340 345
                                       350
Gly Asn Gly Trp Ile Lys Val Ser Ser Gly Thr Glu Leu Asn Arg Ala
 355 360 365
Trp Phe Gln Val Glu Asp Asp Gly Pro Gly Ile Lys Pro Glu Gln Arg
 370 375 380
Lys His Leu Phe Gln Pro Phe Val Arg Gly Asp Ser Ala Arg Ser Thr
385 390 395 400
Ser Gly Thr Gly Leu Gly Leu Ala Ile Val Gln Arg Ile Val Asp Asn
          405 410
His Asn Gly Leu Leu Glu Ile Gly Thr Ser Glu Arg Gly Gly Leu Ser
  420 425 430
Ile Arg Ala Trp Leu Pro Val Pro Val Leu Arg Gly Gln Val Lys Glu
                     440
  450
<210> 8975
<211> 162
<212> PRT
<213> Enterobacter cloacae
<400> 8975
Pro Leu Met Ser Ala Ile Cys Ala Ser Arg Ser Asp Gly His Gly Asn
Glu Lys Glu Arg Lys Lys Val Lys Ile Arg Ile Gly Leu Leu Leu Ala
  20
                        25
                                       3.0
Val Leu Ser Gln Pro Leu Trp Ala Ala Thr Pro Lys Pro Val Thr Leu
    3.5
                    40
Leu Val Asp Asp Val Pro Val Val Gln Ile Leu Gln Ala Leu Val Ala
 50 55
                                60
Gln Glu Asp Arg Asn Leu Val Val Ser Pro Asp Val Ser Gly Ser Leu
                           75
            70
Ser Leu Asn Leu Thr Arg Val Pro Trp Arg Gln Ala Leu Gln Thr Val
           8.5
                          90
Val Asn Ser Ala Gly Leu Val Leu Arg Lys Arg Ala Ala Phe Phe Met
        100
                       105 110
Cys Ile Arg Arg His Gly Asn Gly Ser Asn Lys Arg Val Lys Ser Arg
     115
                    120
Ser Gly Pro Ser Val Cys Ser Thr Pro Arg Cys Thr Leu Thr Ala Phe
 130
               135
Arg Leu Leu Met Arg Met Arg Pro Asn Cys Lys Lys Arg Arg Lys Ser
145
              150
                              155
Ser
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<210> 8976
<211> 214
<212> PRT
<213> Enterobacter cloacae
<400> 8976
Asp Asn Phe Ser Ser Asp Ser Arg Ser Ile Ala Asn Glu Val Ser Val
                           10
His Val Leu Leu Arg Arg Val Ser Ala Gln Arg Gly Leu Pro Leu Thr
                           25
    20
                                            30
Asn Ser Leu Ser Ser Thr Glu Lys Met Ala Glu Lys Arg Asn Ile Phe
 35
                       40
                                       4.5
Leu Val Gly Pro Met Gly Ala Gly Lys Ser Thr Ile Gly Arg Gln Leu
50
                   55
                            - 60
Ala Gin Gin Leu Asn Met Glu Phe Tyr Asp Ser Asp Gin Glu Ile Glu
                 7.0
                                 7.5
Lys Arg Thr Gly Ala Asp Val Gly Trp Val Phe Asp Val Lys Gly Glu
            85
                              90
Glu Gly Phe Arg Asp Arg Glu Glu Lys Val Ile Asn Glu Leu Thr Glu
       100
                          105
                                            110
Lys Gln Gly Ile Val Leu Ala Thr Gly Gly Gly Ser Val Lys Ser Arg
 115
                       120
                                      125
Glu Thr Arg Asn Arg Leu Ser Ala Arg Gly Val Val Tyr Leu Glu
                    135
                                     140
Thr Thr Ile Glu Lys Gln Leu Ala Arg Thr Gln Arg Asp Lys Lys Arg
              150 155 160
Pro Leu Leu Gln Val Glu Thr Pro Pro Arg Glu Val Leu Glu Ala Leu
      165 170 175
Ala Asp Glu Arg Asn Pro Leu Tyr Glu Glu Ile Ala Asp Val Thr Ile
       180 185 190
Arg Thr Asp Asp Gln Ser Ala Lys Val Val Ala Asn Gln Ile Ile His
                       200
Met Leu Glu Ser Asn
   210
<210> 8977
<211> 368
<212> PRT
<213> Enterobacter cloacae
<400> 8977
Gly Gly Cys Arg Val Met Glu Arg Ile Thr Val Thr Leu Gly Glu Arg
                            10
Ser Tyr Pro Ile Thr Ile Ala Ala Gly Leu Phe Asn Asp Pro Ala Ser
         20
                           25
                                            30
Phe Leu Pro Leu Lys Ala Gly Asp Gln Ala Met Leu Val Thr Asn Glu
     35
                        40
Thr Leu Ala Pro Leu Tyr Leu Asp Arg Val Arg His Leu Leu Glu Gln
                  55
Ala Gly Val Lys Val Asp Ser Val Ile Leu Pro Asp Gly Glu Gln Tyr
                                 75
                 70
Lys Ser Leu Thr Val Leu Asp Thr Val Phe Thr Ala Leu Leu Gln Lys
             85
                              90
Pro His Gly Arg Asp Thr Thr Leu Leu Ala Leu Gly Gly Gly Val Val
          100
                        105
                                            110
Gly Asp Leu Thr Gly Phe Ala Ala Ala Ser Tyr Gln Arg Gly Val Arg
                120
Phe Ile Gln Ile Pro Thr Thr Leu Leu Ser Gln Val Asp Ser Ser Val
   130
                    135
                                     140
```

Gly Gly Lys Thr Ala Val Asn His Pro Leu Gly Lys Asn Met Ile Gly 150 155 Ala Phe Tyr Gln Pro Ala Ser Val Val Val Asp Leu Asp Cys Leu Lys 165 170 175 Thr Leu Pro Ala Arg Glu Leu Ala Ser Gly Leu Ala Glu Val Ile Lys 180 185 190 Tyr Gly Ile Ile Leu Asp Gly Glu Phe Phe Thr Trp Leu Glu Glu Asn 195 200 205 Met Asp Ala Leu Leu Arg Leu Asp Gly Gln Ala Met Ala Tyr Cys Ile 210 215 220 Arg Arg Cys Cys Glu Leu Lys Ala Glu Val Val Ala Ala Asp Glu Arg 225 230 235 240 Glu Thr Gly Leu Arg Ala Leu Leu Asn Leu Gly His Thr Phe Gly His 245 250 255 Ala Ile Glu Ala Glu Met Gly Tyr Gly Asn Trp Leu His Gly Glu Ala 260 265 270 Val Ala Ala Gly Met Val Met Ala Ala Arg Ala Ser Glu Arg Leu Gly
275 280 285 Gln Phe Arg Pro Glu Glu Thr Ala Arg Ile Ile Ala Leu Leu Lys Arg 290 295 300 Ala Gly Leu Pro Val Ser Gly Pro Gln Glu Met Ser Ala Gln Ala Tyr 310 315 Leu Pro His Met Met Arg Asp Lys Lys Val Leu Ala Gly Glu Met Arg 325 330 335 Leu Val Leu Pro Leu Ala Ile Gly Lys Ser Glu Val Arg Gly Gly Val 340 345 350 Pro His Glu Val Val Leu Gly Ala Ile Ala Asp Cys Gln Gln Ala 355 360

<211> 291 <212> PRT

<210> 8978

<213> Enterobacter cloacae

<400> 8978 Ser Ala Gly Cys Cys Arg Ser Phe Leu His Ser Arg Arg Arg Cys Asn 10 Gln Leu Val Ser Met Lys Lys Asn Arg Ala Phe Leu Lys Trp Ala Gly 20 25 30 Gly Lys Tyr Pro Leu Leu Asp Asp Ile Lys Lys His Leu Pro Lys Gly 35 40 4.5 Glu Cys Leu Ile Glu Pro Phe Val Gly Ala Gly Ser Val Phe Leu Asn Thr Asp Phe Ser Arg Tyr Ile Leu Ala Asp Ile Asn Ser Asp Leu Ile 70 75 80 Ser Leu Tyr Asn Ile Val Lys Leu Arg Thr Asp Glu Tyr Val Glu Glu 85 90 Ala Arg Lys Leu Phe Thr Pro Glu Asn Asn Asn Pro Asp Val Tyr Tyr 105 100 Gln Phe Arg Ala Glu Phe Asn Gln Ser Gln Asp Pro Phe Arg Arg Ala 125 115 120 Leu Leu Phe Leu Tyr Leu Asn Arg His Gly Tyr Asn Gly Leu Cys Arg 135 130 140 Tyr Asn Leu Arg Gly Glu Phe Asn Val Pro Phe Gly Arg Tyr Lys Arg 145 150 155 Pro Tyr Phe Pro Gln Asp Glu Leu Tyr His Phe Ala Glu Lys Ala Gln 165 170 Asn Ala Glu Phe Tyr Cys Leu Ser Tyr Glu Glu Cys Met Glu Leu Ala 185 190 Gly Val Asn Ser Val Val Tyr Cys Asp Pro Pro Tyr Ala Pro Leu Ser 200

```
Ala Thr Ala Asn Phe Thr Ala Tyr His Thr Asn Ser Phe Ser Pro Ala
 210
          215
Glu Gln Ala Arg Leu Ala Glu Met Ala Glu Lys Leu Val Ser Lys Arg
            230 235
Ile Pro Val Leu Ile Ser Asn His Asp Thr Pro Asp Thr Arg Glu Trp
             245 250 255
Tyr Lys Ala Ala Lys His Phe Gln Val Lys Val Arg Arg Ser Ile Ser
        260 265 270
Ser Asn Gly Gly Thr Arg Lys Lys Val Asp Glu Leu Leu Ala Leu Tyr
              280
Arg Pro
   290
<210> 8979
<211> 233
<212> PRT
<213> Enterobacter cloacae
<400> 8979
Thr His Phe Lys Glu Met Arg Met Lys Gln Phe Leu Ile Ala Pro Ser
                              10
Ile Leu Ser Ala Asp Phe Ala Arg Leu Gly Glu Asp Thr Ala Lys Ala
                           25
                                             30
Leu Ala Ala Gly Ala Asp Val Val His Phe Asp Val Met Asp Asn His
      35
                       4.0
                                       4.5
Tyr Val Pro Asn Leu Thr Ile Gly Pro Met Val Leu Lys Ala Leu Arg
                    5.5
                                    60
Asn Tyr Gly Ile Thr Ala Pro Ile Asp Val His Leu Met Val Lys Pro
                 70
                                7.5
Val Asp Arg Ile Val Pro Asp Phe Ala Ala Ala Gly Ala Ser Ile Ile
             85
                               90
Thr Phe His Pro Glu Ala Ser Glu His Val Asp Arg Thr Leu Gln Leu
                          105
         100
                                110
Ile Lys Glu Asn Gly Cys Lys Ala Gly Leu Val Phe Asn Pro Ala Thr
      115
                       120
                            125
Pro Leu Ser Tyr Leu Asp Tyr Val Met Asp Lys Leu Asp Val Ile Leu
                    135
                                      140
Leu Met Ser Val Asn Pro Gly Phe Gly Gly Gln Ser Phe Ile Pro Gln
          150 155
Thr Leu Asp Lys Leu Arg Glu Val Arg Arg Arg Ile Asp Glu Ser Gly
             165 170
                                                175
Tyr Asp Ile Arg Leu Glu Val Asp Gly Gly Val Lys Val Asn Asn Ile
          180
                           185
                                            190
Gly Glu Ile Ala Ala Ala Gly Ala Asp Met Phe Val Ala Gly Ser Ala
                       200
      195
                                         205
Ile Phe Asp Gln Pro Asp Tyr Lys Lys Val Ile Asp Glu Met Arg Arg
                    215
                                      220
Glu Leu Ala Lys Val Ser His Gly
                 230
<210> 8980
<211> 84
<212> PRT
<213> Enterobacter cloacae
<400> 8980
Trp Arg Cys Arg Phe Pro Pro Val Arg Pro Ala Tyr Leu Leu Pro Cys
                               1.0
Arg Ala Pro Ala Val Ser Pro Glu Ser Trp Leu Pro Asp Leu Ala Pro
         20
                                            30
```

Cys Arg Arg Pro Ala Ser Ala Phe Gln Arg Pro Asp Tyr Ala Ser Pro

4675 Ala Arg Cys Arg Phe Ser Gly Gly Pro Ser Pro Gly Ala Arg Ser Gly 55 60 His Ser Arg Asp Gly Leu Thr Glu Cys Arg Asn Arg Gln Asn Ser Arg Met Pro Pro <210> 8981 <211> 262 <212> PRT <213> Enterobacter cloacae <400> 8981 Leu Met Lys Thr Leu Trp Trp Gln Thr Val Gly Thr Gly Asn Cys His 10 Leu Val Leu Leu His Gly Trp Gly Leu Asn Ala Glu Val Trp Arg Cys 25 Ile Ser Glu Glu Leu Ala Ser Gln Phe Thr Val His Leu Val Asp Leu 40 45 Pro Gly Tyr Gly Arg Ser His Gly Tyr Gly Ala Met Thr Leu Asp Asp 5.5 60 Met Ala Glu Gln Val Leu Glu Ala Ala Pro Gln Lys Ala Val Trp Leu 7.5 70 8.0 Gly Trp Ser Leu Gly Gly Leu Val Val Ser Gln Ile Ala Leu Arg His 90 Pro Glu Arg Val Gln Ala Leu Ile Thr Val Ala Ser Ser Pro Cys Phe 105 110 Ser Ala Arg Glu Ala Trp Pro Gly Ile Lys Pro Glu Val Leu Ala Gly 120 125 Phe Gln His Gln Leu Ser Glu Asp Phe Gln Arg Thr Val Glu Arg Phe 130 135 140 Leu Ala Leu Gln Thr Met Gly Thr Glu Thr Ala Arg Gln Asp Ala Arg 150 155 Thr Leu Lys Gln Thr Val Leu Ser Leu Pro Met Pro Glu Val Glu Val 165 170 175 Leu Asn Gly Gly Leu Glu Ile Leu Lys Thr Ala Asp Leu Arg Glu Pro 180 185 190 Leu Ala Ser Leu Thr Val Pro His Leu Arg Ile Tyr Gly Tyr Leu Asp 200 205 Gly Leu Val Pro Arg Lys Val Val Pro Leu Leu Asp Ala Leu Trp Pro 215 220 Glu Ser Lys Ser Met Val Val Ala Lys Ala Ala His Ala Pro Phe Ile 230 235 Ser His Pro Ala Glu Phe Cys Ser Ala Leu Ser Gly Phe Ile Ser Glu 245 250 Ala Ser Thr Thr Pro 260 <210> 8982 <211> 278 <212> PRT <213> Enterobacter cloacae <400> 8982 Ile Cys Phe Val Thr Ile Ser Ser Arg Ile Tyr Thr Arg Ile Cys Trp Ser Asn Pro Cys Thr Phe Leu Glu Tyr Ala Val Pro Gly Leu Ser Glu 25 20

Pro Leu Gly Val His Thr Met Gln Glu Asn Tyr Lys Ile Leu Val Val

40

```
Asp Asp Asp Met Arg Leu Arg Ala Leu Leu Glu Arg Tyr Leu Thr Glu
Gln Gly Phe Gln Val Arg Ser Val Ala Asn Ala Glu Gln Met Asp Arg
               70
Leu Leu Thr Arg Glu Ser Phe His Leu Met Val Leu Asp Leu Met Leu
                          90
Pro Gly Glu Asp Gly Leu Ser Ile Cys Arg Arg Leu Arg Ser Gln Ser
        100
                      105
Asn Pro Met Pro Ile Ile Met Val Thr Ala Lys Gly Glu Glu Val Asp
                    120 125
     115
Arg Ile Val Gly Leu Glu Ile Gly Ala Asp Asp Tyr Ile Pro Lys Pro
 130 135 140
Phe Asn Pro Arg Glu Leu Leu Ala Arg Ile Arg Ala Val Leu Arg Arg
    150 155 160
Gln Ala Asn Glu Leu Pro Gly Ala Pro Ser Gln Glu Glu Ala Val Ile
           165 170 175
Ala Phe Gly Lys Phe Lys Leu Asn Leu Gly Thr Arg Glu Met Phe Arg
        180 185 190
Glu Asp Glu Pro Met Pro Leu Thr Ser Gly Glu Phe Ala Val Leu Lys
195 200 205
Ala Leu Val Ser His Pro Arg Glu Pro Leu Ser Arg Asp Lys Leu Met
210 215 220
Asn Leu Ala Arg Gly Arg Glu Tyr Ser Ala Met Glu Arg Ser Ile Asp
      230
                             235
Val Gln Ile Ser Arg Leu Arg Arg Met Val Glu Glu Asp Pro Ala His
           245 250 255
Pro Arg Tyr Ile Gln Thr Val Trp Gly Leu Gly Tyr Val Phe Val Pro
        260
                  265
Asp Gly Ser Lys Ala
```

<210> 8983

<211> 197

<212> PRT <213> Enterobacter cloacae

180

<400> 8983

Ser Gln Phe Thr Gln Gln Arg Pro Val Lys Met Thr Lys Pro Leu Gln 10 Lys Pro Thr Ile Leu Asn Val Glu Thr Val Ala Lys Ser Arg Leu Phe 2.5 Asn Val Glu Ser Val Asp Leu Glu Phe Ser Asn Gly Val Arg Arg Val 40 45 Tyr Glu Arg Met Arg Pro Ser Ser Arg Glu Ala Val Met Ile Val Pro Ile Val Asp Glu His Leu Ile Leu Ile Arg Glu Tyr Ala Val Gly Thr 7.0 75 Glu Ser Tyr Glu Leu Gly Phe Ser Lys Gly Leu Ile Asp Pro Gly Glu 85 Thr Val Phe Glu Ala Ala Asn Arg Glu Leu Lys Glu Glu Val Gly Phe 105 110 1.00 Gly Ala Lys Glu Leu Thr Phe Leu Lys Lys Leu Ser Met Ala Pro Ser 120 115 Tyr Phe Ser Ser Lys Met Asn Ile Val Val Ala Glu Asp Leu Tyr Pro 135 140 Glu Ser Leu Glu Gly Asp Glu Pro Glu Pro Leu Pro Gln Val Arg Trp 145 150 155 Pro Leu Ala His Leu Met Asp Leu Leu Glu Asp Pro Asp Phe Asn Glu 165 170 Ala Arg Asn Val Ser Ala Leu Phe Leu Val Arg Glu Trp Leu Lys Gly 185

```
4677
Gln Asp Arg Leu
      195
<210> 8984
<211> 178
<212> PRT
<213> Enterobacter cloacae
<400> 8984
Leu His Arg Leu Pro Gly Ala Gly His Glu Arg Gly Ala Val Met Ser
                              1.0
Met Pro Asn Leu Leu Pro Trp Arg Arg Gln Gln Arg Asn Gln Arg Leu
     20
                           2.5
Arg Phe Trp Glv Leu Leu Phe Ala Ala Ser Leu Leu Val Met Leu Ala
               40
                                       45
Gly Gly Phe Ser Leu Arg Ala Thr Gln Ser Leu Ala Leu Gln Ala Leu
                    55 60
Gln Ser Glu Leu Ala Gly Thr Arg Ala Val His Lys Val Leu Arg Ala
                7.0
                      75
Arg Gln Pro Gln Ser Ala Gly Leu Lys Thr Pro Ser Pro Pro Ser Asp
Pro Ala Trp Gln Pro Ala Leu Glu Ser Leu Ala Ser Ala Met Pro Arg
        100 105
Gln Ala Trp Leu Thr Ala Leu Arg Tyr Gln Pro Pro Ser Leu Thr Leu
     115 120
                                         125
Thr Gly Tyr Thr Thr Ser Leu Pro Ala Leu Ala Ala Met Thr Asp Ala
 130
                  135
                                      140
Leu Lys Arg Val Thr Gly Phe Asn Pro Gly Pro Ala Gly Glu Leu Gln
              150 155
Gln Asp Ser Leu Gly Arg Trp Met Phe Ser Phe Lys Leu His Ser Arg
              165
                               170
Arg
<210> 8985
<211> 152
<212> PRT
<213> Enterobacter cloacae
<400> 8985
Pro Val Gly Ile Trp Tyr Gln Arg Trp Ala Asp Ala Arg Pro Ser Arg
Arg Val Leu Cys Trp Leu Ile Ala Ser Gly Leu Val Ala Trp Ala Ile
Trp Gly Leu Leu Arg Pro Ala Ala Leu Arg Tyr Ala Asp Val Gln
      35
                        40
Ala Gln Ala Ile Ser Ala Lys Arg Ile Asn Ala Ser Leu Trp Pro Glu
                     55
Ala Gly Arg Gln Ala Val Phe Thr Gln Val Thr Pro Ser Arg Pro Phe
                 70
                                   75
Ser Pro Leu Ala Phe Gln Arg Glu Asp Ala Arg Leu Val Tyr Trp Lys
                               90
Pro Gln Gln Ser Gly Gly Glu Leu Ala Leu Asp Ala Ser Trp Gly Ala
```

105

125

Val Pro Ala Leu Phe Ser Arg Leu Ala Leu Glu Asn Val Arg Val Ser

Ala Phe Ser Ile Ile Pro Gln Gly Lys Gln Leu Arg Leu Ser Leu Gln

120

110

Leu Glu Ile Gly His Ala Gln 145 150

115

10

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<210> 8986
<211> 105
<212> PRT
<213> Enterobacter cloacae
<400> 8986
Arg Thr Ala Arg Val Ser Gly Val Tyr His Ala Thr Ser Gly Gln Tyr
               5
          20
```

Ser Val Met Gly Asn Asp Pro Arg Asn Asp Phe Ala Phe Ser Leu Leu 25 Gln Met Phe Asp Val Gly His Glu Leu Ala Tyr Lys Glu Tyr Arg Phe 40 45 Glu Leu Asp Leu Arg Leu Ile Ser Leu Cys Ala Gly Asn Gly Asp Leu 55 60 Ile Ser Cys Gln Thr Ser Arg Ser Ile Glu Ile Ile Phe Arg Leu Thr

7.0 7.5 Leu Ala Leu Leu Gln Met Arg Phe Gln Phe Met Ser Cys Tyr Ala Gly 85 90

Cys Leu Arg Ser Gly Asp Tyr His 100

<210> 8987 <211> 255 <212> PRT

<213> Enterobacter cloacae

<400> 8987 Val Met Asp Lys Leu Gln Ala Ile Arg Gly Val Ala Phe Asp Leu Asp 1.0 Gly Thr Leu Val Asp Ser Ala Pro Gly Leu Thr Ser Ala Val Asp Gln 20 25 30 Ala Leu Tyr Ala Leu Glu Leu Pro Val Ala Gly Glu Glu Arg Val Val 35 40 Thr Trp Ile Gly Asn Gly Ala Asp Val Leu Met Glu Arg Ala Leu Thr 50 55 60 Trp Ala Arg Gln Glu Arg Ala Ser Gln Arg Ser Ala Gln Gly Lys Pro 7.0 75 Ser Val Asp His Ala Asp Ile Pro Gln Asp Glu Gln Gln Arg Ile Leu 85 90 Arg Lys Leu Phe Asp Arg Phe Tyr Glu Glu Thr Val Glu Glu Gly Ser 105 100 110 Phe Leu Phe Pro Asp Val Ala Glu Thr Leu Ser Ala Leu Tyr Ala Lys 115 120 Gly Ile Pro Leu Gly Leu Val Thr Asn Lys Pro Thr Pro Phe Val Ala 135 130 140 Pro Leu Leu Glu Ala Leu Asp Ile Ala Lys Tyr Phe Ser Val Ile Val 155 145 150 Gly Gly Asp Asp Val Gln Asn Lys Lys Pro His Pro Glu Pro Leu Leu 165 170 Leu Val Ala Gly Lys Leu Ser Leu Thr Pro Ala Glu Leu Leu Phe Val 180 185 190 Gly Asp Ser Arg Asn Asp Ile Leu Ala Ala Arg Ala Ala Gly Cys Pro 195 200 Ser Val Gly Leu Thr Tyr Gly Tyr Asn Tyr Gly Glu Ala Ile Thr Leu 215 220 Ser Glu Pro Asp Val Val Phe Asp His Phe Lys Asp Leu Leu Pro Ala 230 235 Leu Gly Leu Ser His Ser Glu His Gln Glu Leu Asn Asn Asp 245 250

```
<211> 167
<212> PRT
<213> Enterobacter cloacae
<400> 8988
Asn Ser Ala Lys Pro Thr Val Lys Pro Val Asn Thr Thr Ala His Trp
                            10
Met Cys Cys Leu Pro Asn Leu Ser Ile Arg Val Val Ala Ile Arg Cys
        20
                  25
                                             3.0
Ala Pro Pro Gln Ser Ala Ser Ile Leu Pro Ser Met Ala Pro Lys Pro
 35
                 40
                               4.5
Met Ile Ser Ala Arg Leu Pro Ser Val Pro Pro Thr Pro Ala Leu Met
                  55
Glu Leu Ile Thr Leu Thr Ser Gly Ile Pro Cys Ile Arg Pro Thr Ala
               70
                           7.5
Ser Ala Thr Arg Thr Arg Ala Ile Asn Pro Phe Ile Leu Lys Arg Ile
             85 90 95
Ile Lys Ser Ser Asn Asn Thr Thr Pro Ile Ala Thr Met Asn Asn Gly
         100
                           105 110
Met Ile Asp Leu Ala Phe Glu Leu Leu Trp Val Thr Ser Leu Phe Gln
    115
                       120 125
Arg Gln Ile Pro Val Val Pro Thr Gly Asn Arg Val Leu Thr Ala Leu
 130 135
Ile Leu Met Pro Ala Lys Thr Leu Ser Leu Val Gly Cys Tyr Lys Gly
145 150
                               155
Val Glu Cys Pro Arg Glu
             165
<210> 8989
<211> 587
<212> PRT
<213> Enterobacter cloacae
<400> 8989
Glu Met Glu Asn Arg Glu Thr Leu Ser Ala Leu Thr Arg Val Ala Val
Val Leu Ala Gly Ala Leu Gln Gly Val Ile Cys Tyr Val Ile Thr Trp
          20
                           25
                                             30
Tyr Ile Glu Tyr Ala Lys Leu Pro Ser Asp Thr Leu Trp Leu Met Cys
                       40
Val Val Pro Ala Thr Val Val Met Thr Thr Thr Leu Ser Leu Ala Met
  5.0
                    55
                                      60
Thr Ser Phe Arg Lys Pro Phe Leu Trp Leu Ser Leu Gly Met Ile Gly
                                  75
                 7.0
                                                   80
Ala Ala Val Ala Gly Met Gly Gly Trp Leu Lys Trp Ser Val Ala Gly
             85
                               90
Leu Glu Ser Trp Asn Leu Arg Asp Glu Met Leu Val Phe Gly Phe His
          100
                          105
                                             110
Leu Leu Met Thr Leu Phe Val Leu Pro Trp Leu Gln Arg Arg Leu
                        120
      115
                                          125
```

Phe Trp Leu Val Leu Phe Leu Trp Ala Glu Leu Phe Glu Leu Ile Gly
165 170 175

Ile Gly Phe Phe Asp Arg Leu Phe Phe His Ser Asp Gly Phe Ile Ser
180 185 190

Val Ala Ile Gly Val Val Ser Ala Ser Ala Ala Val Leu Thr Arg Met
185 200 200

Asp Pro Val Pro Thr Thr Ser Phe Tyr Ser Asp Phe Tyr Gln Arg Asn

Trp His Asn Ala Leu Thr Leu Leu Ile Ile Phe Val Ser Asn Gly Leu

140

155

135

130

145 150

Gln Val Arg Leu Ile Leu Ala Leu Gln Asn Leu Leu Thr Leu Ile Ala

```
Thr Gly Leu Leu Pro Leu Met Ala Ala Leu Ala Leu Leu Phe Ile Gly
        230
                          235
Ala Leu Pro Phe Val Gly Phe Glu Ser Ile Ser Ala Arg Ile Ser Ala
         245
               250 255
Ala Gly Leu Leu Thr Thr Leu Ala Leu Leu Leu Phe Leu Val Thr
       260
           265 270
Ile Val Trp His Pro Gln Arg Gln Thr Leu Pro Tyr Tyr Ala Pro Leu
   275 280 285
Arg Gly Met Ile Arg Leu Ala Val Ala Ile Val Pro Ala Tyr Pro Val
 290 295 300
Leu Ala Gly Trp Ala Leu Trp Leu Arg Ile Ser Gln Tyr Gly Trp Ser
305 310 315
Pro Glu Arg Leu Tyr Gly Val Leu Ile Thr Ile Val Ala Leu Val Trp
        325 330 335
Ala Ile Gly Phe Cys Ala Ser Ala Leu Ile Gln Arg Arg Glu Pro Gln
   340 345 350
Lys Ile His Ala Tyr Val Ile Pro Ala Thr Gly Leu Leu Ser Leu Ile
355 360 365
Phe Leu Ala Leu Val His Thr Pro Val Leu Asp Pro Trp Arg Ile Ser
370 375 380
Val Ala Ser His Met Ala Arg Tyr Gln Asp Gly Arg Ile Thr Ala Asp
385 390 395 400
Gln Val Ser Leu Tyr Met Leu Ser Asn Ala Gly Arg Lys Gly Arg Glu
      405 410 415
Ala Met Leu Thr Leu Gln Asn Asp Pro Gln Phe Ile Ser Asn Pro Lys
   420 425 430
Arg Gln Arg Glu Ile Asn Gly Leu Leu Ser Arg Asn Ala Gly Gly Ala
435 440 445
Gly Lys Met Thr Ala Ala Met Leu Glu Lys Gln Val Gln Leu Ala Pro
450 455 460
Gly Met Ala His Pro Asp Lys Thr Leu Trp Gln Ala Met Leu Ser Asn
465 470 475 480
Gln Tyr Arg Phe Glu Ser Cys Asp Ser Ala Gln Ser Asn Cys Leu Leu
      485 490 495
Met Pro Leu Asp Leu Asn Ser Asp Gly Lys Pro Glu Ala Val Leu Phe
 500 505 510
Gln Phe Thr Asp Arg Thr Ile Val Ala Tyr Thr Gln Thr Asn Thr Gly
515 520
                                 525
Trp Arg Ile Ala Gly Asp Ala Trp Lys Met Pro Glu Ala Leu Thr Arg
530 535 540
Gly Glu Leu Asp Arg Ala Leu Arg Gln Arg Lys Val Lys Ser Val Val
545 550 555
Lys Pro Trp Ala Asp Ile Glu Ile Phe Gly Glu Arg Val Asp Met Ser
              570
          565
Tyr Asp Ser Tyr Asn Asn Ala Gln Trp Arg
        580
<210> 8990
<211> 259
<212> PRT
<213> Enterobacter cloacae
<400> 8990
Ser Met Ala Phe Lys Thr Trp Gln Thr Gly Ile His Ile Gln Gln Asp
                        10
Lys Val Val Ala Val Ala Leu Thr Arg Glu Arg Ala Gly Trp Arg Leu
     20
                      25
Arg Arg Trp Trp Ala Val Pro Leu Ser Asp Gly Val Ile Gly Glu Gly
```

Lys Ile Leu Lys Pro Glu Glu Leu Val Asn Ala Leu Arg Gly Trp Arg

```
55
Lys Thr Leu Pro His Ser His Arg Val Phe Leu Ser Phe Pro Ala Thr
         70
                         75
Arg Val Leu Gln Arg Ala Leu Pro Arg Pro Ser Val Thr Leu Arg Asp
          85
                           90
Ser Glu Gln Leu Thr Trp Val Gly Ala Ala Leu Ala Arg Glu Leu Glu
      100 105 110
Met Pro Ala Asp Thr Leu Cys Phe Asp Tyr Ala Gln Asp Thr Phe Ser
 115 120 125
Asn Thr Phe Gln Val Thr Ala Ala Gln Asn Arg Glu Val Asp Thr Leu
130 135 140
Leu Thr Leu Ala Asn Ala Leu Arg Leu Arg Leu Ala Ala Ile Ala Pro
145 150 155
Asp Ala Gly Ala Leu Ala Asn Leu Leu Ser Ala Val Ala Pro Ala Arg
          165 170 175
Cys Val Ala Trp Arg Asp Gln His Gln Trp Leu Trp Ala Met Arg His
        180 185
Gln Trp Gly Arg Arg Tyr Thr Thr Glu Ala Ala Thr Val Asn Glu Leu
    195 200 205
Ala Ala Leu Leu Ala Leu Ser Ser Ser Asp Ile Ala Val Phe Asp Ala
210 215 220
Ala Arg Asp Pro Trp Glu Ala Val Thr Leu Cys Gln Pro Pro Leu Pro
225 230
                            235 240
Glu Cys Gly Ala Asp Tyr Thr Val Ser Leu Ala Leu Ala Met Ser Glu
            245
                           250
Ala Pro
<210> 8991
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 8991
Val Arg Phe Pro Ser Ser His Arg Ala Asn Ser Tyr Ala Ser Ala Cys
                            1.0
Asn Trp Arg Ser Val Met Arg Ser Lys Ala Arg Leu Val Ile Leu Leu
 20
                        25
                                        3.0
Ser Pro Leu Phe Leu Thr Gly Met Arg Asp Pro Phe Ser Val Pro Glu
35
                     4.0
Glu Arg Cys Ser Ala Gly Gln Leu Ser Gln Trp Arg Tyr Gln Gly Ile
 50 55
                                  60
Val Ser Gly Ser Arg Asp Ile Gly Leu Met Gln Asp Gly Gln Lys Arg
               70
                     75
                                              8.0
Trp His Arg Val Lys Thr Gln Met Arg Leu Pro Thr Gly Trp Arg Val
           85
                            90
Ser Ala Ile Asp Arg Gln Gln Leu Thr Val Asp Val Gly Asp Met Cys
        100
                        105
                                        110
Glu Pro Lys Arg Trp Thr Trp Gln Arg Glu Gly Thr Lys Lys Ser Glu
    115
                     120
                                   125
Asp Lys Asp Arg Ala Val Thr Gly Gly Thr Gln Pro Ala Pro Val Gly
 130 135
Arg Asp Ala Lys Thr Gly His Pro Ala Gly Gly
               150
                               155
<210> 8992
<211> 383
<212> PRT
```

<213> Enterobacter cloacae

<400> 8992

```
Cys Pro Gly Gly Ala Asn Ile Thr Gly Ala Gly Ser Ala Gly Gly Ser
                             10
Gln Ser Gly Gly Val Ala Gly Cys Gln Arg Phe Ala Phe Ala Glu Phe
         2.0
                         2.5
                                         3.0
Asn Ala Gly Ala Leu Glu Ala Gly Ala Ser Asp Gly Ser Glu Gln Arg
    35
                     40
                                      45
Arg Ala Gly Ile Ala Glu Glu Gly Gly Ile Phe Tyr Val His Thr Ala
                55
                                   60
Ala Trp Gln Arg Glu Gln Gln Thr Arg Lys Glu Gln Glu Arg Ala Gln
      70 75
Arg Leu Leu Asp Ala Pro Leu His Ser His Ser Ile Pro Phe Ala Tyr
            85
                            90
Ala Asp Ala Ala Glu Leu Gln Lys Ala Ala Glu Lys Leu Leu Ser Pro
     100 105 110
Lys Gly Ser Leu Ser Val Asp Lys Arg Thr Asn Arg Phe Leu Val Arg
    115 120
                           125
Asp Asn Gln Thr Val Val Asp Met Leu Gln Arg Trp Ala Val Gln Met
                  135 140
Asp Leu Pro Val Glu Gln Val Glu Leu Ala Ala Gln Ile Val Thr Ile
               150 155
Ser Glu Lys Ser Leu Arg Glu Leu Gly Val Lys Trp Asn Leu Ala Asp
         165 170 175
Ala Thr Glu Ala Ser Lys Val Gly Gln Val Thr Thr Leu Gly Ala Asp
        180
                         185 190
Leu Ser Val Ala Ser Ala Thr Thr His Ala Gly Phe Asn Ile Gly Arg
                     200
Ile Asn Gly Arg Met Leu Asp Leu Glu Leu Ser Ala Leu Glu Gln Lys
210
                  215 220
Gln Gln Val Asp Ile Ile Ala Ser Pro Arg Leu Leu Ala Ser His Met
             230
                                235
Gln Pro Ala Ser Ile Lys Gln Gly Ser Glu Ile Pro Tyr Gln Val Ser
            245
                            250
Ser Gly Glu Ser Gly Ala Thr Ser Val Glu Phe Lys Glu Ala Val Leu
         260
                         265
Gly Met Glu Val Thr Pro Val Val Leu Pro Gly Gly Arg Val Arg Leu
                          285
    275
                      280
Lys Leu His Ile Ser Glu Asn Met Pro Gly Gln Val Leu Gln Gln Ala
                   295
                                   300
Asp Gly Glu Thr Leu Ala Ile Asp Lys Gln Glu Ile Glu Thr Gln Val
               310
                                315
Glu Val Lys Ser Gly Glu Thr Leu Ala Leu Gly Gly Ile Phe Ser Gln
            325
                            330
Lys Asn Lys Thr Gly Arg Asp Ser Val Pro Val Leu Gly Asn Ile Pro
         340
                         345
                                         350
Trp Leu Gly Gln Leu Phe Arg His Asp Gly Lys Asp Asn Glu Arg Arg
    355
                     360
                                     365
Glu Leu Val Val Phe Ile Thr Pro Arg Leu Val Ser Ile Gln
  370
                   375
```

<210> 8993 <211> 430

<212> PRT <213> Enterobacter cloacae

<400> 8993

Met Asp Glu Phe Lys Pro Glu Asp Glu Leu Lys Pro Asp Pro Ser Asp 1 5 10 15
Arg Arg Thr Gly Arg Ser Arg Gln Ser Ser Glu Arg Asp Asn Glu Pro 20 25 30
Gln Ile Asn Phe Asp Asp Asp Ala Asp Asp Arg Arg Pro 35
40 45

```
Ser Arg Ser Arg Asn Ala Arg Asn Glu Arg Glu Asp Glu Glu Phe Glu
Ser Glu Glu Glu Leu Met Asp Glu Gln Pro Val Lys Arg Arg Pro Arg
              70
                            75
Lys Arg Lys Lys Ala Val Ala Ala Lys Pro Ala Ser Arg Gln Tyr Ile
           85
                90
Met Met Gly Leu Gly Val Leu Val Leu Val Leu Leu Ile Val Gly Ile
            105 110
        100
Gly Ser Ala Leu Lys Ala Pro Ser Thr His Ser Thr Glu Gln Thr Ala
  115 120 125
Ser Ala Glu Lys Ser Ile Asp Leu Ser Gly Asn Asp Ala Ser Asn Gln
130 135 140
Ala Asn Gly Ala Gln Pro Ala Pro Gly Thr Thr Ser Ala Glu Gln Thr
145 150 155 160
Ala Gly Asn Thr Ser Thr Gly Gln Asp Ile Ser Leu Pro Pro Val Ser
      165 170 175
Ser Thr Pro Thr Gln Gly Gln Ala Pro Ala Thr Pro Glu Gly Gln Gln
       180 185 190
Arg Val Glu Val Gln Gly Asp Leu Asn Asn Ala Leu Met Gln Pro Gln
195 200 205
Asn Gln Glu Gln Val Asn Ala Ala Val Val Asn Ser Thr Leu Pro Thr
210 215 220
Glu Pro Ala Thr Val Ala Pro Val His Gly Ser Asn Ala Gln Gln
225 230 235
Thr Thr Ala Thr Glu Thr Lys Pro Arg Gln Thr Gln Thr Ala Pro Arg
          245
                         250 255
Gln Glu Arg Lys Gln Ala Val Ile Glu Pro Lys Arg Glu Thr Lys Pro
        260
                      265 270
Gln Ala Val Ala Lys Ala Pro Glu Thr Lys Ala Pro Ala Gln Thr Lys
275
                   280 285
Pro Ala Val Ser Gln Pro Val Lys Ala Pro Thr Pro Ala Ala Thr Ala
290 295
                               300
Ala Pro Lys Ala Thr Ala Thr Thr Ala Ala Pro Ala Ala Thr Thr Pro
             310
                            315
Ala Ala Pro Ala Ala Lys Thr Gly Ala Ser Pro Gly Lys Thr Thr Gly
           325
                         330 335
Asn Val Gly Ser Leu Gln Ser Ala Ser Ser Ser Asn Tyr Thr Leu Gln
      340
                      345 350
Leu Ser Ser Ser Asn Tyr Asp Asn Leu Asn Ala Trp Ala Lys Lys
     355
                   360
                                  365
Ser Asn Leu Lys Asn Tyr Val Val Tyr Gln Thr Thr Arg Asn Gly Gln
                375
                                380
Pro Trp Tyr Val Leu Val Ser Gly Ile Tyr Ala Ser Lys Asp Glu Ala
              390
                            395
Lys Arg Ala Val Ser Thr Leu Pro Ala Asp Val Gln Ala Lys Asn Pro
           405 410
Trp Ala Lys Pro Ile His Gln Val Gln Ala Asp Leu Lys
                      425
<210> 8994
<211> 336
```

<212> PRT <213> Enterobacter cloacae

<400> 8994

Ile Met Thr Lys Pro Ile Val Phe Ser Gly Ala Gln Pro Ser Gly Glu 10 Leu Thr Ile Gly Asn Tyr Met Gly Ala Leu Arg Gln Trp Val Ser Met 30 25 Gln Asp Asp Tyr His Cys Ile Tyr Cys Ile Val Asp Leu His Ala Ile 40

```
Thr Ala Arg Gln Asp Pro Glu Lys Leu Arg Lys Ala Thr Leu Asp Thr
                  55
Leu Ala Leu Tyr Leu Ala Cys Gly Ile Asp Pro Glu Lys Ser Thr Ile
               70
Phe Val Gln Ser His Val Pro Glu His Ala Gln Leu Gly Trp Ala Leu
            85
Asn Cys Tyr Thr Tyr Phe Gly Glu Leu Ser Arg Met Thr Gln Phe Lys
                        105
        100
Asp Lys Ser Ala Arg Tyr Ser Glu Asn Ile Asn Ala Gly Leu Phe Asp
     115 120 125
Tyr Pro Val Leu Met Ala Ala Asp Ile Leu Leu Tyr Gln Thr Asn Gln
 130 135 140
Val Pro Val Gly Glu Asp Gln Lys Gln His Leu Glu Leu Ser Arg Asp
145
   150 155 160
Ile Ala Gln Arg Phe Asn Ala Leu Tyr Gly Asp Val Phe Lys Val Pro
     165 170 175
Glu Pro Phe Ile Pro Lys Ser Gly Ala Arg Val Met Ser Leu Leu Glu
  180 185 190
Pro Thr Lys Lys Met Ser Lys Ser Asp Asp Asn Arg Asn Asn Val Ile
 195 200
Gly Leu Leu Glu Asp Pro Lys Ser Val Val Lys Lys Leu Lys Arg Ala
210 215 220
Val Thr Asp Ser Asp Glu Pro Pro Val Val Arg Tyr Asp Val Gln Asn
225 230 235
Lys Ala Gly Val Ser Asn Leu Leu Asp Ile Leu Ser Gly Val Thr Gly
     245 250 255
Gln Ser Ile Pro Glu Leu Glu Lys His Phe Glu Gly Lys Met Tyr Gly
        260 265 270
His Leu Lys Gly Glu Val Ala Asp Ala Val Ser Gly Met Leu Thr Glu
275 280 285
Leu Gln Glu Arg Tyr His Arg Tyr Arg Asn Asp Glu Ala Phe Leu Gln
                  295 300
Lys Val Met Lys Glu Gly Ala Glu Lys Ala Ser Ala Arg Ala Ser Glu
305 310 315 320
Thr Leu Thr Ala Val Tyr Glu Ala Ile Gly Phe Val Ala Lys Pro
                           330
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<210> 8995
<211> 546
<212> PRT
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<213> Enterobacter cloacae

<400> 8995 Gly Ser Gly Glu Val Arg Met Thr Gln Val Asn Asp Val Arg Asp Ala

His Val Glu Thr Thr Pro Ala Pro Thr Val Ser Pro Trp Gln Pro Leu 20 25 30 Ser Gln Pro Val Phe Arg Met Leu Trp Ile Ala Thr Val Val Ser Asn 35 45 40 Val Gly Ser Trp Met Ser Asp Val Gly Ile Asn Trp Ser Met Leu Thr 55 Leu Ser Ala Asp Pro Leu Asp Ile Ala Leu Val Gln Ala Ala Ser Ser 75 70 80

10

Leu Pro Met Phe Leu Phe Ala Leu Pro Ser Gly Val Met Ala Asp Ile 85 90 Val Asp Arg Arg Lys Tyr Leu Leu Phe Ser Gln Leu Trp Val Phe Ile

100 105 Ala Ala Ala Gly Leu Thr Leu Leu Ser Phe Thr Gly His Val Thr Pro 115 120 125

Thr Val Leu Leu Val Ala Thr Phe Leu Leu Ser Val Gly Ala Ala Met 130 135 140

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Ser Ser Pro Pro Phe Gln Ala Val Val Pro Asp Leu Val Ser Lys Pro
      150
                    155
145
Glu Leu Gly Ala Ala Val Ala Leu Asn Ser Leu Gly Val Asn Ile Ser
           165
                170 175
Arg Ala Ile Gly Pro Ala Leu Gly Gly Phe Leu Leu Ser Leu Ala Gly
        180 185 190
Pro Trp Met Val Phe Ala Leu Asn Ala Leu Ser Val Val Gly Val Ala
     195 200 205
Trp Val Leu Trp Arg Trp Arg Pro Ala Pro Ser Val Gln Arg Leu Pro
 210 215 220
Pro Glu His Phe Phe Ser Ala Val Arg Ser Gly Ile Arg Tyr Val His
225
     230 235
Ala Ala Pro Val Leu Arg Asn Val Leu Val Arg Thr Val Ala Phe Phe
           245 250
Val Phe Gly Ser Ala Gly Trp Ala Leu Leu Pro Leu Val Ala Arg Arg
        260
             265 270
Glu Leu Gly Leu Gly Pro Ala Gly Tyr Gly Val Met Leu Ala Cys Ile
     275
                    280
Gly Leu Gly Ala Ile Ala Gly Ala Ile Leu Leu Pro Arg Leu Arg Gln
      295
                                 300
Arg Leu Asn Ala Asp Arg Leu Met Val Ala Ala Ser Leu Val Phe Ala
305 310
                             315 320
Leu Thr Met Leu Ala Leu Ala Phe Val Arg His Val Trp Leu Leu Asn
           325 330 335
Leu Phe Glu Phe Phe Thr Gly Phe Ala Trp Ile Ala Val Leu Ser Thr
        340
                        345
                                       350
Leu Asn Leu Gly Ala Gln Arg Ser Ala Ala Arg Trp Val Lys Ala Arg
355
                    360
                                    365
Ala Leu Ala Val Tyr Leu Thr Val Phe Phe Gly Ser Met Thr Ala Gly
370
               375
                                 380
Ser Ala Leu Trp Gly Gln Ile Ala Ser Gln Phe Gly Thr Pro Thr Ser
              390
                              395
Leu Val Val Ala Thr Leu Gly Met Val Leu Ala Ser Ala Thr Val Phe
            405
                           410 415
Arg Trp Lys Leu Glu Lys Asp Pro Asp Leu Asn Leu Asp Leu Ser Gly
        420
                        425
                                       430
Gln Pro Leu Asp Gly Val Lys Ile Asp Leu Pro Asn Glu Arg Gly Pro
     435
                  440
                                    445
Val Leu Val Ser His Glu Tyr Ile Ile Asp Pro His Asn Ala Lys Ala
 450
                 455
                                 460
Phe Leu Gln Ala Val His Glu Leu Arg Arg Val Arg Arg Arg Ala Gly
               470
                              475
Ala Met Ser Trp Ala Val Tyr Glu Asp Ile Glu Arg Pro Gly Leu Phe
            485
                           490
                                          495
Ile Glu Thr Phe Leu Met Gly Ser Trp Ile Glu His Leu Arg Gln Gln
         500
                        505 510
Glu Arg His Thr Met Asn Asp Leu Leu Gln Ser Arg Val Leu Ala
     515 520 525
Phe His Gln Gly Thr Thr Ser Pro Ala Ile Arg Tyr Leu Val Ala Pro
                  535
                                 540
Val
545
<210> 8996
<211> 282
<212> PRT
<213> Enterobacter cloacae
<400> 8996
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<4002 8996
Pro Ser Pro Val Gln Glu His Thr Met Ala Thr Phe Lys Ala Gln Asp
1 5 10 15</pre>

Gly Thr Gln Ile Tyr Tyr Lys Asp Cys Gly Ala Gly Lys Pro Val Leu 20 25 Phe Ser His Gly Trp Pro Leu Asp Gly Asp Met Trp Asp Ser Gln Leu 3.5 4.0 45 Asn Tyr Leu Ala Glu Arg Gly Phe Arg Ala Ile Ala Phe Asp Arg Arg 55 60 Gly Phe Gly Arg Ser Asp Gln Pro Trp Asn Gly Tyr Tyr Tyr Asp Thr 70 75 Phe Ala Ser Asp Ile Asn Asp Leu Ile Thr Thr Leu Asp Leu His Glu 85 90 95 Val Met Leu Val Gly Phe Ser Met Gly Gly Gly Asp Val Thr Arg Tyr 100 105 110 Ile Asn Asn Tyr Gly Ser Ala Arg Val Ala Gly Leu Ala Leu Leu Gly 120 125 Ala Val Thr Pro Ile Phe Gly Lys Ser Asp Thr Phe Pro Gln Gly Val 130 135 140 Asp Gln Ser Val Phe Asp Gly Ile Arg Asp Gly Leu Arg Lys Asp Arg 145 150 155 Ala Gln Phe Ile Ser Asp Phe Ala Thr Pro Phe Tyr Gly Ile Asn Ala 170 175 165 Gly Gln Thr Val Ser Ala Gly Ala Leu Thr Gln Thr Leu Asn Ile Ala 180 185 190 Leu Leu Ala Ser Leu Lys Gly Thr Ile Asp Cys Val Thr Ala Phe Gly 195 200 205 Glu Thr Asp Phe Arg Pro Asp Met Ala Lys Ile Asp Val Pro Thr Leu 210 215 220 Val Ile His Gly Ser Asn Asp Gln Ile Val Pro Phe Glu Thr Thr Gly 230 235 240 Lys Leu Ala Ala Glu Met Ile Lys Asn Ala Thr Leu Lys Val Tyr Asp 245 250 Asn Ala Pro His Gly Phe Ala Leu Thr His Gln Asp Gln Leu Asn Glu 260 265 Asp Leu Leu Ala Phe Val Lys Ser Leu

<210> 8997 <211> 339 <212> PRT

<213> Enterobacter cloacae

<400> 8997 Leu Arg Val Asp Trp Ser Glu Phe Cys Glu His His Arg Lys Thr Thr Gly Ser Cys Asn Arg Thr Met Thr Ile Ala Lys Ser Leu Ser Gln Lys 2.0 25 30 Ile Ala Gly Met Lys Thr Ala Trp Tyr Asn Lys Ala Pro Ala Leu Asn 35 40 Lys Pro Leu Leu Val Leu Tyr Val Leu Ser Gln Tyr Lys Lys Gly His Glu Arg Leu Phe Gln Phe Gln Asp Glu Ile Gln Asp Gln Leu Arg Asp 70 65 75 Leu Leu Lys Arg Tyr Gly Pro Lys Arg Ser Asn Tyr Glu Val Leu Met 8.5 Pro Phe Trp Arg Leu Lys His Asp Gly Phe Trp Ala Leu Glu Gly Thr 100 105 Asp Ser Ala Leu Leu Lys Ser Pro Glu Glu Pro Arg Leu Gln Thr Val 115 120 Leu Asp Asn Asn Val Arg Gly Gly Phe Asp Val Thr Ser Phe Phe Leu 135 140 Leu Gln Asn Gln Lys Leu Leu Ile Asp Ser Leu Ala Lys Gln Val Val

155

Val Gln Tyr Leu Pro Ile Glu Phe His Ser Ala Leu Phe Lys Glu Leu 165 170 Gly Phe Glu Thr His Glu Pro Phe Glu Val Asn Glu Asn Pro Asn Asp 180 185 190 Arg Ile Ala Leu Val Gln Pro Asp Ile Asp Ile Ile Thr Gln Asp Leu 195 200 205 Ala Ile Asp Glu Thr Thr Arg Thr Ala Leu Ile Gln Ala Arg Ile Gly 210 215 220 Gln Gly Asn Phe Arg Ala Glu Cys Leu Arg Leu Tyr Pro Ala Cys Pro 225 230 235 Val Thr Gly Ile Thr Phe Gln Pro Leu Leu Arg Ala Ser His Ile Met 245 250 255 Pro Trp Ser Ala Cys Gln Tnr Ala Lys Glu Arg Leu Asp Pro Tyr Asn 260 265 270 Gly Leu Met Leu Ala Ala His Ile Asp Thr Leu Phe Asp Ser Gly Trp 275 280 285 Ile Ser Phe Ala Asn Glu Gly Asp Val Leu Ile Ser Asn His Leu Asp 295 300 Phe Gly Thr Cys Asp Lys Leu Asn Leu Pro Glu Arg Ile Ile Ala Leu 305 310 315 320 Pro Lys Pro Ser Tyr Asn Tyr Met Gln Trp His Arg Gln Asn Val Phe 325 330

<210> 8998 <211> 286 <212> PRT

Lys Gly

<213> Enterobacter cloacae

<400> 8998 Arg Leu Pro Arg Ala Ala Pro Gly Pro Arg Ala Gly His Gly Gly Arg Ala Gly Ala Arg Gly Ala Pro Ser Gly Gly Ala Pro Leu Ala Val Pro 20 25 Pro Ala Arg His Leu Gln Arg Ile His Gln Pro His Ala Gly Arg Leu 35 40 45 Arg Glu Gly Glu Pro Arg His Ser Val Gln Arg Pro Ala Leu Val Leu 50 55 60 Arg Pro Cys Gly Asn Arg Tyr Pro Gly Gln His Arg Pro His Gln Arg 75 70 8.0 Thr Gly Arg Arg His Cys Arg Pro Ala Pro His Gly Leu Pro Gly Arg 8.5 90 Ile Leu Cys Arg Ala Leu Arg His Arg Ser His Pro Pro His Ala Ala 105 110 100 Gly Ser Glu Asn Ala Arg Asp Arg Arg Ala Gly Gly Leu Arg Asp Gly 115 120 125 Arg His Pro Arg Gly Glu Leu Gln Pro Val Asp Arg Ala Leu Leu Ala 135 130 140 Gly Leu Arg Pro His Arg Arg Arg Asp Ala Asp Val Arg Pro Gln Arg 150 155 145 160 Pro Ser Gly Pro Arg Tyr Arg Pro Asp Ala Leu Asp Pro Gly Gln Arg 165 170 Val Val Leu Gln Arg Ala Glu Ser Glu Gly Ala Asp Gln Gly Arg Pro 180 185 190 Ala Cys Arg Pro Gly Ser Ala Glu Gln Arg Leu Leu Pro Arg Ala Gly 205 195 200 Arg Gly Asp Gln Gly His Arg Val Arg Pro Asp Gly Glu Arg Arg 210 215 220 His Arg Leu Arg Arg Arg Gln Leu Trp Pro Ala Arg Ala Ala Gly His 230 235

370

Pro Gly Pro Ala Arg Val Val Pro Gly Gly Glu Gly Ala Gly Ser Leu 245 Pro Gln Arg Ala Ala Ala Gly Arg Pro Arg Gly His Glu Cys Gly Ser 265 270 260 Pro Leu Gln Arg Pro Val Arg Gly Ser Gln Pro Pro Ala 280 <210> 8999 <211> 393 <212> PRT <213> Enterobacter cloacae <400> 8999 Cys Ala Gly Glu Ser Pro Gly Phe Gln Lys Gly Thr Ser Gln Arg Met 10 Thr Asp Leu Ala Glu Arg Asp Asp Thr Gln Ala Arg Ala Ala Val Ser 25 Arg Ile Pro Leu Arg Asn Ile Trp Leu Leu Met Leu Tyr Ala Ser Ser 40 Leu Phe Arg His His Gly Arg Ser Met Val Ala Ala Glu Asn Asn Pro 50 55 60 Glu Glu Ile Pro Ala Leu Val Ala Arg Ile Leu Leu His Glu Val Glu 65 70 75 Gln Arg Leu Leu Arg His Leu Ser Met Gly Tyr Gln Thr Arg Arg Ala 90 Thr Leu Asn Arg Val Arg Gly Arg Ile Asp Val Leu Arg Thr Thr Ser 100 105 110 Arg Gln Leu Leu Glu Arg Ala Gln Val Ala Cys Gln Phe Gln Glu Met 115 120 125 Thr Leu Asp Thr Pro Arg Asn Arg Tyr Val Arg Ser Ala Leu Glu His 130 135 140 Leu Val Pro Leu Leu Ser Asn Gly Pro Leu Ala Ala Gln Cys Arg Ala 145 150 155 Met Ala Ile Asn Leu Arg Arg Gly Ile Glu Gly Gly Met Pro Ser 165 170 175 Lys Gly Glu Leu Pro Ser Ile Thr Arg Phe Gly Arg His Asp Ala Ala 180 185 190 Asp Lys Ala Met Val Asp Ala Ala Lys Leu Ala Phe Glu Leu Trp Leu 195 200 205 Pro Thr Gln Thr Ala Gly Gln Lys Leu Leu Pro Thr Pro Ser Asn Asp 215 220 Pro Tyr Trp Met Arg Lys Leu Phe Glu Lys Ser Met Ala Gly Phe Tyr 230 235 His Phe His Leu Pro Lys Lys Asp Trp Thr Val Ala Ala Gly Lys Glu 245 250 Leu Lys Trp Gly Leu Thr Ser Gln Ser Ala Gly Ser Glu Ser Ile Phe 265 260 270 Pro Thr Met Asn Ser Asp Ile Ile Leu Glu His Lys Gln Pro Ala Gln 275 280 Arg Val Ile Ile Asp Thr Lys Phe Asn Asn Ile Leu Thr Lys Gly Trp 295 290 300 Tyr Arg Asp Lys Ser Leu Arg Ser Gly Tyr Ile Tyr Gln Ile Tyr Thr 305 310 315 Tyr Leu Arg Thr Gln Glu Asn Arg Thr Asp Pro Leu Ser Leu Arg Ser 325 330 Ala Gly Leu Leu His Pro Ala Val Asp Val Met Leu Tyr Glu Phe 340 345 350 Val Glu Val Gln Gly His Lys Ile His Phe Ala Thr Val Asp Leu Ala 355 360

Ala Asp Ala Ala Thr Met Thr Gln Gln Leu Leu Lys Leu Ala Arg Asp

380

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Cys Cys Gly Ile Thr Asp Val Asn
             390
<210> 9000
<211> 345
<212> PRT
<213> Enterobacter cloacae
<400> 9000
Cys Glu Phe Ala Lys Gly Arg Gly Arg Met Lys Arg Lys Thr Lys Val
                             1.0
Thr Met Asn Asp Ile Ala Arg Ala Ala Gly Val Ser Gln Ala Thr Val
                        25
Ser Leu Val Leu Asn Gln Ser Arg Asn Ile Lys Leu Ser Asp Asp Thr
                     40
Arg Gln Arg Val Ile Gly Val Ala Thr Glu Leu Gly Tyr Asp Arg Leu
                 5.5
Pro Ala Val His Ala Pro Arg Asr Gln Glu Glu Ile Ala Leu Leu Val
                70
                                 75
Ser Ser Met Gln Ser Phe Asp Pro Phe Ile Asp Ala Ile Ser Gln Ala
             85
                              90
Arg Glu Ala Ala Trp Arg Asn Glu Thr Leu Leu Thr Val Tyr Asp Tyr
          100
                          105
                                         110
Gly Asp Asp Ile Glu Leu Ala Leu Asn Ile Ile Arg Gln Leu Glu Lys
      115
                       120
                            125
Arg Asn Cys Ile Gly Ile Val Leu Ala Ser Pro Val Thr Thr Leu Val
                    135
   130
                                  140
Asp Met Thr Ala Phe Gln Asp Cys Thr Arg Ile Pro Leu Val Leu Leu
145
             150
                                 155
                                                   160
Asn Gln Arg Asp Pro Gly Ser Pro Leu Leu Pro Ser Phe Ile Pro Asp
             165 170
Asp Tyr Ala Asn Ala Phe Gln Val Thr Lys His Leu Ile Ala Cys Gly
                                            190
          180
                           185
Ala Thr Arg Ile Ala His Ile Thr Gly Glu Ser Trp Met Glu Ala Ser
                        200
                                         205
      195
Arg Gln Arg Leu Ala Gly Tyr Gln Ala Ala Leu Gln Gln Ala Gly Leu
                    215
 210
                                    220
Ala Cys Asp Asp Gly Leu Val Arg Gln Thr Asn Trp Gln Phe Ser Glu
225
                 230
                                  235
Ser Phe Thr Ala Thr Thr Ser Let Leu Glu Leu Ala Glu Arg Pro Asp
                           250
             245
Ala Ile Phe Cys Ala Ser Asp Trp Leu Ala Ile Gly Cys Tyr Gln Ala
                          265
          260
                                            270
Leu Ala Val Asn Gly Val Arg Ile Pro Gln Asp Met Leu Leu Ala Gly
      275
                       280
                                         285
Tyr Asp Asp Gln Lys Ile Ser Glu Gln Leu Thr Pro Pro Leu Thr Ser
                    295
Ile Gln Leu Pro Tyr Ser Glu Leu Gly Arg Leu Ala Val Glu Tyr Leu
                 310
305
                                 315
Cys Asn Gln Glu Asp Ala Ala Thr His Val Thr Leu Ala Gly Arg Leu
             325
                              330
Lys Val Arg Ala Ser Ser Leu Val
          340
<210> 9001
<211> 206
<212> PRT
<213> Enterobacter cloacae
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<400> 9001 Met Glu His Ile Val Tyr Val Val Asp Asp Asp Thr Val Arg Gln

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1.0
Ser Val Val Arg Leu Leu Glu Ser Ala Asp Met His Ala Leu Gly Phe
         20
                    2.5
Ser Ser Ala Glu Ala Phe Leu Ser His Pro Phe Glu Asp Leu Pro Ser
      35
             40
Cys Val Ile Leu Asp Met Gln Met Pro Thr Ile Thr Gly Phe Asp Val
          - 55
                         60
Ala Asp Ala Leu Lys Ala Ser Gly Arg Glu Ile Pro Ile Ile Phe Leu
        70 75
Thr Gly His Gly Thr Ile Pro Met Ser Val Arg Ala Ile Lys Gly Gly
            85 90
Ala Tyr Glu Phe Leu Thr Lys Pro Val Glu Ser Ser Ala Leu Ile Gly
         100 105
Ser Ile Glu Ser Ala Leu Arg Leu Ala Gln His Asn Ala Ala Arg Val
                      120
Lys Glu His Tyr Ala Leu Lys Gln Arg His Met Ser Leu Thr Pro Arg
       135 140
Glu Asn Glu Val Leu Glu Leu Ala Ile Ser Gly Lys Leu Asn Lys Gln
             150 155
Ile Ala Ala Glu Leu Gly Val Ser Glu Ile Thr Val Lys Val His Arg
            165 170
Arg Arg Val Met Glu Lys Met Gln Val Arg Ser Val Ala Glu Leu Val
       180
                        185
Arg Ala Val Glu Arg Leu Thr Lys His Gln Pro Val Glu
                        200
<210> 9002
<211> 628
<212> PRT
<213> Enterobacter cloacae
<400> 9002
Ser Gly Ala Leu Met Val Thr Leu Gly Lys Ala Asp Leu Ile Leu Val
Asn Gly Gln Phe His Thr Val Asp Arg Glu Asn Pro Leu Ala Glu Ala
                           25
      20
Val Ala Val Arg Asp Gly Lys Phe Leu Glu Val Gly Thr Val Ala Glu
 3.5
                       40
Val Met Gln His His Gly Asp Gly Thr Lys Val Val Asp Leu Lys Gly
                    55
 50
                                     60
His Thr Ala Ile Pro Gly Leu Asn Asp Ser His Leu His Leu Ile Arg
                          75
                 70
Gly Gly Leu Asn Tyr Asn Leu Glu Leu Arg Trp Glu Gly Val Pro Ser
             85
                              90
Leu Ala Asp Ala Leu Arg Met Leu Lys Glu Gln Ala Leu Arg Thr Pro
          100
                                 110
Ser Pro Gln Trp Val Arg Val Val Gly Gly Trp Ser Glu Phe Gln Phe
                       120
      115
Ala Glu Arg Arg Met Pro Thr Leu Asp Glu Ile Asn Asp Ala Ala Pro
                    135
                                     140
Asp Thr Pro Val Phe Ile Leu His Leu Tyr Asp Arg Ala Leu Leu Asn
                 150
                                 155
Arg Ala Ala Leu Lys Val Val Gly Tyr Thr Lys Glu Thr Pro Asn Pro
            165
                              170
Pro Gly Gly Glu Ile Gln Arg Asp Ala Asn Gly Asn Pro Thr Gly Met
          180
                          185
                                            190
Leu Ile Ala Arg Pro Asn Ala Met Ile Leu Tyr Ala Thr Leu Ala Lys
             200
                                     205
Gly Pro Lys Leu Pro Leu Glu Gln Gln Val Asn Ser Thr Arg Gln Phe
          215
                                     220
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Met Arg Glu Leu Asn Arg Leu Gly Leu Thr Ser Ala Ile Asp Ala Gly

```
225
              230
                           235
Gly Gly Phe Gln Asn Tyr Pro Glu Asp Tyr Glu Val Ile Ala Glu Leu
       245
                250 255
His Glu Lys Lys Gln Met Thr Ile Arg Ile Ala Tyr Asn Leu Phe Thr
       260 265 270
Gln Arg Pro Gly His Glu Leu Glu Asp Phe Glu Lys Trp Thr Asp Met
    275 280 285
Leu Thr Pro Gly Gln Gly Ser Asp Phe Phe Arg Gln Asn Gly Ala Gly
290 295 300
Glu Met Leu Val Phe Ser Ala Ala Asp Phe Glu Asp Phe Leu Glu Pro
305 310 315 320
Arg Pro Asp Leu Ala Pro Gly Met Glu Asp Glu Leu Glu Arg Val Val
        325 330 335
Arg His Leu Val Glu His Arg Trp Pro Phe Arg Leu His Ala Thr Tyr
       340 345 350
Asn Glu Ser Ile Ser Arg Met Leu Asp Val Phe Glu Lys Val Asn Arg
 355 360 365
Asp Ile Pro Phe Asn Gly Leu His Trp Phe Phe Asp His Ala Glu Thr
370 375 380
Val Thr Gln Ala Asn Ile Asp Arg Ile Lys Glu Leu Gly Gly Gly Ile
   390
                            395
Ala Val Gln His Arg Met Ala Phe Gln Gly Glu Tyr Phe Ala Glu Arg
           405 410
Tyr Gly Ile Glu Ala Thr Arg His Thr Pro Pro Val Ala Lys Met Leu
        420 425 430
Glu Thr Gly Val Pro Val Gly Leu Gly Thr Asp Ala Thr Arg Val Ala
435 440
                                   445
Ser Tyr Asn Pro Trp Thr Ala Leu Tyr Trp Leu Val Ser Gly Arg Thr
450 455
                                460
Val Gly Gly Met Gln Met Tyr Asp His Ser Ala Arg Leu Asp Arg Asp
465 470 475
Thr Ala Leu Met Leu Trp Thr Gln Gly Ser Ala Trp Phe Ser Ser Glu
           485
                          490
Gln Asn Gln Lys Gly Gln Ile Lys Val Gly Gln Leu Ala Asp Leu Ala
     500 505
                           510
Val Leu Ser Lys Asp Tyr Phe Arg Val Pro Glu Glu Glu Ile Lys Gly
   515 520 525
Ile Glu Ser Val Leu Thr Val Val Asn Gly Asp Ile Val Tyr Ala Ala
 530 535
                             540
Gly Ser Phe Gly Pro Leu Ala Pro Pro Ala Ile Pro Val Leu Pro Glu
545
           550
                             555
Trp Ser Pro Val Val Lys Val Pro Gly His Tyr Arg Ser Ala Pro Pro
           565
                         570 575
Gln Ala Ala Arg Val Gly Met Ser Val Ala His His Cys Ser Gly Pro
            585 590
        580
Cys Gly Val His Ser His Gln His Asp Phe Ala Arg Thr Ser Ala Met
                    600
Pro Val Ser Asp Asp Asn Ala Phe Trp Gly Ala Leu Gly Cys Ser Cys
  610
                 615
Phe Ala Phe
625
<210> 9003
<211> 676
<212> PRT
<213> Enterobacter cloacae
<400> 9003
Leu Phe Thr Gln Ala Tyr Asn Pro Val Lys Phe Ile Arg Gln Val Thr
                          1.0
Glu Ala Cys Asn Phe Thr Gly Glu His Met Asp Ala Val Glu Gln Asp
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25 Val Arg Phe Glu Trp Ala Asp Phe Tyr Gln Ala Phe Ala Ser Gln Leu Leu Thr Trp Arg Asn Arg Arg Glu Glu Leu Val Ala Gly Ile His Arg 55 Ile Ala Ala Glu Ile Gly Ser Met Ser His Leu Gln Asp Lys Pro Ala 70 7.5 Asn Gly Val Pro His Pro Leu Lys Asp Ile Cys Pro Phe Thr Thr Met 85 90 95 Gly Leu Phe Asn Arg Ser Leu Thr Val Thr Asn Arg Arg Asn Ile Ala 100 105 110 Ala Ser Leu Ala Lys Leu Ile Gly Val Arg Glu Lys Val Pro Glu Ser 115 120 125 Phe Asp Gly Ile Pro Leu Leu Asn Asn Gln Lys Ser Trp Phe Phe Gly 130 135 140 Tyr Glu Lys Ser Arg Lys Pro Glu Asp Ile Asp Thr Leu Trp Glu Met 145 150 155 160 Phe Ser Gln Ala Ile Ser Phe Ala Asp Thr Pro Asn Ala Asp Pro Ala $165 \\ 170 \\ 175$ Asp Phe Leu Phe Ser Tyr Asp Ala Ala Ser Asn Val Arg Asn Val Gly 180 185 190 Trp Asn Leu Thr Met Gly Leu Tyr Trp Leu Arg Pro Trp Phe Tyr Pro Thr Leu Asp Ser Gln Ser Gln Tyr Tyr Ile Gln Lys Val Leu Asn Ile 210 215 220 Lys Ile Ile Lys Lys Gly Ala Lys Gly Arg Cys Ser Gly His Asn Tyr 225 230 235 240 Gln Ala Val Ala Leu Ala Leu Lys Lys Ala Phe Thr Gln Pro Asn Tyr 245 250 Pro Val His Ser Phe Pro Glu Leu Ser Leu Ala Ala Trp Asn Ile Asp 260 265 Leu Gln Gln Ser Asn Asp Glu Val Glu Arg Leu Thr Trp Lys Ala Tyr 275 280 285 Leu Leu Asn Lys Ile Lys Val Leu Cys Leu Arg Lys Asp Ser Pro Phe 290 295 300 Phe Ser Leu Arg Glu Leu Lys Glu Ala Tyr Leu Asp Glu Ile Lys Ala 315 305 310 Asp Tyr Pro Asn Asn Asn Thr Ile Glu Ser Ser Ile Ser Tyr Tyr Leu 325 330 335 Gln Lys Leu Arg Asp Asp Glu Leu Glu Phe Gln Thr Pro Gly Asn 350 340 345 Tyr Glu Tyr Leu Asn Phe Asp Lys Gly Glu Leu Gln Ser Ile Thr Glu 355 360 365 Glu Thr Val Glu Glu Asn Val Pro Ala Glu Ile Pro His Lys Pro Tyr 375 380 Thr Ile Ser Asn Leu Ile Asp Glu Gly Cys Phe Leu Glu Glu Glu Lys 390 400 395 Ile Gln Phe Ile Leu Gln Arg Leu Gln Ala Lys Lys Asn Leu Ile Leu 405 410 Gln Gly Pro Pro Gly Thr Gly Lys Thr Trp Leu Ala Arg Arg Leu Ala 425 420 Tyr Cys Leu Met Gly Glu Glu Thr Ser Lys Arg Ile Ser Ala Val Gln 440 Phe His Pro Thr Leu Ser Tyr Glu Asp Phe Ile Arg Gly Trp Arg Pro 455 Asn Asn Glu Gly Arg Leu Ala Leu Val Asp Gly Pro Phe Leu His Ala 470 475 480 Ile Asp Lys Ala Val Asn Asp Pro Thr Thr Lys Tyr Val Val Ile Ile 485 490 Glu Glu Ile Asn Arg Gly Asn Pro Ala Gln Ile Phe Gly Glu Thr Leu 500 505

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Thr Leu Met Glu Ala Asp Lys Arg Thr Pro Asn Glu Ala Leu Glu Leu
                     520
    515
Ser Tyr Arg Ser Asp Met His Glu Lys Thr Tyr Ile Pro Glu Asn Leu
 530
                 535
                                     540
Tyr Ile Ile Gly Thr Met Asn Ile Ala Asp Arg Ser Leu Ala Leu Leu
545
       550 555 560
Asp Leu Ala Leu Arg Arg Arg Phe Ala Phe Ile Asp Leu Lys Pro Glu
             565 570 575
Phe Asn Asp Ala Trp Lys Lys Trp Val Asn Gln Arg Phe Asn Val Ser
         580 585 590
Leu Glu Thr Leu Ala Leu Ile Glu Ser Lys Leu Thr Ala Leu Asn Glu
 595 600 605
Lys Leu Ser Arg Asp Ala Ala Leu Gly Pro Gln Phe Cys Ile Gly His
        615
                                      620
Ser Tyr Val Thr Pro Pro Ala Gly Leu Lys Ile Asp Asp Gly Met Ala
                 630
                                  635
Trp Tyr Glu Gln Val Val Glu Thr Glu Ile Cys Pro Leu Leu Ala Glu
             645 650
Tyr Trp Phe Asp Ala Pro Glu Lys Val Gln Asp Ser Arg Lys Glu Leu
                          665
Leu Ser Val
     675
<210> 9004
<211> 338
<212> PRT
<213> Enterobacter cloacae
<400> 9004
Gly Val Phe Met Asn Ala Pro Thr Ile Leu Thr Gly Asp Arg Pro Thr
                               10
Gly Pro Leu His Leu Gly His Phe Val Gly Ser Leu Arg Gln Arg Val
          20
                           25
Ala Leu Gln Gln Thr His Ser Gln Phe Val Leu Ile Ala Asp Leu Gln
 35
                     40
Gly Leu Thr Asp Asn Gly Ser Asn Pro Gln Lys Ile Arg Asp Asn Ile
Pro Glu Val Leu Ala Asp Tyr Leu Ala Ala Gly Ile Asp Pro Asn Leu
                 7.0
                                  75
Thr Thr Ile Cys Leu Gln Ser Ala Leu Pro Ala Leu Ala Asp Leu Thr
             85
                              90
Met Leu Tyr Met Asn Ile Val Thr Val Ala Arg Val Glu Arg Asn Pro
                           105
          100
                                             110
Thr Val Lys Asn Glu Ile Ala Gln Lys Gly Phe Ala Arg Ser Leu Pro
      115
                        120
Val Gly Phe Met Ala Tyr Pro Ile Ser Gln Ala Ala Asp Ile Thr Ala
   130
                                      140
Phe Lys Ala Glu Cys Val Pro Val Gly Asp Asp Gln Leu Pro Met Ile
                150
                                  155
Glu Gln Thr Asn Glu Ile Val His Lys Met Asn Ser Leu Leu Pro Ala
                             170 175
             165
Pro Val Leu Arg His Cys Lys Ala Met Leu Ser Asp Thr Ser Arg Leu
          180
                           185
Pro Gly Ile Asp Gly Ser Ala Lys Met Ser Lys Ser Leu Gly Asn Thr
                        200
                                     205
Leu His Leu Ser Ala Ser Glu Glu Thr Ile His Arg Ala Val Ser Ala
 210
                    215
                                      220
Met Tyr Thr Asp Pro Asn His Leu Lys Val Ser Asp Pro Gly Gln Ile
                 230
                                  235
Glu Gly Asn Val Val Phe Thr Tyr Leu Asp Ala Phe His Pro Asp Lys
             245
                               250
```

```
Asp Lys Val Ala Ala Met Lys Ala His Tyr Gln Ala Gly Gly Leu Gly
        260
             265
Asp Arg Val Cys Lys Asn Glu Leu Glu Gly Cys Leu Gln Glu Leu Ile
   275
          280
                          285
Ala Pro Met Arg Glu Arg Arg Ala Met Tyr Met Arg Asp Arg Gly Glu
      295
                                 300
Leu Met Ala Met Leu Lys Arg Gly Thr Glu Arg Ala Gln Gly Val Thr
305 310
                    315
Gln Glu Thr Leu Arg Glu Val Lys Val Gly Leu Gly Val Pro Val Phe
            325
                           330
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<210> 9005 <211> 123

<212> PRT <213> Enterobacter cloacae

<400> 9005

Lys Gly Val Gly Ser Asp Arg His Val Arg Cys Glu Asn Ala Arg Ile

Gly Pro Asp Gln Gly Pro Glu Phe Thr Cys Arg Ala Leu Asp Arg Trp 25 20 30

Ala Cys Glu His Gly Val Asp Leu Arg Leu Ile Gln Pro Gly Asn Pro 35 40 45 Thr His Asn Gly Phe Ile Glu Ser Phe Asn Gly Arg Phe Arg Asp Glu

50 55 Cys Leu Asn Glu His Trp Phe Ser Asp Ile Val His Ala Arg Lys Ile

70 75 Ile Asn Asp Trp Arg Gln Asp Tyr Asn Glu Cys Arg Pro His Ser Thr 85 90

Leu Asn Tyr Gln Thr Pro Ser Glu Phe Ala Ala Gly Trp Arg Lys Gly 105 100 110

His Ser Glu Asn Glu Asp Ser Asp Val Thr Asn 115

<210> 9006 <211> 138

<212> PRT

<213> Enterobacter cloacae

<400> 9006

Arg Arg Pro Asn Pro Ala Ala His Arg Leu Arg Val Ala Pro Ala Ala Gly Arg Gly Gly Arg Asp Val Leu Pro Ala Ser Ala Gly Pro Asp Arg 20 25 30 Ala Gly Ala Leu Gly Arg Gly Glu Leu Pro Arg Leu His Pro His Gly 35 40 45 Ala Asp Asp Gly Asp Tyr Pro Ala Ala Ala Thr Ala Arg Thr Thr Ala 5.0 55 Val Leu Tyr Arg Met Ala Gly Ala Pro Arg Gly Gln His His Arg Arg 70 75 Ala Ala Pro Ala Asp Val Arg Gly Glu Gly Arg Ala Val Pro Val Gly 8.5 90

Ala Gly Ala Arg Gln Asn Pro Asp Val Ala Ala Val Ala Gly Gly Asp

100 105 110 Glu Gly Val His Gly Leu Leu Pro Pro Leu Val Pro Arg Arg Val Arg 115 120

Gly Glu Arg Tyr Pro Val Phe Thr Arg 130 135

13

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<210> 9007
<211> 385
<212> PRT
<213> Enterobacter cloacae
<400> 9007
Ser Arg Leu Phe Thr Leu Ser Leu Val Leu Thr Met Ala Tyr Gln Leu
1 5
                         10
Asn Leu Asn Trp Pro Glu Phe Leu Glu Lys Tyr Trp Gln Lys Gln Pro
 20 25
                                       30
Val Val Leu Lys Asn Ala Phe Pro Asn Phe Val Asp Pro Ile Thr Pro
   35
           40
                                   45
Asp Glu Leu Ala Gly Leu Ala Met Glu Pro Glu Val Asp Ser Arg Leu
50 55 60
Val Ser His Ala Asn Gly Lys Trp Gln Ala Ser Asn Gly Pro Phe Glu
              70
                    7.5
His Phe Asp Asn Leu Gly Glu Thr Gly Trp Ser Leu Leu Ala Gln Ala
          85 90
Val Asn His Trp His Lys Pro Ala Ala Glu Leu Val Arg Pro Phe Arg
        100 105
Val Leu Pro Asp Trp Arg Leu Asp Asp Leu Met Ile Ser Phe Ser Val
   115 120
                                    125
Pro Gly Ser Gly Val Gly Pro His Ile Asp Gln Tyr Asp Val Phe Ile
130
                 135 140
Ile Gln Gly Met Gly Ser Arg Arg Trp Arg Val Gly Asp Lys Leu Pro
              150 155
Met Arg Gln Phe Cys Pro His Pro Ala Leu Leu His Val Asp Pro Phe
         165 170 175
Glu Pro Ile Ile Asp Glu Asp Leu Ala Pro Gly Asp Ile Leu Tyr Ile
        180 185
                                      190
Pro Pro Gly Phe Pro His Asp Gly Phe Thr His Glu Thr Ala Leu Asn
195 200 205
Tyr Ser Val Gly Phe Arg Gly Pro Asn Gly Arg Asp Leu Ile Ser Ser
               215
                                 220
Phe Ala Asp Tyr Ala Leu Glu Asn Asp Leu Gly Gly Glu His Tyr Ser
              230 235
Asp Pro Asp Leu Thr Cys Arg Glu His Pro Gly Arg Val Glu Gln Tyr
            245
                           250
Glu Leu Asp Arg Ile Arg Glu Met Met Ile Asp Met Ile Ser Lys Pro
        260
                        265
                                       270
Asp Asp Phe Thr Lys Trp Phe Gly Ser Phe Val Ser Thr Pro Arg His
     275 280 285
Glu Leu Asp Ile Ala Ala Ala Glu Pro Pro Tyr Ser Ala Glu Glu Val
                  295
                                 300
Leu Asp Ala Leu Gln Gly Gly Glu Thr Leu Ser Arg Leu Ser Gly Leu
               310
                             315
Arg Val Leu Asn Val Asn Gly Ser Phe Phe Ile Asn Ser Glu Gln Leu
            325
                          330
Glu Thr Ala Asp Val Asn Gly Ala Asp Ala Leu Cys Arg Tyr Thr Glu
        340
                        345
                                       350
Leu Gly Gln Ala Glu Leu Gly Asp Ala Leu Asn Asn Pro Ala Phe Val
                    360 365
Asp Glu Leu Thr Gly Leu Ile Asn Gln Gly Tyr Trp Tyr Phe Asp Glu
                  375
                                 380
385
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<210> 9008 <211> 172 <212> PRT

<213> Enterobacter cloacae

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<400> 9008
Asn Ala Arg Ser Asn Arg Met Ala Val Pro Val His Leu Phe Leu Thr
Asn Asp Gly Gly Thr Met Ile Cys Gly Ser Cys Asp Val Ala Gln Arg
                         2.5
                                          3.0
Glu Gly Ser Ile Glu Leu Arg Gly Leu Gln His Asn Leu Ser Leu Pro
                      40
                                      4.5
Thr Asp Ser Ala Thr Gly Lys Val Thr Gly Thr Arg Gln His Ser Pro
                 55
                                  60
Phe Gln Phe Thr Lys Glu Leu Asp Ser Ser Ser Pro Tyr Leu Phe Lys
                               75
             7.0
Ala Ala Ala Thr Gly Gln Thr Leu Lys Thr Ala Glu Phe Arg Phe Tyr
          8.5
                            90
His Ile Asn Tyr Ser Gly Gln Glu Glu Glu Tyr Tyr Arg Ile Thr Leu
        100 105 110
Glu Asn Val Lys Val Ile Ser Val Ser Pro Val Met Tyr Asp Thr Arg
 115 120 125
Gly Cys Pro Gly Thr Gly His Met Glu Glu Val Ala Phe Asn Tyr Glu
 130 135 140
Lys Ile Thr His Leu Tyr Lys Asp Gly Asn Leu Leu Ala His Asp Ala
145 150 155
Trp Asn Glu Arg Pro Thr Ser Gly Ser Ala Ala
            165
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<210> 9009 <211> 371 <212> PRT

<213> Enterobacter cloacae

<400> 9009 Ile Leu Ser Val Arg Gly Arg Val Met Lys Glu Gln Trp Ser Arg Glu 10 Gln Ala Gln Ala Trp Tyr Gln Gln Lys Gly Trp Leu Cys Gly Phe Asn 25 Tyr Leu Pro Ser Thr Ala Val Asn Trp Thr Asp Ile Trp Gln Ala Glu 35 40 4.5 Thr Phe Asp Ala Ala Thr Ile Glu Arg Glu Leu Gly Trp Ala Ala Asp Ala Gly Tyr Asn Thr Leu Arg Ile Asn Leu Pro Phe Ile Val Trp Glu 70 75 8.0 His Asp Arg Asp Gly Leu Met Ala Arg Ile Asp Arg Phe Leu Thr Ile 85 90 Ala Asp Asp Arg Gly Phe Ser Thr Met Leu Thr Leu Met Asp Asp Cys 100 105 110 Gly Phe Ser Gly Asp Glu Pro Tyr Leu Gly Pro Gln Lys Pro Pro Val 115 120 125 Pro Gly Lys His Asn Ser Gln Ala Ala Ala Ser Pro Gly Arg Asp Lys 130 135 140 Val Cys Asp Pro Asp Cys Trp Ala Asp Ile Glu Arg Tyr Ile Arg Asp 150 155 Val Val Arg Gln Phe Arg Glu Asp Lys Arg Val Leu Leu Trp Asp Leu 165 170 175 Tyr Asn Glu Pro Gly Asn Arg Gly Ile Phe Ala Thr Gly Thr Gln Glu 180 185 Val Gln Tyr Asp Ala Lys Leu Glu Ser Cys Ala His Glu Leu Met Lys 195 200 205 Leu Ala Phe Gln Trp Val Arq Glu Glu Asp Pro Thr Gln Pro Leu Thr 215 220 Val Cys Ala Trp Arg Leu Pro Pro Glu Glu Glu Gly Glu Thr Phe Phe 230 235

4697 Gln His Pro Leu Asp Gln Thr Ala Leu Ala Leu Ser Asp Val Val Ser 245 250 Phe His Ala Tyr Thr His Thr Gly Arg Met Thr Ala Ile Ile Gln Gln 265 260 270 Leu Gln Gln Leu Gly Arg Pro Leu Phe Cys Thr Glu Trp Leu Ala Arg 275 280 285 His Val Gly Ser Thr Ile Glu Glu Gln Leu Pro Leu Met Tyr Ala Ala 290 295 300 Lys Val Ala Pro Tyr Gln Trp Gly Leu Val Arg Gly Lys Thr Gln Thr 305 310 315 320 Trp Leu Pro Trp Pro Val Val Met Lys Glu Ser Thr Asp Tyr Cys Arg 325 330 335 Leu Trp Phe His Asp Val Phe Glu Glu Asn Gly Ile Pro Phe Ser Arg 340 345 350 Ala Glu Ile Ala Leu Met Lys Lys Leu Arg Lys Ile Ala Pro Asp Pro 360 Gln Gly 370 <210> 9010 <211> 478 <212> PRT <213> Enterobacter cloacae <400> 9010 Arg Pro Gly Ala Leu Ser Pro Gly Asn Gln Val Arg Thr Met Ala Thr 10 Thr Met Lys Ile Pro Ser Arg Glu Leu Trp Ser Tyr Phe Gly Tyr Gly 20 3.0 Leu Gly Gln Cys Phe Ser Phe Gly Leu Val Gly Ser Phe Ile Asn Tyr 35 4.0 4.5 Phe Tyr Thr Asp Val Leu Gly Ile Ser Ala Leu Ala Ala Ser Thr Ile 50 55 Phe Leu Ile Ala Arg Ala Trp Asp Ala Val His Asp Pro Leu Phe Ala 70 75 Ser Ile Met Asp Thr Ile Asn Ser Arg Phe Gly Lys Phe Arg His Phe 8.5 90 Leu Leu Ile Ala Pro Leu Leu Ile Thr Gly Val Thr Leu Leu Ser Phe

100 105 110 Tyr Lys Ile Glu Ala Asp Met Thr Thr Lys Ile Leu Tyr Ala Gly Val 115 120 125 Thr Tyr Ile Leu Trp Gly Thr Leu Tyr Ala Ile Ser Asp Ile Pro Phe 135 140 130 Trp Ser Met Ser Ser Val Met Thr Asn Asp Ser Ala Gln Arg Thr Arg 145 150 155 160 Ala Val Thr Ala Ala Met Leu Gly Val Asn Ala Gly Ile Ala Cys Ala 165 170 Asn Ile Phe Phe Pro Lys Leu Ala Ala Phe Phe Ala Gln Tyr Ser Asn 190 180 185 Asp Lys Gly Tyr Phe Met Ala Ala Leu Val Met Met Leu Val Gly Leu 195 200 205 Pro Leu Met Leu Asn Gly Phe Met Gln Ile Lys Glu Arg Val Pro Pro 215 220 210 Ser Pro Glu Lys Val Thr Ile Arg Asp Thr Phe His Asn Leu Arg Gln 235 Asn Lys Pro Leu Phe Ile Val Leu Leu Ser Phe Phe Cys Val Phe 245 250 His Asn Val Ala Gly Gly Leu Tyr Ile Tyr Phe Phe Ile Asn Asn Met 260 265 270 Gly Asp Gly Ser Leu Gln Met Ala Ile Gly Val Met Gly Ile Val Ala 280 285

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Ala Val Leu Cys Leu Val Ala Pro Met Leu Thr Arg Arg Met Gln Lys
                 295
                             300
Arg Lys Leu Phe Met Ile Leu Cys Gly Leu Asp Val Ala Val Arg Val
305
          310 315
Val Met Trp Phe Thr Gly Tyr Gln His Thr Ala Leu Leu Phe Ile Leu
       325 330 335
Leu Gly Leu Ser Thr Leu Phe Val Met Met Thr Asn Ile Leu Thr Ser
         340 345 350
Ser Met Ile Ala Asp Thr Ile Glu Tyr Ala Glu Tyr His Thr Asn Lys
                      360
 355
                                       365
Arg Cys Ala Ala Ile Thr Phe Ser Gly Gln Thr Phe Thr Gly Lys Met
 370 375
Ser Val Ala Val Gly Gly Gly Leu Ile Gly Val Phe Leu Thr Met Ile
               390 395
Asp Tyr Val Pro Gln Ala Gln Ala Gln Ser Asp Ser Val Leu Ser Gly
            405 410
Leu Phe Phe Gly Ile Cys Leu Leu Pro Ala Ile Gly Ser Leu Ile Arg
         420 425 430
Met Gly Phe Met Ser Arg Phe Thr Phe Thr Glu Glu Lys His Ala Glu
    435
                      440
                                     445
Val Cys Arg Leu Leu Ala Glu Arg Arg His His Val Glu Asn Ser Arg
450 455 460
Ala Glu Asn Glu Arg Leu Glu Arg Pro Ala Pro Ala Asn
               470
<210> 9011
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 9011
Met Arg Thr Glu Asp Gln Trp Tyr Arg Ala Pro Ser Ala Arg Glu Gly
                             10
Lys Pro Arg Arg Val Thr Ile Cys Leu Arg Lys Asp Ser Met Thr Leu
         20
                          25
                                           30
Pro Trp Arg Ile Ala Ile Ile Asp Asp Glu Arg Ser Val Arg Ser Gly
                      40
                                       4.5
Leu Ser Asn Leu Leu Gln Ser Glu Gly Tyr Ala Thr Asp Thr Phe Asp
                  55
 5.0
Ser Ala Glu Val Phe Leu Ser His Pro Leu Ala Leu Ser Gly Ala Ser
             7.0
                              7.5
Leu Val Ile Ala Asp Ile Lys Leu Arg Gly Met Asn Gly Ile Glu Leu
                             90
            8.5
Phe Glu Lys Leu Arg Leu Leu Ala Met Pro Pro Pro Pro Ile Leu Phe
         100
                         105
Ile Ser Gly His Ala Asp Glu Asn Met Gln Arg Tyr Ala Leu Ser Leu
      115
                      120
Gly Ala Ala Ala Phe Leu Arg Lys Pro Ile Asn Ile Asp Ile Leu Leu
   130
                   135
Asp His Ile Gln Arg Glu Leu Thr Arg Arg Gln
                150
<210> 9012
<211> 1865
<212> PRT
<213> Enterobacter cloacae
<400> 9012
Gly Ser Arg Met Asn Glu His Thr Ser Pro Ala Phe Trp Pro Ala Arg
Gly Ser Leu His Glu Gly Arg Ala Phe Val Leu Lys Glu Asp Val Ile
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Phe Thr Val Leu Ala Gln Glu Gly Gly Ile Ser Trp Met Asn Gly Arg 35 40 His Pro Gln Ser Gly Gly Ser Phe Ile Ile Ala Thr Ala Val Ser Asp 50 5.5 Glu Glu Glu Glu Arg Ala Thr Arg Leu Leu Lys Asn Glu Phe Ala Leu 70 75 Arg Asp Arg Leu His Asp Gly Trp Ala Ile Arg Pro Val Ala Ser Thr 85 90 95 Gln Tyr Arg Gly Arg Phe Ala Leu Val Tyr Ala Pro Phe Cys Phe Glu 100 105 110 Leu Leu Ala Cys Arg Ala Gly Lys Ala Ile Ser Gly Ile Ala Arg Phe 115 120 125 Ile Glu Met Ala Ile Arg Ile Cys Gly Pro Leu Arg Gln Met His Gln 130 135 140 His Asn Leu Ile His Gly Asp Ile Lys Pro Gly Ala Ile Phe Val His 145 150 150 160 His Asp Ala Thr Cys Arg Leu Cys Ser Phe Gly Leu Ser Cys Gly Thr 165 170 Ser Asp Ala Phe Ser Gln Ser Arg Leu Ala Ala Ser Gly Gly Thr Pro 180 185 190 Ala Tyr Met Ser Pro Glu His Thr Thr Arg Thr Arg Arg Ala Val Asp 195 200 Ser Arg Ser Asp Leu Tyr Ser Leu Gly Ile Val Leu Tyr Glu Leu Leu 210 215 220 Thr Gly Arg Leu Pro Phe Glu Leu Ser Ala Asp Asp Gln Thr Asn Trp 225 230 235 Ala His Tyr His Ile Ala Ser Glu Pro Leu Ala Pro Gly Arg Val Arg 245 250 Pro Asp Val Pro Gly Met Leu Ser Thr Ile Ile Leu Lys Leu Leu Glu 260 265 Lys Asn Pro Glu Asn Arg Tyr Gln Thr Val Asp Gly Leu Ile Ala Asp 275 280 285 Leu Arg Arg Cys Gln Ala Thr Leu Thr Val Glu Gly Glu Ile Val Asp 290 295 300 Phe Ile Pro Gly Gln Gln Asp Arg Ser Pro Ala Ile His Leu Ala Asp 310 315 Ser Leu Phe Ser Ala His Pro Gln Ala Ser Asp Val Ile Ala Ala Phe 325 330 Glu Arg Val Ser Gln Ser Gly Ala Pro Glu Val Val Thr Ile Gly Gly 340 345 350 Pro Ser Gly Ile Gly Lys Ser Ser Val Ile Ala Thr Thr Leu Lys Ser 360 365 355 Leu Gln Gln Arg Lys Val Leu Leu Ala Val Gly Lys Val Asp Gln Tyr 375 370 380 Ser Pro Thr Leu Pro Tyr Gly Val Leu Ser Ser Ala Phe Arg Thr Leu 385 390 395 Thr Leu His Leu Leu Gly Leu Pro Ala Gly Glu Val Ala Thr Trp Lys 410 415 405 Ile Arg Leu Ser Arg Ala Leu Glu Gly Phe Glu Glu Leu Ala Val Ser 425 420 Leu Val Pro Glu Leu Asn Leu Leu Glu Asn Lys Pro Arg Phe Ser 435 440 445 Ala Asp Thr Phe Ser Ile Asp Ala Arg Ala Arg Phe Ser His Met Val 455 460 Leu Ala Leu Val Lys Thr Phe Ala Thr Gln Gly Ala Pro Leu Val Leu 475 470 Leu Leu Asp Asp Val Gln Trp Ile Asp Ala Ala Ser Leu Gln Thr Leu 485 490 Asp His Leu Leu Arg Ala Cys Gly Ala Ile Pro Leu Leu Val Val Val 500 505

Ala His Arg Asp Leu Ser Ser Leu Ser Asp Pro Thr Leu Gln Thr Ala 520 515 Leu Ala Ser Leu Pro Glu Ala Ala Gln Tyr Ala Thr Thr Ile Val Pro 535 540 Gln Pro Leu Ser Val Lys Ala Val Ala Arg Trp Leu Gly Gly Ile Phe 545 550 555 His Ala Arg Ser Ser Gly Thr Ala Asp Leu Ala Thr Leu Ile His Glu 565 570 575 Lys Thr Gly Gly Asn Pro Leu Phe Val Gln Glu Phe Phe Arg Arg Ile 580 585 590 Val Asp Asp Gly Leu Val Val His Asn Lys Tyr Gln Gly Lys Trp His 595 600 605 Tyr Asp Leu Gln Ala Ile Arg Ala Arg His Tyr Thr Glu Asn Val Val 610 615 620 Thr Leu Val Leu Glu Gln Leu Lys Glu Met Pro Asp Glu Thr Arg Arg 630 635 640 Leu Leu Gly Ser Ile Ala Cys Leu Gly Cys Thr Gly Glu Leu Glu Met 645 650 655 Leu Cys Arg Val Val Gly Arg Ser Ala Ala Glu Ile Arg Tyr Ala Leu 665 660 His Pro Ala Val Thr Ala Gln Leu Ile Val Leu Thr Glu Lys Glu Tyr 675 680 685 Ala Phe Thr His Asp Arg Val Gln Glu Ala Ala Phe Ala Leu Leu Asp 690 695 700 Glu Gly Glu Lys Ser His Leu His Leu Thr Thr Ala Ser Leu Leu Ala 705 710 715 Asp Ala Ala Arg Gln Thr Ala Gly Asn Glu Leu Leu Phe Arg Ala Val 725 730 735 His His Val Ser Ala Ala Leu Asp Cys Ile Gln Pro Ala Pro Gln Arg 740 745 750 Gln Arg Phe Arg Glu Leu Ser Leu Gln Ala Ala Arg Arg Ala Lys Arg 755 760 765 Thr Gly Asp Tyr Leu Ser Ala Leu Ser Tyr Ile Gln Thr Ala Arg Ala 770 775 780 Leu Gly Asn Ala Gly Pro Val Ser Asp Phe Met Leu Asp Ile Glu Glu 785 790 795 Ala Gly Cys Glu Phe Ala Leu Gly His Leu Glu Arg Thr Arg Ala Leu 805 810 815 Cys Asp Ala Ile Leu Gly Ser Pro Gly Gly Leu Thr Glu Lys Ala Leu 825 830 820 Ala Ala Asn Leu Leu Ala Glu Val Tyr Met Arg Gln Ser Glu Ile Arg 835 840 845 Leu Ala Leu Glu Ala Ser Leu Cys Trp Leu Gly Val Phe Gly Ile Gln 850 855 860 Ile Ser Arg Tyr Pro Glu Asn Ala Glu Cys Asp Glu Ala Trp Gln Gln 870 875 Phe Cys Gln Arg Thr Ala Asp Ala Pro Leu Asn Pro Phe Ser Gln Leu 885 890 Lys Leu Met Glu Asn Ala Glu Thr Glu Ala Val Met Asn Leu Leu Tyr 900 905 910 Ser Ala Ser Ile Phe Ala Ser Phe Thr Cys Pro Arg Leu His Phe Leu 920 925 Leu Leu Cys Arg Met Met His Leu Thr Leu Asp His Gly Ile Thr Gly 935 930 940 Ala Ser Thr Thr Ala Met Ala Trp Phe Gly Val Leu Ile Gly His Arg 950 955 Tyr Ala Glu Tyr Arg Leu Gly Pae Glu Tyr Gly Thr Leu Ala Arg Glu 965 970 Leu Val Asn Arg His Gly Tyr Asp Ala Tyr Glu Ala Lys Thr Leu Leu 985 980 Pro Leu Asp Gln Leu Ser Val Trp Thr Gln Pro Leu Ser Tyr Thr Ile

1000 995 Glu Cys Ala Lys Ala Cys Phe Thr Ser Ala Val Thr His Gly Asp Met 1010 1015 1020 Thr Met Ala Cys Phe Ala Ala Cys His Gln Ile Ile Asn Phe Leu Ser 1025 1030 1035 1040 Arg Gly Asp His Leu Asp Gly Val Leu Thr Ser Ile Asp Arg Gly Leu 1045 1050 1055 Ala Phe Val Arg Lys Thr Asp Tyr Gln Asp Ile Glu Thr Val Leu His 1060 1065 1070 Ile Gln Arg Arg Tyr Val Glu Phe Leu Arg Thr Pro Val Thr Gly Pro 1075 1080 1085 Trp Ser Ala Ala Gln Ala Leu Pro Asp Asp Leu Leu Pro Ala Pro Pro 1090 1095 1100 Glu Gln Ala Pro Glu Gln Thr Ser Thr Met Leu Phe Trp Tyr Trp Leu 1105 1110 1115 1120 Tyr Arg Gly Met Ala His Phe Ser Cys Gly Glu Tyr Ala Asp Ala Gln 1125 1130 1135 Ala Asp Leu Glu Arg Ala Gly Trp Tyr Ala Trp Ser Ala Pro Gly His 1140 1145 1150 Ile His Leu Leu Asp Tyr His Phe Tyr Ser Ala Leu Ala Leu Ser Arg 1155 1160 1165 Gln Leu Thr Pro Glu Thr Phe Ser Ala Asp Tyr Arg Arg Ser Ile His 1170 1175 1180 His His Tyr Asp Lys Ile Ala Leu Trp Ala Arg Ile Asn Ser Gly Thr 1185 1190 1195 1200 Phe Ala Asp Lys Glu Ala Leu Ile Tyr Ala Glu Ile Val Arg Leu Asp 1205 1210 1215 Gly Met Asn Ser Ile Ala Leu Glu Gln Tyr Glu Lys Ala Val Arg Leu 1220 1225 1230 Ser Arg Glu Gly Gly Phe Asn Pro Ile Asn Ala Leu Ala His Glu Leu 1235 1240 1245 Ala Gly Arg Phe Ser Leu Ala Cys Gly Tyr Pro Thr Ala Ser Asp Ala 1250 1255 1260 His Phe Arg Gly Ala Ile Ala Ala Trp Gly Arg Ala Gly Ala Gln Ala 1265 1270 1275 1280 Lys Val Arg Gln Leu Glu Gln Asp Phe Pro His Leu Leu Ala Ser Gly 1285 1290 1295 Gln Ser Arg Ala Tyr Asp Thr Ala Ala Phe Ala Gln Asn Glu Val Ile 1300 1305 1310 Arg Asp Leu Gln Ser Val Ile Lys Ala Ser Arg Ala Leu Ser Glu Glu 1315 1320 1325 Ile Asn Leu Glu Arg Leu Ile Glu Asn Leu Met Thr Leu Leu Leu Glu 1330 1335 1340 Arg Ala Gly Ala Gln Arg Gly Leu Leu Leu Arg Val Ser Asp Asn His 1345 1350 1355 1360 Ile Pro Glu Ile Glu Ala Ser Ala Trp Thr Ser Thr Asp Gly Val Arg 1365 1370 1375 Val Arg Ile Leu Lys Ala Ser Pro Met Ala Thr Asp Met Pro Leu Ser 1380 1385 1390 Val Leu Ala Ala Val Ile Arg Thr Gly Gln Glu Ile Arg Thr Gly Lys 1395 1400 1405 Pro Glu Glu Phe His Pro Phe Ser Gln Asp Pro Tyr Leu Val Thr Ser 1410 1415 1420 Gly Ala Ala Val Met Cys Val Pro Met Phe Lys Gln Ala Arg Leu Val 1425 1430 1435 1440 Gly Val Leu Tyr Leu Glu Asn Arg Leu Met Pro Glu Val Phe Thr Ala 1445 1450 1455 Glu His Ser Arg Val Val Ser Leu Leu Gly Ala Gln Ala Ala Val Ser 1460 1465 Leu Glu Thr Ala Arg Leu Tyr Ala Glu Leu Leu Ala Glu Asn Ile Gln 1480

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Arg Arg Arg Val Glu Lys Glu Leu Arg Ala Ser Gln Thr Ser Leu Met
 1490 1495 1500
Leu Gly Glu Gln Ile Ser His Thr Gly Ser Trp Arg Trp Glu Leu Val
1505 1510 1515 1520
Gln Asp Leu Met Phe Met Ser Glu Glu Tyr Ala Arg Ile Leu Gly Leu
      1525 1530 1535
Pro Glu Gln Gln Lys Met Ile Ser Met Ala Glu Phe Leu Thr Phe Val
       1540 1545 1550
His Glu Asp Asp Tyr Gly Arg Ile Ser Thr Leu Val Asn Gln Ser Val
    1555 1560 1565
Arg Asp Gly Leu Ser Met Arg Ala Glu Phe Arg Ile Ile Arg Thr Asp
 1570 1575 1580
Gly Ser Val Arg Tyr Ile Leu Gly Ile Gly Asp Pro Val Gly Val Gly
1585 1590 1595 1600
Ser Glu Val Asn Glu Tyr Tyr Gly Ile Ile Thr Asp Ile Thr Ser Gln
           1605 1610 1615
Arg Ala Ala Glu Asp Ala Met Arg Val Ala Gln Ala Asp Leu Ala Arg
        1620 1625 1630
Val Ser Arg Ala Thr Thr Val Gly Gln Leu Thr Ser Ser Ile Ala His
  1635 1640 1645
Glu Ile Asn Gln Pro Leu Met Ser Ile Val Ser Asn Ala Gly Ala Ser
  1650 1655
                                1660
Leu Arg Trp Leu Asn Arg Asp Pro Ala Arg Leu Asp Lys Val Arg Glu
1665 1670
                             1675
Gly Leu Glu Glu Ile Ala Ala Glu Gly Glu Arg Ala Gly Glu Ile Ile
           1685
                          1690 1695
Arg Ser Ile Gln Ser Leu Thr Arg Lys Gln Asp Pro Thr Phe Thr Arg
        1700
                      1705 1710
Ile Asp Leu His Phe Leu Ile His His Ile Ile Met Leu Ser Arg Ser
     1715
                                   1725
Glu Leu Glu Leu Arg His Ile Ser Val Asp Tyr Leu Leu Asn Ala Asp
 1730
                 1735 1740
Asp Ser Phe Ile Ile Gly Asp Ser Val Gln Ile Gln Gln Val Leu Leu
1745
              1750 1755 1760
Asn Leu Val Met Asn Ala Met Glu Ala Met Ala Glu Val Thr Asp Arg
           1765
                          1770 1775
Pro Cys Ser Ile Thr Ile Ser Thr Ala Asn Cys Gly Glu Gly Lys Val
        1780
                       1785 1790
Ile Phe Glu Ile Ala Asp Thr Gly Ser Gly Ile Glu Pro Glu Leu Thr
                    1800
     1795
                                   1805
Glu Arg Ile Phe Asp Ser Phe Tyr Ser Thr Lys Ala Gln Gly Met Gly
  1810 1815
                                1820
Met Gly Leu Thr Ile Ser Ala Ser Ile Ile Glu Arg His Arg Gly Lys
              1830
                             1835
Leu Ser Ala Arg Arg Arg Glu Pro Tyr Gly Thr Val Phe Thr Phe Ala
           1845
                        1850
Leu Pro Leu Ala Gly Gln Glu Glu
                       1865
        1860
<210> 9013
<211> 210
<212> PRT
<213> Enterobacter cloacae
<400> 9013
Ala Arg Gln Ala Glu Asp Ile Thr Met His Tyr Thr Leu Lys Ser Ser
1 5
                  10
Asp Asp Lys Glu Lys Ala Glu Gly Thr Asn Gly Ala Gly Ala Leu Gln
                       2.5
Gln Lys Leu Leu Glu Ser Arg Ser Ile Val Ile Ser Gly Glu Ile Asn
     35
                    40
```

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Gln Glu Leu Ala Gln Lys Val Ile Thr Gln Met Ile Leu Leu Gln Ser
                   55
Val Ser Asn Asp Pro Ile Lys Leu Tyr Ile Asn Ser Gln Gly Gly His
                7.0
Val Glu Ala Gly Asp Thr Ile His Asp Phe Ile Lys Phe Ile Arg Pro
           85
                             90
Glu Val His Val Ile Gly Thr Gly Trp Val Ala Ser Ala Gly Ile Thr
                         105 110
        100
Ile Phe Leu Ala Ala Lys Lys Glu His Arg Tyr Ser Leu Pro Asn Thr
  115 120 125
Arg Phe Met Ile His Gln Pro Leu Gly Gly Val Arg Gly Gln Ala Thr
 130 135 140
Asp Ile Glu Ile Glu Ala Arg Glu Ile Ile Arg Met Leu Glu Arg Val
145 150 155 160
Asn Lys Leu Ile Ala Asp Ala Thr Gly Gln Pro Leu Glu Lys Val Lys
            165 170 175
Lys Asp Thr Asp Arg Asn Phe Trp Met Ser Pro Ala Glu Ala Leu Asp
         180 185 190
Tyr Gly Ile Val Gly Lys Leu Ile Thr His Tyr Asp Glu Leu Asn Leu
                      200
Asp
  210
<210> 9014
<211> 339
<212> PRT
<213> Enterobacter cloacae
<400> 9014
Leu Leu Pro Leu Gln Met Asp Gly Thr Val Leu Pro Val Leu Ser Arg
                             10
Cys Arg Pro Arg Met Met Leu Gln Ser Glu Asn Lys Ser Ala Lys Arg
 20
                        25
Ile Phe Phe Val Glu Asp Phe Gln Val Phe Gly Glu Arg Tyr Gly Ile
35
                    40
Asp Tyr Arg Phe Pro Gln Leu Lys Glu Ala Gln Val Ser Gly Ser Pro
                 5.5
50
Val Leu Gln Gly Asn Val Glu Glu Met Met Leu Ser Ser Gly Ile Ser
             7.0
                                75
Leu Thr His Ser Asp Val Arg Val Leu Gln Pro Tyr Glu Thr Thr Ser
           8.5
                             90
Arg His Ser Ser Pro Leu Tyr Met Leu Val Val Leu Glu Gly Cys Val
                       105
                                        110
         100
Thr Leu Thr Leu Asn Gly Ile Asn Tyr Pro Val Arg Pro Gly Met Ala
 115
                      120
                                       125
Phe Ser Ser His Leu Ser Glu Asp Gln Val Met Ser Ala Arg His Asp
   130 135
                                    140
Ala Asp Ser Thr Leu Lys Thr Leu Ser Phe Gly Val Tyr Pro His Asp
                                155
                                                 160
145
             150
Ala Gly Arg Glu Ala Leu Leu Glu Ser Leu Leu Glu Trp Gln Ser
                             170
            165
                                              175
Leu Asn Ala Pro Ala Phe Val Trp Gln Val Pro Glu Phe Val Met Ser
                                          190
         180
                          185
Gly Ile Leu His Ala Gln Arg Gln Gly Gly Ser Val Leu Ser Arg Lys
                       200
                                       205
Leu Leu Leu Glu Gly Leu Met Tyr Gln Leu Leu Gly His Gly Leu Asn
 210
                   215
                                    220
Gln Arg Gln Gln Pro Cys Pro Ser Arg Pro Glu His Ala Arg Leu Glu
                230
                                235
Arg Val Arg Ser Leu Leu Glu Gln Ser Pro Glu Arg Asp His Thr Leu
             245
                              250
```

Ala Gln Leu Ala Ala Leu Ala Ala Met Ser Pro Ser Ser Leu Arg Ser 260 265 Lys Phe Arg Gln Arg Tyr Gly Cys Thr Leu Phe Asp Tyr Leu Arg Asn 275 280 285 Cys Arg Leu Ala Leu Ala Arg Arg Tyr Leu Leu Glu Gly His Ser Val 295 300 Gln Gln Ala Ala Trp Met Cys Gly Tyr Gln His Ala Thr Asn Phe Ala 310 315 Thr Ala Phe Arg Arg His Tyr Gly Ile Ser Pro Gly Asp Val Arg Lys 325 330 Leu Arg

<210> 9015 <211> 93 <212> PRT <213> Enterobacter cloacae

<211> 159 <212> PRT

<210> 9016

<213> Enterobacter cloacae

<400> 9016 Glu Leu Tyr Met Ala Ala Thr Asn Phe Lys Pro Glu Phe Thr Val Cys 10 Lys Thr Glu Ser Asp Ala Phe Thr Gly Met Ile Glu Asn Arg Glu Leu 25 Val Arg Lys Asn Ser Ala Arg Arg Leu His Gly Asn Gln Pro Asn Ala 35 4.0 Ala Pro Val His Pro Arg Ala Glu Thr Pro Gln Asp Ser Ala Ala Cys 55 60 Cys Glu Leu Tyr Ala Arg Ile Asp Met Lys Tyr Leu Leu Leu Gly Gly 70 75 Glu Trp Leu Thr Arg Ala Gly Phe Ile Asn Gly Met Pro Val Lys Ile 8.5 90 95 Arg Ala Met Lys Asp Cys Ile Val Ile Thr Pro Gln His Thr Arg Glu 100 105 110 Leu Trp Gly Cys Leu Glu Gly Met Ser Val Val Asn Ile Asn Lys Gln 115 120 Lys Val Ala Gln Trp Leu Lys Thr Phe Pro Gly Ala Leu Asn Asp Thr 135 140 Gly Asp Ile Pro Val Val Lys Arg Asn Ile Val Gln Ala Lys 150

<210> 9017 <211> 204 <212> PRT <213> Enterobacter cloacae

<400> 9017 Arg Cys Asn Ala Glu Arg Gly Leu Arg Cys Glu Lys Ala Ala Phe Arg 10 Arg Leu Ser Glu Asn Gly Glu Asn Tyr Ser Met Pro Pro Leu Arg Arg 20 2.5 Gln Pro Pro Ala Val Tyr Gly Glu His Gly Val Val Tyr Val His Leu 40 4.5 Phe Thr Val Pro Arg Pro Ala Arg Lys Thr Lys Gly His Val Met Leu 55 60 Gln Ser Leu Asn His Leu Thr Leu Ala Val Ser Asp Leu Gln Lys Ser 7.0 75 Val Thr Phe Trp His Glu Leu Leu Gly Leu Thr Leu His Ala Arg Trp 85 90 Asn Ala Gly Ala Tyr Leu Thr Cys Gly Glu Leu Trp Val Cys Leu Ser 105 110 100 Tyr Asp Glu Ala Arg Gln Tyr Val Pro Pro Gln Glu Ser Asp Tyr Thr 115 120 His Tyr Ala Phe Thr Val Ala Glu Glu Asp Phe Glu Pro Phe Ser Gln 135 140 130 Arg Leu Lys Gln Thr Gly Val Thr Val Trp Lys Gln Asn Lys Ser Glu 150 155 145 Gly Ala Ser Phe Tyr Phe Leu Asp Pro Asp Gly His Lys Leu Glu Leu 165 170 175 His Val Gly Ser Leu Ala Ala Arg Leu Ala Ala Cys Arg Glu Lys Pro 185

180 185 Tyr Ala Gly Met Val Phe Thr Ser Asp Glu Ala

<210> 9018 <211> 237 <212> PRT

<213> Enterobacter cloacae

<400> 9018 Pro Leu Thr Ser Leu Asp Asn Leu Met Thr Thr Ser Lys Leu Glu Val 10 Leu Thr Pro Ala Asn Cys Gln Ile Ile Phe Ile Asp His Gln Pro Gln 25 Met Ala Phe Gly Val Gln Ser Ile Asp Arg Gln Val Leu Lys Asn Asn 45 35 4.0 Thr Val Ala Leu Ala Lys Ala Ala Lys Val Phe Asn Ile Pro Thr Ile 5.5 Ile Thr Thr Val Glu Thr Glu Ser Phe Ser Gly Asn Thr Tyr Pro Glu 75 70 Leu Leu Asp Val Phe Pro Gly Gln Asp Ile Leu Glu Arg Thr Ser Met 90 Asn Ser Trp Asp Asp Gln Lys Val Arg Asp Ala Leu Lys Ala Asn Gly 105 100 Lys Lys Lys Val Val Val Ala Gly Leu Trp Thr Glu Val Cys Asn Asn 125 115 120 Ser Phe Ala Leu Cys Ala Met Leu Glu Gly Asp Tyr Glu Ile Tyr Met 135 140 Val Ala Asp Ala Ser Gly Gly Thr Ser Lys Glu Ala His Asp Phe Ala 150 155 Met Gln Arg Met Ile Gln Ala Gly Val Ile Pro Val Thr Trp Gln Gln 165 170 Val Met Leu Glu Trp Gln Arg Asp Trp Ala Arg Lys Glu Thr Tyr Thr 185 180

Ala Val Met Asp Ile Val Arg Glu His Ser Gly Ala Tyr Gly Met Gly 195 200 205 Val Asp Tyr Ala Tyr Thr Met Val His Lys Ala Pro Ser Arg Gln Lys 215 220 210 Ser Glu His Arg Thr Leu Ala Pro Val Pro Ala Arg 230 <210> 9019 <211> 704 <212> PRT <213> Enterobacter cloacae <400> 9019 Glu Ile Ser Leu Glu Arg Val Met Phe Ala Lys Ser Arg Leu Ala Leu 10 Leu Val Gly Trp Val Thr Gly Ser Val Ala Phe Pro Leu Leu Ala Gln 20 Asp Ala Gln Lys Thr Asp Thr Val Val Val Thr Ser Gln Met Gln Ser 35 40 Ala Ala Thr Lys Leu Glu Thr Pro Asp Ile Glu Thr Pro Gln Ser Val 55 Ser Ile Val Thr Arg Glu Gln Phe Glu Glu Gln Gly Ala Thr Ser Val 70 75 Arg Gln Ala Val Ser Tyr Thr Pro Gly Val Tyr Ser Asn Gln Ile Gly 90 85 Ala Ser Asn Arg Phe Asp Tyr Met Val Leu Arg Gly Phe Ser Asp Gly 105 110 100 Ser Leu Asp Asn Val Tyr Leu Asp Gly Leu Lys Met Met Gly Asp Thr 120 125 115 Asn Ser His Ser Ser Leu Val Val Asp Pro Trp Phe Leu Asp Ser Ile 130 135 140 Glu Val Val Arg Gly Pro Ala Ser Val Leu Tyr Gly Arg Ser Ser Pro 150 155 Gly Gly Ile Val Ala Leu Thr Ser Arg Lys Pro Ser Phe Asp Pro Gly 170 175 165 Gly Glu Ile Lys Leu Phe Ala Gly Asn Asn Asn Gln Arg Gly Ala Met 185 190 180 Phe Asp Val Thr Gly Pro Val Asp Asp Asp Asp Arg Val Ala Val Arg 200 205 195 Leu Ser Gly Met Thr Arg Tyr Ala Asp Ser Gln Phe Asp Pro Leu Lys 215 220 Glu Glu Arg Tyr Ala Leu Met Pro Ser Leu Thr Trp Arg Ile Thr Asp 235 230 225 Asn Thr Arg Leu Asp Leu Met Ala Tyr Leu His Arg Asp Pro Glu Gly 245 250 Gly Ser His Ser Gly Leu Pro Tyr Glu Gly Thr Val Val Pro His Ser 265 270 Gly Lys Lys Ile Ser Asn Thr Phe Phe Glu Gly Glu Asp Asp Tyr Asp 275 285 Lys Tyr Asp Arg Arg Glu Asn Met Val Gly Tyr Asn Ile Glu His Leu 300 290 295 Phe Asp Ser Gly Trp Ser Val Arg Gln Lys Leu Arg Tyr Leu His Thr 315 310 Lys Val Glu Leu Asn Gln Val Tyr Ala Ala Gly Trp Leu Asn Asp Thr 335 Glu Leu Asn Arq Gly Tyr Ser Gly Ser Aso Glu Lys Met Asn Ala Ile 340 345 Thr Leu Asp Asn Gln Val Asp Gly Ser Phe Asp Thr Gly Glu Val Asn 355 360 365 His Arg Val Leu Ile Gly Met Asp Tyr Gln Asp Arg Thr Asn Asn Val

375

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Thr Gly Tyr Tyr Gly Gly Phe Pro Pro Ile Asp Ala Phe His Pro Val
              390
                             395
Tyr Gly Ala Lys Pro Asp Tyr Ile Thr Gln Tyr Ser Arg Glu Lys His
           405
                          410
Lys Leu Arg Gln Thr Gly Tyr Tyr Leu Gln Asp Gln Met Ser Ile Asp
      420
                       425
Arg Trp Arg Leu Thr Leu Gly Gly Arg Tyr Asp Gln Val Ser Val Ser
         440
                                   445
Asn Val Asp Asn Phe Asn His Thr Arg Ser Asp Leu Asp Lys Asn Arg
      455
                                460
Tyr Ser Ser Arg Ala Ala Leu Leu Tyr Leu Phe Asp Asn Gly Val Ala
465 470 475
Pro Tyr Val Ser Tyr Ser Thr Ala Phe Thr Pro Thr Ser Phe Ala Asp
      485 490 495
Glu Gln Gly Asn Ile Leu Asp Pro Met Lys Gly Lys Gln Trp Glu Ala
        500
            505
                           510
Gly Val Lys Tyr Glu Pro Glu Gly Met Asn Ser Gln Phe Ser Ala Ser
     515 520 525
Val Phe Arg Ile Asn Gln Lys Asn Ile Ala Thr Lys Glu Glu Pro Thr
 530 535 540
Asp Pro Tyr Arg Ser Ile Gly Glu Ile Glu Ser Glu Gly Val Glu Leu
              550
                   555
Glu Ala Ile Gly Gln Leu Thr Asp Ser Leu Arg Met Gln Ala Ala Tyr
            565
                          570
Thr Tyr Thr Asp Ile Arg Tyr Lys Lys Ser Ser Pro Glu Glu Glu Gly
                      585
        580
Lys Arg Ala Val Tyr Ala Pro Arg Asn Met Ala Ser Ala Trp Leu Ser
     595
                    600
Tyr Asp Val Lys Thr Gly Leu Leu Asp Gly Leu Thr Val Gly Ser Gly
                 615 620
 610
Val Arg Tyr Val Asn Gly Ile Ala Ser Asp Arg Gln Asn Thr His Thr
              630 635
Leu Pro Ser Tyr Thr Leu Val Asp Met Thr Val Gly Tyr Asp Leu Ser
           645 650 655
Lys Val Gly Leu Thr Gly Val Ser Ala Gln Leu Asn Val Asn Asn Leu
        660
                        665
Thr Asp Arg Ser Tyr Val Ala Ala Cys Asn Ser Leu Ser Tyr Cys Tyr
 675
                    680
Phe Gly Ala Glu Arg Ser Ile Val Gly Ser Val Ser Trp Lys Phe
                  695
  690
<210> 9020
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<210> 9020 <211> 381 <212> PRT

<213> Enterobacter cloacae

100

<400> 9020

Val Lys Ser Val Pro Gly Leu Val Cys Leu Gln Lys Arg Gly Leu Gly 10 15 Ser His Ala Pro Thr Ser Cys Arg Thr Tyr Gly Ser Ile Thr Met Thr 25 2.0 30 Asp Ile Ala Gln Leu Leu Gly Lys Asp Ala Asp Ser Leu Leu Gln His 35 40 4.5 Arg Cys Met Thr Ile Pro Ala Asp Gln Leu Tyr Leu Pro Gly His Asp 55 60 Tyr Val Asp Arg Val Met Val Asp Asn Asn Arg Pro Pro Ala Val Leu 65 70 75 Arg Asn Met Gln Thr Leu Tyr Asn Thr Gly Arg Leu Gly Gly Thr Gly 85 90 Tyr Leu Ser Ile Leu Pro Val Asp Gln Gly Val Glu His Ser Ala Gly

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Ala Ser Phe Ala Ala Asn Pro Leu Tyr Phe Asp Pro Lys Asn Ile Val
                   120
  115
Glu Leu Ala Ile Glu Ala Gly Cys Asn Cys Val Ala Ser Thr Tyr Gly
              135
                               140
Val Leu Ala Ser Val Ser Arg Arg Tyr Ala His Arg Ile Pro Phe Leu
145 150
                           155
Val Lys Leu Asn His Asn Glu Thr Leu Ser Tyr Pro Thr Glu Tyr Asp
     165 170 175
Gln Thr Leu Tyr Ala Ser Val Glu Gln Ala Phe Asn Met Gly Ala Val
    180 185 190
Ala Val Gly Ala Thr Ile Tyr Phe Gly Ser Glu Gln Ser Arg Arg Gln
 195 200 205
Ile Glu Glu Ile Ser Ala Ala Phe Glu Arg Ala His Glu Leu Gly Met
 210 215 220
Val Thr Val Leu Trp Ala Tyr Leu Arg Asn Ala Ser Phe Lys Lys Asp
225 230 235
Gly Val Asp Tyr His Val Ser Ala Asp Leu Thr Gly Gln Ala Asn His
        245 250 255
Leu Ala Ala Thr Ile Gly Ala Asp Ile Val Lys Gln Lys Met Ala Glu
       260 265 270
Asn Asn Gly Gly Tyr Lys Ala Val Asn Phe Gly Tyr Thr Asp Asp Arg
275 280
Val Tyr Ser Lys Leu Thr Ser Asp Asn Pro Ile Asp Leu Val Arg Tyr
290 295
                              300
Gln Leu Ala Asn Cys Tyr Met Gly Arg Ala Gly Leu Ile Asn Ser Gly
             310 315 320
Gly Ala Ala Gly Gly Glu Thr Asp Leu Thr Asp Ala Val Arg Thr Ala
          325 330
Val Ile Asn Lys Arg Ala Gly Gly Met Gly Leu Ile Leu Gly Arg Lys
       340 345 350
Ala Phe Lys Lys Ser Met Ala Asp Gly Val Lys Leu Ile Asn Ala Val
355 360 365
Gln Asp Val Tyr Leu Asp Ser Lys Val Thr Ile Ala
                375
<210> 9021
<212> PRT
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<211> 206

<213> Enterobacter cloacae

<400> 9021

Gly Phe Arg Ala Arg Cys Thr Lys Gly Glu Ser Ala Met Arg Leu Cys 10 Asp Arg Asp Ile Glu Ala Trp Leu Asp Glu Gly Arg Leu Ser Ile Thr 20 25 3.0 Pro Arg Pro Pro Val Glu Arg Ile Asn Gly Val Thr Val Asp Val Arg 40 35 4.5 Leu Gly Asn Lys Phe Arg Thr Phe Ser Gly His Thr Ala Pro Phe Ile 55 60 50 Asp Leu Ser Gly Pro Lys Asp Glu Val Ser Ala Ala Leu Asp Arg Val 70 65 Met Ser Asp Glu Ile Val Ile Asp Glu Gly Glu Ala Phe Tyr Leu His 90 85 Pro Gly Glu Leu Ala Leu Ala Val Thr Phe Glu Ser Val Thr Leu Pro 110 100 105 Ala Asp Leu Val Gly Trp Leu Asp Gly Arg Ser Ser Leu Ala Arg Leu 120 Gly Leu Met Val His Val Thr Ala His Arg Ile Asp Pro Gly Trp Ser 130 135 140 Gly Arg Ile Val Leu Glu Phe Phe Asn Ala Gly Lys Leu Pro Leu Ala 150 155

Leu Arg Pro Gly Met Met Ile Gly Ala Leu Ser Phe Glu Pro Leu Thr 170 165 Gly Pro Ala Asp Arg Pro Tyr Asn Arg Arg Gln Asp Ala Lys Tyr Arg 180 185 190 Asp Gln Gln Gly Ala Val Ala Ser Arg Ile Asp Lys Asp 200

<210> 9022 <211> 745 <212> PRT

<213> Enterobacter cloacae

<400> 9022 Gly Gly Ile His Leu Thr Arg Pro Val Cys Pro Ser Val Gly Ala Gly 10 Thr Glu Ser Ser Ala Gly Ile Thr Met Thr Glu Lys Thr Arg Pro Ser 30 25 Ala Ala Pro Thr Ser Gly Ser Asp Glu Ile Asp Ile Gly Arg Leu Val 40 45 35 Gly Thr Val Ile Glu Ala Lys Trp Trp Val Leu Gly Ile Thr Ala Ile 55 50 Phe Ala Val Ala Ala Ile Val Tyr Thr Leu Phe Ala Thr Pro Ile Tyr 75 7.0 Ser Ala Asp Ala Leu Val Gln Ile Glu Gln Asn Thr Gly Asn Ser Leu 85 90 95 Val Gln Asp Ile Gly Ser Ala Leu Ala Asn Lys Pro Pro Ala Ser Glu 100 105 110 Ala Glu Ile Gln Leu Ile Gln Ser Arg Leu Val Leu Gly Lys Thr Val 115 120 His Asp Leu Gly Leu Asp Ile Ala Val Thr Lys Asn Thr Phe Pro Val 135 Phe Gly Ala Gly Trp Asp Arg Leu Met Gly Arg Ser Asn Asp Thr Val 155 160 150 Lys Val Thr Asp Phe Val Ile Pro Lys Gly Ala Gly Asp Gln Thr Phe 170 175 165 Thr Leu Thr Val Leu Gly Pro Lys Gln Tyr Gln Leu Thr Ser Asp Ala 180 185 Gly Phe Ser Ala Arg Gly Glu Val Gly Gln Met Leu Thr Lys Glu Gly 205 195 200 Val Ser Ile Lys Val Ser Ala Ile Gln Ala His Glu Gly Gly Glu Phe 220 215 Thr Val Thr Lys Phe Ser Thr Leu Gly Met Ile Asn Asn Leu Gln Asn 235 240 230 Asn Leu Thr Val Thr Glu Asn Gly Lys Asp Thr Gly Val Leu Ser Met 250 245 Thr Phe Thr Gly Glu Asp Lys Asp Gln Ile Arg Asp Ile Leu Asn Ser 265 270 260 Ile Thr Arg Asn Tyr Leu Glu Gln Asn Val Glu Arg Lys Ser Ala Glu 285 275 280 Ala Ala Lys Ser Leu Ala Phe Leu Ser Lys Gln Leu Pro Glu Val Arg 300 295 Ala Arg Leu Asp Asp Ala Glu Asn Lys Leu Asn Ala Tyr Arg Gln Asp 310 315 Lys Asp Ser Val Asp Leu Pro Leu Glu Ala Lys Ser Val Leu Asp Ser 335 325 330 Met Val Asn Ile Asp Ala Gln Leu Asn Glu Leu Thr Phe Lys Glu Ala 340 345 350 Glu Ile Ser Lys Leu Tyr Thr Lys Arg His Pro Ala Tyr Arg Thr Leu 355 360 365 Leu Glu Lys Arg Arg Thr Leu Glu Glu Glu Lys Ala Lys Leu Asn Asp 380

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Arg Val Thr Ala Met Pro Lys Thr Gln Gln Glu Ile Val Arg Leu Thr
                   395
385
      390
Arg Asp Val Glu Ser Gly Gln Gln Val Tyr Met Gln Leu Leu Asn Lys
        405 410 415
Gln Gln Glu Leu Lys Ile Thr Glu Ala Ser Thr Val Gly Asp Val Arg
    420 425
                                     430
Ile Val Asp Pro Ala Ile Thr Gln Pro Gly Val Leu Lys Pro Lys Lys
     435 440 445
Ala Leu Ile Ile Leu Gly Ser Ile Ile Leu Gly Leu Met Leu Ser Ile
 450 455 460
Val Gly Val Leu Leu Arg Ser Leu Phe Asn Arg Gly Ile Glu Ser Pro
465 470 475 480
Gln Val Leu Glu Glu Asn Gly Ile Ser Val Tyr Ala Ser Ile Pro Leu
           485 490 495
Ser Glu Trp Gln Lys Ser Arg Asp Ser Val Lys Thr Val Lys Gly Val
        500
                       505 510
Lys Arg Tyr Lys Gln Ser Gln Leu Leu Ala Val Gly Asn Pro Thr Asp
     515 520
Leu Ala Ile Glu Ala Val Arg Ser Leu Arg Thr Ser Leu His Phe Ala
                535 540
 530
Met Met Gln Ala Lys Asn Asn Val Leu Met Met Thr Gly Val Ser Pro
              550 555 560
Ser Ile Gly Lys Thr Phe Val Cys Ala Asn Leu Ala Ala Val Val Ser
            565
                          570
Gln Thr Asn Lys Arg Val Leu Leu Ile Asp Cys Asp Met Arg Lys Gly
                       585 590
         580
Tyr Thr His Glu Leu Leu Gly Thr Asn Asn Val Asn Gly Leu Ser Glu
                    600 605
Ile Leu Leu Gly Lys Gly Gla Ile Ser Glu Ser Ala Lys Pro Thr Ser
 610 615 620
Ile Pro Lys Phe Asp Leu Ile Pro Arg Gly Gln Val Pro Pro Asn Pro
                  635
              630
Ser Glu Leu Leu Met Ser Glu Arg Phe Thr Gln Leu Ile Glu Trp Ala
           645
                          650 655
Ser Lys Asn Tyr Asp Leu Val Leu Ile Asp Thr Pro Pro Ile Leu Ala
                       665
        660
Val Thr Asp Ala Ala Val Val Gly Arg His Ala Gly Thr Thr Leu Met
     675 680
                                   685
Val Ala Arg Tyr Ala Val Asn Thr Leu Lys Glu Val Glu Thr Ser Leu
                                700
                 695
Ser Arg Phe Glu Gln Asn Gly Ile Glu Val Lys Gly Val Ile Leu Asn
               710
                             715 720
Ser Ile Phe Arg Arg Ala Thr Gly Tyr Gln Asp Tyr Gly Tyr Tyr Glu
            725
                           730
Tyr Glu Tyr Lys Ser Asp Ser Lys
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740

<210> 9023

<211> 170

<212> PRT

<213> Enterobacter cloacae

<400> 9023

Arg Ala Ser Gly Glu Ile Met Phe Leu Glu Asp Cys Arg Ala Asn Ser 1 5 10 15

Trp Ser Leu Arg Pro Cys Cys Met Val Leu Ala Tyr Arg Phe Ala His 20 25 30

Phe Cys Ser Val Trp Arg Lys Lys Asn Val Leu Asn Asn Ile Trp Ala 35 40 45

Ala Pro Val Leu Val Leu Tyr Arg Ile Ile Thr Glu Cys Phe Phe Gly 50 55

Tyr Glu Ile Gln Ala Ala Ala Thr Ile Gly Arg Arg Phe Thr Ile His His Gly Tyr Ala Val Val Ile Asn Lys Phe Val Val Ala Gly Asp Asp 85 90 Phe Thr Ile Arg His Gly Val Thr Ile Gly Asn Arg Gly Pro Asp Ser 100 105 110 Leu Ala Cys Pro Val Ile Gly Asn Asn Val Glu Leu Gly Ala Asn Val 115 120 125 Val Met Ile Gly Asp Ile Thr Val Gly Asn Asn Val Thr Ile Gly Ala 135 140 Gly Ser Val Val Leu Asp Ser Ile Pro Asp Asn Ala Leu Val Val Gly 145 150 155 Glu Lys Ala Arg Val Lys Val Ile Lys 165

<210> 9024 <211> 372 <212> PRT <213> Enterobacter cloacae

<400> 9024 Leu Pro Pro Thr Ala Thr Pro Arg Gly Lys Cys Trp Arg Asn Arg Ala Val Lys Pro Ser Val Lys Thr Arg Cys Cys Arg Trp Cys Ser Cys Arg 20 25 Arg Pro Ile Ser Arg Arg Leu Phe Leu Ala Arg Thr Trp Asn Arg Ser 40 Ala Thr Ala Ala Ala Lys Leu Thr Val Asp Asn Arg Cys Trp Arg Ser Met Ser Arg Ser Ile Arg Ile Cys Ser Tyr Leu Leu Leu Pro Leu Ile 70 75 Tyr Leu Leu Val Asn Val Lys Ile Ala Gln Leu Gly Glu Ser Phe Pro 85 Ile Thr Ile Val Thr Phe Leu Pro Val Leu Leu Leu Tyr Val Asp 105 100 Lys Leu Asn Leu Lys Lys Leu Met Ile Ala Leu Gly Ile Gly Phe Gly 120 Leu Thr Ala Phe Asn Tyr Ile Phe Gly Gln Ser Leu Asp Ala Ser Lys 135 140 Tyr Val Thr Ser Thr Met Leu Phe Val Tyr Ile Val Ile Ile Ile Gly 150 155 Met Val Trp Ser Ile Arg Phe Lys Thr Ile Ser Pro His Asn Tyr Arg 165 170 175 Lys Ile Leu Arg Phe Phe Tyr Ile Val Val Gly Leu Ile Val Val Leu 180 185 190 Ala Ala Met Glu Met Ala Gln Ile Ile Leu Thr Gly Gly Ser Ser Leu 200 205 Met Glu Ile Ile Ser Lys Tyr Leu Ile Tyr Ser Asn Ser Tyr Val Leu 215 220 Asn Phe Ile Lys Phe Gly Gly Lys Arg Thr Thr Ala Leu Tyr Phe Glu 230 235 Pro Ala Phe Phe Ala Leu Ala Leu Ile Ser Ile Trp Leu Ser Ile Lys 250 255 Gln Phe Gly Ile Lys Thr Pro Lys Thr Asp Ala Met Ile Leu Ala Gly 265 270 260 Ile Val Leu Ser Gly Ser Phe Ser Gly Val Met Thr Phe Ile Leu Phe 275 280 285 Tyr Leu Leu Glu Trp Ala Phe Gln Tyr Leu Asn Lys Glu Ala Ile Lys 295 300 Lys Lys Leu Pro Leu Ala Ile Ile Ser Leu Thr Val Phe Leu Val Gly 310 315

Val Ile Phe Ala Phe Pro Tyr Ile Ser Glu Arg Leu Gly Asp Leu Gly 330 325 Thr Glu Gly Ser Ser Ser Tyr Tyr Arg Ile Ile Gly Pro Leu Val Met 340 345 Val Gly Tyr Ser Leu Thr His Leu Asp Val Phe Thr Thr Ser Arg Arg 355 360 His Pro Thr 370 <210> 9025 <211> 380 <212> PRT <213> Enterobacter cloacae <400> 9025 Ser Met Met Lys Ser Lys Met Lys Leu Met Pro Leu Leu Val Ser Val 10 Thr Leu Met Ser Gly Cys Thr Val Phe Pro Gly Ser Asn Met Ser Thr 25 Met Gly Lys Asp Val Ile Lys Gln Gln Asp Ala Asp Phe Asp Leu Asp 35 40 4.5 Lys Met Val Asn Val Tyr Pro Leu Thr Pro Arg Leu Val Glu Gln Leu 55 Arg Pro Arg Pro Asn Val Ala Gln Pro Asn Met Ser Leu Asp Gln Glu 70 75 Ile Ala Ser Tyr Gln Tyr Arg Val Gly Pro Gly Asp Val Ile Asn Val 85 90 Thr Val Trp Asp His Pro Glu Leu Thr Thr Pro Ala Gly Gln Tyr Arg 100 105 110 Ser Ser Ser Asp Thr Gly Asn Trp Val Gln Ser Asp Gly Thr Met Phe 115 120 125 Tyr Pro Tyr Ile Gly Lys Val His Val Ala Gly Lys Thr Leu Ala Glu 135 140 Ile Arg Ser Asp Ile Thr Gly Arg Leu Ala Gln Tyr Ile Ala Asp Pro 150 155 Gln Val Asp Val Asn Ile Ala Ala Phe Arg Ser Gln Lys Ala Tyr Ile 165 170 175 Ser Gly Gln Val Asn Lys Ser Gly Gln Gln Ala Ile Thr Asn Val Pro 180 185 Leu Thr Val Leu Asp Ala Ile Asn Ala Ala Gly Gly Leu Thr Asp Gly 195 200 205 Ala Asp Trp Arg Asn Val Val Leu Thr His Asn Gly Lys Glu Gln Arg 220 215 210 Ile Ser Leu Gln Ala Leu Met Gln Asn Gly Asp Leu Thr Gln Asn Arg 230 235 Leu Leu Tyr Pro Gly Asp Ile Leu Tyr Val Pro Arg Asn Asp Asp Leu 245 250 Lys Val Phe Val Met Gly Glu Val Lys Lys Gln Ser Thr Leu Lys Met 260 265 Asp Phe Ser Gly Met Thr Leu Thr Glu Ala Leu Gly Asn Ala Glu Gly 285 275 280 Ile Asp Leu Thr Ala Ser Asn Ala Ser Gly Ile Phe Val Ile Arg Pro 295 290 300 Ile Lys Gly Glu Asn Ala Lys Gly Lys Ile Ala Asn Ile Tyr Gln Leu 310 315 320 Asp Met Ser Asp Ala Thr Ser Leu Val Met Ala Thr Ser Phe Arg Leu 325 330 Gln Pro Tyr Asp Val Val Tyr Val Thr Thr Ala Pro Val Ala Arg Trp 345

Asn Arg Leu Ile Asn Gln Leu Leu Pro Thr Ile Ser Gly Val Arg Tyr 360

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100
                        105
Ser Glu Glu Leu Glu Ser Glu Pro Ser Ala Asn Ile Ala Phe Val Pro
     115
                    120
                              125
Leu Ala Met Pro Ser Thr Ala Gly Pro Gly Thr Ile Ala Met Ile Ile
         . 135
                                 140
Ser Ser Ala Ser Thr Val Arg Asp Gly Ser Thr Phe Pro His Trp Val
            150
                        155
Ile Thr Val Ala Pro Pro Ile Ile Phe Ala Leu Ile Ala Ile Ile Val
       165
                  170 175
Trp Gly Ser Leu Arg Ser Ser Gly Ala Ile Met Arg Trp Val Gly Lys
         180
                   185 190
Gly Gly Ile Glu Ala Ile Ser Arg Leu Met Gly Phe Leu Leu Val Cys
          200 205
    195
Met Gly Val Gln Phe Ile Ile Asn Gly Val Leu Glu Ile Val Lys Thr
 210
Tvr His
225
<210> 9090
<211> 283
<212> PRT
<213> Enterobacter cloacae
<400> 9090
Arg Thr Arg Leu Phe Ser Leu Lys Ile Lys Asn Asn Thr Thr Lys Thr
                          1.0
Gly Gly Asn Thr Met Gln Glu Ile Asp Phe Tyr Leu Val Asp Ala Phe
20 25
Ser Ala Ser Ser Phe Gly Gly Asn Pro Ala Ala Val Cys Pro Leu Asp
35 40
                         . 45
Ala Trp Leu Thr Asp Glu Thr Leu Leu Arg Met Ala Gln Gln His Asn
50 55
Gln Ser Glu Thr Ala Phe Phe Val Cys Thr Lys Gly Gly Ile Glu Leu
65 70 75
Arg Trp Phe Thr Thr Leu Thr Glu Val Asn Leu Cys Gly His Ala Thr
      85 90
Leu Ala Ala Ala Tyr Ile Leu Phe Asn Glu Leu Asp Tyr Pro Asp Ser
        100
                      105 110
Arg Leu His Phe Asp Thr Ala Ser Gly Arg Leu Thr Val Ser Arg Glu
   115 120 125
Gly Asp Trp Met Thr Leu Asp Phe Pro Ala Cys Pro Thr Gln Ala Gln
 130 135 140
Thr Pro Pro Pro Glu Leu Leu Thr Ala Leu Gly Ile Ser His Tyr Val
145 150 155 160
Glu Ala Arg Lys Gly Arg Ala Trp Val Leu Val Leu Glu Ser Arg Glu
           165 170 175
Gln Val Glu Ala Ile Asn Pro Asp Phe Ser Ala Met Thr Pro Gly Glu
        180 185
                                       190
His Lys Val Ala Val Thr Ala Arg Asp Glu Gly Glu Tyr Asp Phe Ile
                    200 205
Ser Arg Phe Phe Ser Pro Gly Val Ala Val Pro Glu Asp Pro Val Thr
210 215
                                 220
Gly Ser Ala His Thr Met Leu Ile Pro Tyr Trp Ser Glu Arg Leu Gly
              230
                              235
                                             240
Lys Thr Gln Met Phe Ala Arg Gln Val Ser Ala Arg Gly Gly Asp Val
            245
                           250
                                          255
Arg Cys Glu Leu Lys Gly Asp Arg Val Arg Met Gly Gly Gln Ala Ala
        260 265
Leu Tyr Leu Lys Gly Thr Val Phe Leu Arq
      275
                     280
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<210> 9091 <211> 476 <212> PRT <213> Enterobacter cloacae <400> 9091 Gln Ser Arg Pro Gln Ser Ile Asn Cys Tyr Tyr Val Glu Asp Ile Met 10 Thr Tyr Ser Ser Ala Thr His Ala His Ser Val Asn Pro Ala Thr Gly 20 25 Glu Thr Leu Ala Ala Tyr Pro Trp Ala Thr Ser Arg Asp Val Glu Arg 40 4.5 Ala Ile Ala Gln Ala Asp Thr Gly Phe Arg Gln Trp Arg Arg Glu Ser 55 Val Ala His Arg Ala Gln Lys Leu Arg Asp Leu Gly Ala Ala Leu Arg 70 75 Ser Arg Ala Glu Glu Met Ala Gln Thr Ile Ser Arg Glu Met Gly Lys 85 90 Pro Ile Val Gln Ala Arg Ala Glu Val Ala Lys Ser Ala Ser Leu Cys 100 105 110 Asp Trp Tyr Ala Glu His Gly Pro Ser Met Leu His Pro Glu Ser Thr 115 120 125 Gln Val Glu Asn Ala Val Ile Glu Tyr Arg Pro Leu Gly Pro Ile Leu 130 135 140 Ala Val Met Pro Trp Asn Phe Pro Leu Trp Gln Val Leu Arg Gly Ala 150 155 Val Pro Ile Leu Leu Ala Gly Asn Ser Tyr Leu Leu Lys His Ala Pro 165 170 175Asn Val Leu Gly Ser Ala Glu Leu Ile Gly Lys Val Phe Ala Asp Ala 180 185 190 Gly Phe Pro Glu Gly Val Phe Gly Trp Val Asn Ala Thr Asn Asp Gly 195 200 Val Ser Gln Ala Ile Asn Asp Arg Arg Ile Ala Ala Val Thr Val Thr 210 215 220 Gly Ser Val Arg Ala Gly Ala Ala Ile Gly Ala Gln Ala Gly Ala Ala 225 230235235 Leu Lys Lys Cys Val Leu Glu Leu Gly Gly Ser Asp Pro Phe Ile Val 245 250 255 Leu Asn Asp Ala Asp Leu Asp Leu Ala Val Asn Ala Ala Val Ala Gly 260 265 Arg Tyr Gln Asn Thr Gly Gln Val Cys Ala Ala Ala Lys Arg Phe Ile 275 280 285 Val Glu Ala Gly Val Ala Asp Ala Phe Thr Gln Arg Phe Val Asp Ala 290 295 300 Val Lys Ala Leu Lys Met Gly Ala Pro Asp Glu Glu Asp Asn Tyr Ile 305 310 315 Gly Pro Met Ala Arg Phe Asp Leu Arg Asp Glu Leu His Gln Gln Val 325 330 335 Gln Ala Thr Leu Ala Glu Gly Ala Thr Leu Leu Leu Gly Gly Glu Lys 340 345 350 Leu Ala Gly Ser Gly Asn Tyr Tyr Ala Pro Thr Val Leu Gly Gly Val 355 360 365 Thr Pro Gln Met Thr Ala Phe Arg Gln Glu Leu Phe Gly Pro Val Ala 375 380 Ala Ile Thr Val Ala Asn Asp Ala Ala His Ala Leu Gln Leu Ala Asn 390 395 Asp Ser Asp Phe Gly Leu Ser Ala Thr Val Phe Thr Ala Asn Asp Ala 405 410 415 Leu Ala Glu Thr Phe Ser Arg Glu Leu Glu Cys Gly Gly Val Phe Ile 420 425 Asn Gly Tyr Ser Ala Ser Asp Ala Arg Val Ala Phe Gly Gly Val Lys

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440
Lys Ser Gly Phe Gly Arg Glu Leu Ser His Phe Gly Leu His Glu Phe
                  455
Cys Asn Val Gln Thr Val Trp Lys Asp Arg Ile
              470
<210> 9092
<211> 316
<212> PRT
<213> Enterobacter cloacae
<400> 9092
Pro Glu Gly Lys Glu Gln Ser Val Ala Ala Val Ile His Asn Glu Met
                          10
Leu Asp Glu Ile Leu Ala Gln Val Arg Pro Leu Leu Gly Gln Gly Lys
  20
                         25
Val Ala Asp Tyr Ile Pro Ala Leu Ala Ser Ile Ser Gly Asn Lys Leu
  35
          40
Gly Ile Ala Ile Cys Thr Val Asp Gly Gln Arg Phe Gln Ala Gly Asp
  50 55
Ala Leu Glu Arg Phe Ser Ile Gln Ser Ile Ser Lys Val Leu Ser Leu
    70
                               75
                                               80
Val Ala Ala Met Arg Gln Tyr Asp Glu Gln Glu Ile Trp Gln Arg Val
      85
                            90
Gly Lys Asp Pro Ser Gly Gln Pro Phe Asn Ser Leu Leu Gln Leu Glu
    100 105 110
Ile Glu Gln Gly Lys Pro Arg Asn Pro Phe Ile Asn Ala Gly Ala Leu
 115
                     120 125
Val Val Cys Asp Met Leu Gln Ser Arg Leu Ser Ala Pro Arg Gln Arg
 130 135 140
Met Leu Gln Ile Val Arg Gln Leu Ser Gly Met Gln Asp Ile Gly Tyr
               150
                               155
Asp Pro Val Val Ala Arg Ser Glu Phe Glu His Ser Ala Arg Asn Ala
      165 170
Ala Ile Ala Trp Leu Met Lys Ser Phe Gly Asn Phe His Asn Asp Val
   180 185
                                         190
Ala Thr Val Leu Gln Asn Tyr Phe His Tyr Cys Ala Leu Lys Met Asn
   195
                     200
                                      205
Cys Val Glu Leu Ala Gln Thr Phe Leu Phe Leu Ala His Gln Gly His
                  215 220
Ala Pro His Leu Gly Glu Asp Val Val Ser Pro Met Gln Ala Arg Gln
225 230
                             235
Ile Asn Ala Leu Met Ala Thr Ser Gly Met Tyr Gln Asn Ala Gly Glu
       245
                            250
Phe Ala Trp Arg Val Gly Leu Pro Ala Lys Ser Gly Val Gly Gly
        260
                         265
                                         270
Val Val Ala Ile Val Pro His Glu Met Ala Ile Ala Val Trp Ser Pro
     275
                     280
                                    285
Glu Leu Asp Glu Thr Gly Asn Ser Leu Ala Gly Val Ala Ala Leu Glu
 290 295
Gln Leu Thr Lys Arg Leu Gly Arg Ser Val Tyr
               310
                               315
<210> 9093
<211> 329
<212> PRT
<213> Enterobacter cloacae
<400> 9093
Cys Ser Ala Ser Gly Asp Val Met Lys Ala Pro Gln Ile Pro Val Asn
                            10
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Glu Ala Glu Arg Met Asn Ala Leu Arg Glu Ser Gly Leu Leu Glu Ile Asp Asn Tyr Pro Ala Phe Asp Arg Leu Thr Arg Leu Ala Thr Arg Phe Phe Arg Val Pro Leu Ala Met Ile Thr Leu Val Asp Asp His Ala Ala Ile Val Lys Ser Ala Asp Gly Arg Ala Leu Ala Ser Gln Pro Arg Asp 7.0 Leu Ser Phe Cys Gly His Thr Ile Leu Gly Asp Ala Pro Leu Val Val 90 85 Ser Asp Thr Leu Leu Asp Glu Arg Phe Ala Asp Asn Pro Gln Val Ala 100 105 110 Gly Asp Pro Gly Val Arg Phe Tyr Ala Gly Phe Pro Leu Arg Leu Arg 115 120 125 Asp Gly Ala Cys Val Gly Ser Leu Cys Leu Ile Asp Tyr Ala Pro Arg 135 140 Glu Phe Thr Ala Ala Asp Ala Ala Val Leu Ala Asp Leu Ser Ala Leu 150 155 Ala Glu Asp Glu Phe Ala Ala Val Ser Ala Ala Thr Thr Asp Glu Leu 165 170 175 Thr Gly Leu Phe Asn Arg Arg Gly Phe Asn Gln Phe Ala Gln Phe Ala 180 185 190 Leu Ser Val Ser Gln Arg Arg Ala Glu Pro Leu Thr Leu Gly Trp Leu 195 200 205 Asp Leu Asp His Phe Lys Thr Ile Asn Asp Arg Phe Gly His Gln Glu 210 215 220 Gly Asp Lys Ala Leu Lys Ala Met Ala Ala Leu Met Arg Ser Ser Phe 225 230 235 Arg Glu Ala Asp Leu Leu Val Arg Phe GIy Gly Asp Glu Phe Ala Val 245 250 255 Leu Phe Ala Asp Thr Asp Glu Pro Gly Ala Trp Ile Ala Met Gln Tyr 260 265 270 Leu Val Glu Gln Thr Glu Lys Tyr Asn Ala Arg Gln Leu His Pro Trp 275 280 285 Ser Leu Gln Phe Ser Trp Gly Leu Ser Glu Phe Asp His His Arg Asn 290 295 300 Asp Ile Gln Ala Trp Leu Lys His Ala Asp Ala Gln Met Tyr Ala Met 305 310 315 Lys Arg GIn His His Gly Glu Lys 325

<210> 9094 <211> 488 <212> PRT

<213> Enterobacter cloacae

<400> 9094 Arg Thr Ser Ile Val Asn Thr Leu Asn Arg Arg Asp Phe Pro Gly Ala Cys Tyr Pro Glu Arg Ile Ile Gln Phe Gly Glu Gly Asn Phe Leu Arg 25 3.0 Ala Phe Val Asp Trp Gln Ile Asp Leu Leu Asn Glu His Thr Asp Leu 3.5 40 Asn Ala Gly Val Val Ile Val Arg Pro Ile Gln Ser Asp Phe Pro Pro 55 Ser Leu Ser Thr Gln Asp Gly Leu Tyr Thr Thr Ile Ile Arg Gly Leu 75 70 Asn Glu Gln Gly Glu Ala Val Ser Asp Ala Arg Leu Ile Arg Ser Val 85 90 Asn Arg Glu Ile Ser Val Tyr Ser Gln Tyr Asp Glu Phe Leu Ala Leu 100 105

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Ala His Asn Pro Asp Met Arg Phe Val Phe Ser Asn Thr Thr Glu Ala
                    120
     115
Gly Ile Ser Tyr His Ala Gly Asp Lys Leu Asp Asp Ala Pro Ala Ala
                                140
Ser Tyr Pro Ala Lys Leu Thr Arg Leu Leu Phe Glu Arg Phe Thr His
              150
                             155
Phe Asn Gly Ala Ala Asp Lys Gly Trp Ile Ile Ile Pro Cys Glu Leu
         165
                          170
Ile Asp Tyr Asn Gly Asp Ala Leu Arg Glu Leu Val Leu Arg Tyr Ala 180 \hspace{1.5cm} 185 \hspace{1.5cm} 190 \hspace{1.5cm}
Gln Glu Trp Ala Leu Pro Ala Ala Phe Ile Ala Trp Leu Asn Asp Ala
 195 200
Asn Thr Phe Cys Ser Thr Leu Val Asp Arg Ile Val Thr Gly Tyr Pro
      215
                                220
Arg Asp Glu Val Ala Glu Leu Glu Ala Gly Leu Gly Tyr His Asp Ser
225 230 235
Phe Leu Asp Thr Ala Glu His Phe Tyr Leu Phe Val Ile Gln Gly Pro
    245 250 255
Lys Ser Leu Ala Ala Glu Leu Arg Leu Asp Lys Tyr Pro Leu Asn Val
        260 265 270
Leu Ile Val Asp Asp Ile Lys Pro Tyr Lys Glu Arg Lys Val Ala Ile
275 280 285
Leu Asn Gly Ala His Thr Ala Leu Val Pro Val Ala Phe Gln Ala Gly
 290 295 300
Leu Asp Thr Val Gly Glu Ala Met Asn Asp Ala Glu Ile Cys Ala Phe
305 310 315 320
Val Glu Lys Ala Ile Tyr Glu Glu Ile Ile Pro Val Leu Asp Leu Pro
        325 330 335
Arg Asp Glu Leu His Ser Phe Ala Ser Ala Val Thr Gly Arg Phe Arg
      340 345 350
Asn Pro Tyr Ile Lys His Gln Leu Leu Ser Ile Ala Leu Asn Gly Met
                    360 365
 355
Thr Lys Tyr Arg Thr Arg Ile Leu Pro Gln Leu Leu Ala Gly Gln Lys
370 375 380
Ala Thr Gly Lys Leu Pro Ala Arg Leu Thr Phe Ala Leu Ala Ala Leu
       390 395 400
Ile Ala Phe Tyr Arg Ala Glu Arg Asn Gly Glu Arg Tyr Pro Val Gln
           405 410 415
Asp Asp Ala His Trp Leu Glu Arg Tyr Gln Gln Leu Trp Thr Gln His
        420 425 430
His Asp Lys Gln Val Thr Thr Arg Glu Leu Val Ser Ser Val Leu Ser
     435 440 445
Val Ser Glu His Trp Glu Gln Asp Leu Thr Leu Val Asn Gly Leu Val
  450 455 460
Lys His Val Ala Leu Asp Leu Asp Ala Ile Leu Ser Lys Gly Met Arg
465 470
                             475
Asp Ala Val Lys Pro Leu Cys
            485
```

<210> 9095 <211> 321 <212> PRT <213> Enterobacter cloacae

Leu Leu Ser Ile Ala Val Ile Val Met Leu Pro Trp Tyr Thr Ser Leu Gly Ile Arg Phe Thr Val Ala Pro Phe Ser Ile Leu Gly Val Ala Ile 70 Ala Ile Phe Leu Gly Phe Arg Asn Asn Ala Cys Tyr Ser Arg Tyr Val 90 8.5 Glu Ala Arg Leu Leu Trp Gly Gln Leu Met Ile Ala Ala Arg Ser Leu 105 100 Phe Arg Glu Val Lys Asn Thr Leu Pro Asp Asp Lys His Leu Gly Glu 115 120 125 Phe Val Arg Leu Gln Ile Ala Phe Ala Asn Cys Leu Arg Met Thr Leu 130 135 140 Arg Arg Glu Thr Asn Ala Asp Gln Leu Ser Arg Tyr Leu Ala Pro Asp 145 150 155 Asp Leu Arg Lys Val Met Asp Ala Asn Ser Pro Ala Asn Arg Ile Leu 165 170 Leu Ile Met Gly Glu Trp Leu Ala Val Arg Arg Arg Ser Gly His Leu 180 185 190 Ser Asp Ile Leu Phe His Ser Leu Asn Asn Arg Leu Asn Asp Met Ser 195 200 205 Ile Val Leu Ala Gly Cys Glu Arg Ile Ala Asn Thr Pro Val Pro Phe 210 215 220 Ala Tyr Thr Leu Ile Leu His Arg Thr Val Tyr Leu Phe Cys Ile Met 225 230 235 240 Leu Pro Phe Ala Leu Val Val Asp Leu His Tyr Met Thr Pro Phe Val 245 250 255 Ser Ala Leu Ile Ser Tyr Thr Phe Ile Ser Leu Asp Thr Leu Ala Glu 260 265 270 Glu Leu Glu Asp Pro Phe Gly Thr Glu Asp Asn Asp Leu Pro Leu Asp 275 280 285 Ala Ile Cys Asn Met Met Glu Arg Asp Leu Leu Gln Met Asn Asp Glu 290 295 300 Glu Asn Ile Pro Glu Arg Leu Met Pro Asp Lys His Tyr Gln Leu Thr 310 315

<210> 9096 <211> 432 <212> PRT

<213> Enterobacter cloacae

<400> 9096 Met Thr Leu Trp Pro Arg Thr Leu Leu Ala Arg Leu Leu Ile Ile Val 10 Leu Leu Gly Leu Leu Ala Asn Ala Leu Ser Leu Thr Leu Val Met 25 2.0 Val Glu Arg Met His Ser Ala Arg Thr Val Met Leu Gly Asn Leu Glu 4.0 35 Asn Asp Val Ala Thr Ser Val Ala Ile Leu Asp Arg Leu Pro Gly Lys 55 Glu Arg Pro Glu Trp Leu Glu Arg Leu Ser Arg Gly Asn Tyr Arg Tyr 7.0 75 65 Ile Leu Gly Pro Gly Glu Ala Gly Ala Ala Pro Thr Asp Lys Arg Ser 85 90 Arg Asp Ala Ile Arg Thr Leu Lys Glu Thr Leu Ser Ala Gln Tyr Pro 105 100 Leu Gln Phe Thr Ala Val Pro Gly Pro Ile Ser His Ile Gln Ala His 120 125 115 Leu Thr Leu Arg Asp Gly Ala Pro Leu Thr Ile Asp Leu Ile Pro Arg 130 135 140

```
Met Pro Pro Val Ala Ser Trp Leu Pro Val Val Leu Val Leu Gln Leu
145
           150
                   155
Leu Leu Val Ala Leu Cys Ser Trp Ile Ala Val Arg Gln Val Val Arg
                          170
          165
Pro Phe Leu Gln Phe Thr Arg Ala Val Asp Ser Leu Asp Pro Ala Ala
              185
                                     190
His Ser Pro Met Thr Glu Lys Gly Pro Val Glu Val Arg Gln Ala Ala
                                  205
    195 200
His Ala Phe Asn Glu Met Gln Ser Arg Ile Gln Thr Tyr Leu Arg Glu
      215
                               220
Arg Ala Gln Ile Leu Ala Ser Ile Ser His Asp Leu Gln Thr Pro Ile
225 230
                            235
Thr Arg Met Lys Leu Arg Ile Glu Met Ala Asp Gln Pro Glu Leu Arg
     245 250
Asp Lys Leu Leu Ser Asp Leu Asp Asn Met Ser Arg Leu Val Arg Glu
     260 265 270
Gly Ile Ala Tyr Ala Arg Ser Ser Glu Ser Leu Glu Glu Thr Thr Leu
   275 280 285
Lys Leu Glu Leu Asn Ala Trp Val Asn Ser Ile Ala Ser Asp Tyr Gln
290 295
                               300
Asp Ile Gly Lys Asn Val Gln Phe His Ala Arg Asn Ala Arg Leu Pro
305 310 315 320
Ile Val Thr Arg Pro Gln Ala Leu Arg Arg Val Met Thr Asn Leu Leu
          325 330 335
Asp Asn Ala Leu Lys Phe Gly Asp Ser Ala Val Ile Glu Ile Asp Glu
        340 345
                                     350
Asp Glu Arg Gln Val Ala Ile Arg Ile Met Asp Asn Gly Pro Gly Ile
 355 360 365
Pro Glu Ala Glu Leu Glu Ala Val Leu Gln Pro Phe Tyr Arg Val Glu
                375 380
Thr Ser Arg Asn Arg Glu Thr Gly Gly Thr Gly Leu Gly Leu Ala Ile
             390 395
Ala Ala Gln Leu Thr Ala Gln Leu Asp Gly Lys Leu His Ile Ala Asn
   405 410 415
Arg Ala Glu Gly Gly Leu Ala Val Ser Val Thr Leu Pro Arg Gly
       420
               425
```

<210> 9097 <211> 442

<212> PRT

<213> Enterobacter cloacae

<400> 9097

130

Leu Tyr Ala Cys Val Ser Ala Pro Arg Ala Asp Thr Gln Ala Asp Lys 10 Ile Gln Leu Phe Ala His Gly Leu Asn Thr Phe Val Arg Ser Asn Asn 25 Leu Thr Ala Pro Ser Gln Gln Pro Tyr Arg Glu Val Val Met Phe Leu 4.5 3.5 4.0 Ile Ile Ala Phe Leu Gly Gly Met Ile Ser Leu Leu Ser Pro Cys Thr 55 60 Leu Pro Val Ile Pro Leu Leu Phe Ala Gly Phe Gln Gly Gln Arg Lys 7.0 75 His Ile Leu Ala Leu Leu Ser Gly Met Ile Val Met Phe Thr Leu Val 85 90 Ala Met Val Val Thr Val Ala Ser Glu Trp Ile Ala Asp Ala Thr Val 105 100 Ile Gly Arg Trp Ile Ala Leu Leu Ile Leu Ser Ile Ala Ala Leu Ala 115 120 125 Leu Phe Phe Pro Gln Phe Ala Gln Arg Ile Ala Arg Pro Ala Val Ser 135

```
Ala Gly Asn Val Leu Asn Thr His Ser Val Gln Arg Arg Gly Leu Val
                   155 160
      150
Ser Ala Phe Leu Ala Gly Leu Ala Val Gly Leu Leu Trp Ser Pro Cys
                          170
           165
Ala Gly Pro Ile Leu Gly Ala Ile Phe Ser Ile Asn Ile Ala Gly His
                       185
        180
Ser Ala Ile Ala Thr Gly Ala Leu Leu Ala Ala Tyr Gly Ser Gly Cys
                    200
                                   205
     195
Ala Leu Met Leu Gly Leu Leu Val Ala Gly Gly Arg Lys Leu Ile Thr
               215
                                220
Pro Leu Arg Val Lys Ser Ala Leu Met Ala Arg Leu Arg Gln Gly Ala
225 230
                             235
Gly Val Met Met Leu Ala Ala Val Ala Phe Asn Ala Ser Gly Met Thr
      245 250
Ser Ala Leu Lys Gly Ala Asn Gly Ile Ala Asp Gln Leu Glu Asn Ala
        260 265
Leu Leu Ser Leu Ala Gln Pro Ser Ser Thr Gln Val Lys Leu Gln Pro
    275 280 285
Val Ala Asp Ala Thr Pro Ser Ser Gln Leu Pro Ser Leu Ser Gly Gly
 290 295 300
Thr Gly Trp Val Asn Gly Asp Pro Val Thr Ser Glu Ala Leu Arg Gly
      310 315
                                  320
305
Lys Val Val Leu Ile Asp Phe Trp Thr Trp Asp Cys Ile Asn Cys Gln
           325 330 335
His Thr Leu Pro His Val Arg Asp Trp Ala Lys Lys Tyr Glu Ser Gln
        340 345 350
Gly Leu Val Val Ile Gly Val His Thr Pro Glu Tyr Pro Trp Glu Lys
 355 360 365
Pro Leu Ser Ser Val Lys Asn Ala Val Asn Lys Trp Gln Leu Pro Tyr
 370 375 380
Arg Val Val Thr Asp Asn Asn Tyr Lys Ile Trp Ser Ala Phe Gly Asn 385 $390$
Gln Tyr Trp Pro Ala His Tyr Tyr Phe Asp Ala Lys Gly Gln Leu Arg
         405 410 415
Tyr Thr Ala Phe Gly Glu Gly Asn Tyr Asp Lys Gln Glu Ala Val Ile
        420 425
Gln Gln Leu Leu Lys Glu Ala Arg Ser
```

435 <210> 9098 <211> 658 <212> PRT

<213> Enterobacter cloacae

115

<400> 9098 Arg Arg Ser Met Arg Leu His Ser His His Leu Glu Leu Leu Ser Pro 10 Ala Arg Asp Ala Ala Ile Ala Arg Glu Ala Ile Leu His Gly Ala Asp 2.0 2.5 Ala Val Tyr Ile.Gly Gly Pro Gly Phe Gly Ala Arg His Asn Ala Ser 40 35 Asn Ser Leu Arg Asp Ile Ala Glu Leu Val Pro Phe Ala His Arg Phe 5.5 50 Gly Ala Lys Val Phe Val Thr Leu Asn Thr Ile Leu His Asp Asp Glu 7.0 75 Leu Glu Pro Ala Gln Arg Leu Ile Thr Asp Leu Tyr Gln Thr Gly Val 90 85 Asp Ala Leu Ile Val Gln Asp Met Gly Val Leu Glu Leu Asp Ile Pro 100 105 110 Pro Ile Glu Leu His Ala Ser Thr Gln Cys Asp Ile Arg Thr Val Glu Lys Ala Lys Phe Leu Ser Asp Val Gly Phe Thr Gln Ile Val Leu Ala 135 140 130 Arg Glu Leu Asn Leu Asn Gln Ile Arg Asp Ile His Gln Ala Thr Asp 155 150 Ala Thr Ile Glu Phe Phe Ile His Gly Ala Leu Cys Val Ala Tyr Ser 165 170 175 Gly Gln Cys Asn Ile Ser His Ala Gln Thr Gly Arg Ser Ala Asn Arg 185 190 180 Gly Asp Cys Ser Gln Ala Cys Arg Leu Pro Tyr Thr Leu Lys Asp Asp 200 195 Gln Gly Arg Val Val Ala Phe Glu Lys His Leu Leu Ser Met Lys Asp 210 215 220 Asn Asp Gln Thr Ala Asn Leu Gly Ala Leu Ile Asp Ala Gly Val Arg 230 235 Ser Phe Lys Ile Glu Gly Arg Tyr Lys Asp Met Ser Tyr Val Lys Asn 245 250 255 Ile Thr Ala His Tyr Arg Gln Met Leu Asp Ala Ile Ile Asp Asp Arg 260 265 270 Gly Asp Leu Ala Arg Val Ser Ala Gly Arg Thr Glu His Phe Phe Ile 275 280 285 Pro Ser Thr Asp Lys Thr Phe His Arg Gly Ser Thr Asp Tyr Phe Val 290 295 300 Asn Ala Arg Lys Gly Asp Ile Gly Ala Phe Asp Ser Pro Lys Phe Ile 310 315 320 Gly Leu Pro Val Gly Glu Val Leu Lys Val Ala Lys Asp His Leu Asp 325 330 335 Val Gln Val Thr Glu Pro Leu Ala Asn Gly Asp Gly Leu Asn Val Met 340 345 350 Ile Lys Arg Glu Val Val Gly Phe Arg Ala Asn Thr Val Glu Lys Thr 355 360 365 Gly Glu Asn Arg Tyr Arg Val Trp Pro Asn Glu Met Pro Ala Asp Leu 370 375 380 Tyr Lys Ala Arg Pro Asn Ala Ala Leu Asn Arg Asn Leu Asp His Asn 385 390 395 400 Trp Gln Gln Ala Leu Leu Lys Thr Ser Ser Glu Arg Arg Ile Ala Val 405 410 415 Asp Ile Ala Leu Gly Gly Trp Glu Glu Gln Leu Ile Leu Thr Met Thr 420 425 430 Cys Glu Asp Gly Ile Ser Val Tar His Thr Leu Asp Gly Leu Phe Glu 435 440 445 Val Ala Asn Asn Ala Glu Lys Ala Leu Asn Asn Leu Lys Asp Gly Val 450 455 460 Ala Lys Leu Gly Gln Thr Ile Tyr Tyr Ala Arg Asn Ile Glu Val Asn 465 470 475 480 Leu Pro Asp Ala Leu Phe Val Pro Asn Ser Leu Leu Asn Gln Phe Arg 485 490 495 Arg Glu Thr Ala Glu Met Leu Asp Glu Val Arg Leu Ala Asn Tyr Ser $500 \hspace{1.5cm} 505 \hspace{1.5cm} 510$ Arg Gly Ser Arg Lys Ala Glu Ala Val Pro Ala Pro Val Tyr Pro Asp 520 525 Thr His Leu Ser Phe Leu Ala Asn Val Tyr Asn His Lys Ala Arg Ala 530 535 540 Phe Tyr His Arg His Gly Val Gln Leu Ile Asp Ala Ala Tyr Glu Ala 550 555 His Glu Glu Lys Gly Asp Val Pro Val Met Ile Thr Lys His Cys Leu 565 570 575 Arg Phe Ala Phe Asn Leu Cys Pro Lys Gln Ala Lys Gly Asn Ile Lys 585 590 580 Ser Trp Lys Ala Thr Pro Met Gln Leu Val Asn Gly Asp Glu Val Leu 600 Thr Leu Lys Phe Asp Cys Arg Pro Cys Glu Met His Val Ile Gly Lys

```
615
Met Lys Asn His Ile Phe Lys Met Pro Pro Pro Gly Ser Ile Val Ala
625 630 635
Ser Val Ser Pro Asp Asp Leu Met Lys Thr Leu Pro Lys Arg Lys Gly
                645
                                     650
Ser
```

<210> 9099 <211> 140 <212> PRT <213> Enterobacter cloacae

<400> 9099 Gly Arg Phe Met Ser Tyr Val Thr Glu Phe Pro Ala Ala Glu Pro Gln 1.0 Glu Ala Val Gly His Phe Leu Arg Arg Leu Ser Val Glu Thr Asp Cys 20 25 3.0 Ala Asp Val His His Ala Val Ser Ser Gly Glu Gln Asp Phe Val Leu 35 40 45 Leu His Val Val Gly Lys Pro Glu His Phe Ala Arg Arg His Leu Pro 50 55 60 Gly Ala Leu His Leu Pro Trp Ser Gln Ile Thr Ala Glu Arg Met Thr 7.0 75 80 Ala Trp Pro Glu Gly Thr Leu Phe Val Val Tyr Cys Ala Gly Pro His 85 90 Cys Asn Gly Ala Asp Arg Ala Ala Leu Lys Leu Ala Arg Leu Gly Leu 100 105 110 Pro Val Lys Ile Met Leu Gly Gly Met Thr Gly Trp Glu Asp Glu Arg 115 120

Phe Ala Phe Ala Gly Ser Ser Ser Pro Ala Leu

130 , 135

<210> 9100 <211> 376

<212> PRT <400> 9100

<213> Enterobacter cloacae

Arg Arg Gln Thr Glu Glu Ile Ser Met Gln Arg His His Ala Pro Tyr 10 Arg Ala Asp Val Val Gly Ser Phe Leu Arg Pro Asp Ser Val Lys Gln 25 Ala Arg Leu Gln Phe Ala Ser Gly Glu Ile Asp Ala Gly Gln Leu Arg 40 Ala Val Glu Asp Glu Ala Ile Arg His Val Val Glu Gln Gln Cys Ala 55 Cys Gly Leu His Val Val Thr Asp Gly Glu Phe Arg Arg Ala Trp Trp 75 His Phe Asp Phe Phe Asp Gly Leu Gln Gly Val Glu Arg Tyr Asp Ser 90 Gln Gln Gly Ile Gln Phe Asn Gly Val Gln Thr Lys Ala His Gly Val 105 Arg Val Thr Gly Lys Leu Gly Phe Gly Asp His Pro Met Leu Glu Asp 115 120 125 Phe Arg Tyr Leu Lys Ser Ile Ser Gly Asn Ala Gln Pro Lys Met Thr 130 135 140 Ile Pro Ser Pro Ser Val Leu His Phe Arg Gly Gly Arg Lys Asp Ile

150 155 Asp Ala Thr Val Tyr Pro Asp Leu Lys Asp Tyr Phe Asp Asp Leu Ala

210

```
Thr Thr Trp Arg Asp Ala Ile Arg Ala Phe Tyr Asp Ala Gly Cys Arg
         180
                185
Tyr Leu Gln Leu Asp Asp Thr Val Trp Ala Tyr Leu Cys Ser Glu Asp
                     200
     195
Gln Arg Arg Gln Ile Arg Glu Arg Gly Asp Asp Ala Asp Glu Leu Ala
                  215
Arg Thr Tyr Ala Arg Val Leu Asn Lys Ala Leu Glu Gly Lys Pro Asp
               230
                               235
Asp Leu Thr Ile Gly Leu His Val Cys Arg Gly Asn Phe Arg Ser Thr
           245 250
Trp Ile Ser Glu Gly Gly Tyr Glu Pro Val Ala Glu Val Leu Phe Gly
       260 265
Thr Val Asn Val Asp Ala Phe Phe Leu Glu Tyr Asp Asn Asp Arg Ser
    275 280
                                     285
Gly Asp Phe Ala Pro Leu Arg Phe Val Arg Pro Gly Lys Gln Gln Val
290 295 300
Val Leu Gly Leu Ile Thr Thr Lys His Gly Glu Leu Glu Asn Pro Glu
305 310 315 320
Gly Val Lys Ala Arg Leu Glu Glu Ala Ala Arg Tyr Val Ala Lys Glu
    325 330
                                           335
Gln Ile Cys Leu Ser Pro Gln Cys Gly Phe Ala Ser Thr Glu Glu Gly
 340 345 350
Asn Ser Leu Ser Glu Ala Gln Gln Trp Asp Lys Ile Arg Leu Val Thr
355 360
Gln Ile Ala Ser Asp Val Trp
<210> 9101
<211> 538
<212> PRT
<213> Enterobacter cloacae
<400> 9101
Lys Pro Pro Ala Thr Lys Pro Pro Pro Gly Arg Asp Val Met Asn Ala
                      10
Ile Arg Met Met Ile Ala Ile Val Trp Leu Thr Gly Leu Leu Pro Gly
                       25
       20
Met Ala Gln Ala Ser Asp Ala Asp Asp Phe Val Ala Ala Ser Arg Ser
35 40
                                  4.5
Gln Gln Thr Ala Met Leu Thr Arg Trp Ala Ala Thr Pro Glu Pro Ala
            55 60
Arg Leu Pro Leu Leu Lys Ala Leu Gln Gln Glu Asn Leu Tyr Thr Asp
             70 75 80
Ser Gln Lys Lys Ala Phe Thr Arg Ile Asp Gly Glu Met Val Ala Leu
            85 90
Gly Ala Ala Lys Ser Ala Glu Gly Thr Thr Lys Ala Val Arg Leu Thr
         100
                        105 110
Asn Arg Leu Arg Val Leu Thr Val Thr Ala Leu Ala Thr His Gln Leu
    115 120
                         125
Val Ser Asp Ser Val Thr Glu Arg Arg His Ala Ala Arg Gln Leu Gln
                135 140
Arg Asp Ala Gln Pro Asp Met Leu Gly Phe Leu Gln Gln Arg Ala Asn 145 150 155 160
Arg Glu Thr Asp Asp Ile Thr Arg Gln Ser Leu Arg Leu Ala Leu Ala
           165 170 175
Asn Leu Gln Leu Ala Ser Pro Gln Ala Glu Thr Arg Leu Asn Ala Val
       180 185 190
Glu Leu Leu Gly Gln Ser Asp Asp Pro Asp Val Gln Ala Thr Leu Thr
    195 200 205
Pro Phe Thr Arg Ala Gln Thr Glu Pro Asp Ala Arg Val Arg Ala Ala
```

```
Ala Ala Glu Ser Leu Asp Arg Ile Gln His Arg Leu Met Trp Gly Glu
      230
                      235
Leu Leu Gly Gln Ala Phe Met Gly Leu Ser Leu Gly Ser Val Leu Leu
                           250
           245
Leu Ala Ala Leu Gly Leu Ala Ile Thr Tyr Gly Leu Leu Gly Val Ile
              265
         260
Asn Met Ala His Gly Glu Met Leu Met Leu Gly Ala Tyr Ala Thr Trp
                                 285
 275
                     280
Met Val Gln Gln Val Met Ala Gln Trp Met Pro Gln Trp Leu Ala Leu
 290 295
                                  300
Tyr Pro Val Val Ala Leu Pro Val Ala Phe Cys Leu Thr Ala Gly Ile
              310 315
305
Gly Met Val Leu Glu Arg Thr Val Ile Arg His Leu Tyr Gly Arg Pro
                           330 335
       325
Leu Glu Thr Leu Leu Ala Thr Trp Gly Ile Ser Leu Met Leu Ile Gln
        340 345 350
Leu Val Arg Met Thr Phe Gly Ala Gln Asn Leu Glu Val Ala Asn Pro
 355 360 365
Ala Trp Leu Ser Gly Gly Val Gln Val Phe Ala Asn Leu Thr Leu Pro
370 375 380
Trp Asn Arg Ile Val Val Leu Gly Phe Val Leu Met Val Leu Phe Phe
385 390 395 400
Thr Trp Leu Ile Leu Asn Lys Thr Arg Leu Gly Leu Asn Val Arg Ala
           405 410 415
Val Thr Gln Asn Arg Ser Met Ala Ala Cys Cys Gly Val Pro Thr Gly
        420 425
                                        430
Arg Val Asp Met Leu Ala Phe Gly Leu Gly Ser Gly Ile Ala Gly Leu
    435 440 445
Gly Gly Val Ala Leu Ser Gln Leu Gly Asn Val Gly Pro Glu Leu Gly
 450 455 460
Gln Gly Tyr Ile Ile Asp Ser Phe Leu Val Val Val Leu Gly Gly Val 465 $470$
Gly Gln Leu Ala Gly Ser Val Ala Ala Ala Phe Gly Leu Gly Ile Phe 485 490 495
Asn Lys Ile Leu Glu Pro Gln Met Gly Ala Val Leu Gly Lys Ile Leu
        500 505 510
Ile Leu Val Ala Ile Ile Leu Phe Ile Gln Lys Arg Pro Gln Gly Leu
  515 520
Phe Ala Leu Lys Gly Arg Val Thr Asp
  530
<210> 9102
<211> 227
<212> PRT
<213> Enterobacter cloacae
<400> 9102
Tyr Asn Ile Pro Val Leu Ile Lys Arg Asn Glu Asp Phe Ala Val Ala
                      1.0
Ala Gln Pro Gly Lys Ile Ala Leu Thr Leu Gly Thr Leu Leu Val Ser
         20
                        25
Gly Ser Leu Phe Ala His Ser His Gly His Gln Met Thr Glu Ala Glu
      35
                     4 0
Gin Lys Ala Ala Asn Gly Val Phe Glu Asp Lys Asp Val Arg Asp Arg
 50
                  55
                            60
Lys Leu Ser Asp Trp Asp Gly Thr Trp Gln Ser Val Tyr Pro Phe Leu
               70
                            7.5
```

Leu Asp Gly Ser Leu Asp Pro Val Phe Glu Lys Lys Ala Gln Lys Gly

90 Glu Lys Ser Ala Ala Glu Val Lys Ala Tyr Tyr Arg Lys Gly Tyr Ala 105

8.5

100

95

```
Thr Asp Val Asp Ala Ile Gly Ile Glu Asn Asn Val Met Glu Phe His
  115
                       120
Arg Gly Lys Thr Val Ser Ser Cys Arg Tyr Asp Tyr Ser Gly Tyr Lys
                    135
                                     140
Ile Leu Thr Tyr Ala Ser Gly Lys Lys Gly Val Arg Tyr Leu Phe Glu
                150
                                  155
145
Cys Lys Asp Asn Ala Ser Glu Ala Pro Lys Phe Val Gln Phe Ser Asp
                  170 175
             165
His Ile Ile Gly Pro Lys Ala Ser Ser His Phe His Ile Phe Met Gly
               185
                                           190
         180
Asn Thr Ser His Glu Ala Leu Leu Lys Glu Met Asp Asn Trp Pro Thr
    195 200
Tyr Tyr Pro Asn Glu Met Tyr Lys Glu Gln Val Val Glu Glu Met Leu
 210
        215
His His
225
```

<210> 9103 <211> 275 <212> PRT <213> Enterobacter cloacae

<400> 9103 Glu Glu Pro Thr Met Gln Glu Ile Asp Pne Tyr Leu Val Asp Ala Phe 10 Ser Asp Arg Ala Phe Gly Gly Asn Ala Ala Ala Val Cys Pro Leu Glu 20 25 30 Ala Trp Leu Pro Asp Glu Thr Leu Leu Lys Met Ala Lys Gln His Asn 35 40 45 Gln Ser Glu Thr Ala Phe Phe Val Arg Thr Asp Asn Gly Phe Glu Leu 55 Arg Trp Phe Thr Thr Gln Asp Glu Ile Asn Leu Cys Gly His Ala Thr 65 70 75 Leu Ala Ala Ser His Val Ile Phe Glu Tyr Leu Asp Tyr Pro His Thr 85 90 Glu Ile Thr Phe Thr Thr Arg Phe Val Gly Glu Leu Thr Val Gln Arg 100 105 110 Ser Gly Asp Trp Leu Thr Leu Asn Phe Pro Ala Trp Ser Thr Glu Val 115 120 125 Val Asp Thr Pro Pro Pro Val Leu Phe Ser Ala Leu Gly Ile Asn Ala 130 135 140 Ala Asn Glu Val Arg Val Gly Arg Asp Tyr Met Val Val Leu Asp Ser 150 155 Gln Arg Gln Val Glu Ala Leu Thr Pro Asp Ile Thr Ala Met Leu Pro 165 170 175 Leu Gly Lys Met Val Cys Val Thr Ala Pro Gly Asp Glu Tyr Asp Phe 180 185 190 Val Ser Arg Phe Phe Cys Pro Gly Glu Gly Val Pro Glu Asp Pro Val 195 200 205 Thr Gly Ser Ala His Ser Met Leu Ile Pro Tyr Trp Ser Glu Lys Leu 210 215 220 Gly Lys Thr Gln Met Ser Ala Arg Gln Val Ser Leu Arg Gly Gly Asp 230 235 225 Leu Arg Cys Glu Leu Lys Gly Asp Arg Val Leu Ile Gly Gly Gln Ala 245 Thr Leu Tyr Met Lys Gly Lys Ile Phe Leu Arg Leu Gln Asp Tyr Val

265

Gln Leu 275

<210> 9104

```
<212> PRT
```

<213> Enterobacter cloacae

<400> 9104 Trp Phe Cys His Phe Arg Phe Val Asp Ser Leu Ala Pro Asn Val Leu Leu Gln Lys Lys Ile Met Asn Leu Thr Gln Ile Phe Arg Arg Leu Ala 2.0 25 Pro Arg Phe Ile Pro Arg Gln Phe Gly Leu Leu Thr Gly Ile Phe Cys 40 Ile Ile Gly Leu Phe Ser Ala Leu Gln Leu Ser Ser Ser Phe Leu Leu 50 55 60 Thr Ala Ser Leu Asn Gln Ala Gln Arg Asn Glu Gln Arg Asn Gln Leu 75 65 70 Ala Trp Gln Gln Ser Arg Leu Asp Gln Ala Arg Ile Ser Leu Leu 85 90 95 Ala Ala Ser Asp Leu Leu Asn Arg Ser Gly Val Tyr Phe Met Gln Asp 100 105 110 Lys Glu Thr Gly Ser Glu Gly Ser Trp His Ser Leu Met Asp Glu Ala 115 120 125 Gin Lys Ser Leu Ala Ala Ser Gin Gin Ala Trp Gin Ala Trp Leu Ala 130 135 140 Leu Asn Pro Pro Gln Asp Glu Gly Leu Val Asn Ser Tyr Gln Leu Phe 145 150 155 160 Phe Gly Ala Ile Ser Glu Gln Ala Glu Gly Leu Val Lys Thr Asn Ser 165 170 175 Ile Asp Leu Phe Phe Ala Val Pro Ala Gln Ala Phe Gln Thr Asp Phe 180 185 190 Asn Asp Asn Phe Ala Arg Tyr Gln Gln Arg Ser Glu Lys Gln Ala Ile 195 200 205 Gln Gly Arg Gln Ser Leu Met Glu Gln Leu Ser Gly Leu Gln Arg Leu 210 215 220 Phe Leu Phe Ala Pro Leu Val Leu Leu Ala Ile Ala Ile Ala Val Trp 225 230 235 Phe Gly Met Ala Lys Trp Val Ile Ser Pro Leu Arg Arg Leu Ile Ile 245 250 255 His Ile Asn Gln Leu Ala Ala Gly Asp Leu Ser Gly Thr Pro Pro Asp 260 265 270 Val Val Arg Phe Asn Arg Glu Ile Ser Gln Leu Cys Gly Ser Ile Thr 275 280 285 Ala Met Gln Leu Gly Leu Gln Gln Leu Val Thr Gln Val Ser Glu Ala 290 295 300 Thr Thr Ala Met Val Glu Asn Ile Gly Ser Leu Ala Gln Gly Asn Gln 305 310 315 320 Lys Leu Tyr Gln Gln Ser Thr Arg Gln Ala Lys Glu Leu Glu Glu Val 325 330 335 Thr Ala His Ile Ala Asp Leu Glu Thr His Val Glu Gly Asn Thr Gly 345 350 340 Tyr Ala Lys Leu Ala Arg Ser Arg Ala Asp Glu Ala Arg Gln Ala Ala 355 360 365 Val Gly Gly Glu Gln Met Met Thr Ala Val Asn Gly Ser Met Gln Thr 375 Ile Val Asp Arg Ser Ser Glu Met Arg Gly Ile Val Ala Met Ile Asp 390 395 400 Ser Val Ala Phe Gln Thr Asn Ile Leu Ala Leu Asn Ala Ala Ile Glu 405 410 415 Ala Ala His Ala Gly Glu Gln Gly Arg Gly Phe Ala Val Val Ala Arg 420 425 Glu Val Gly Leu Leu Ala Arg Lys Ser Ser His Ser Thr Gln Thr Ile

```
Gln Ala Leu Ile Asn His Ser Leu Gln Gly Ile Glu Glu Gly Ser Gln
 450
           455
Val Val Asn Arg Leu Glu Glu Asn Leu Gln Gln Val Thr Gly Leu Val
465
             470
                           475
Ala Asn Leu Ser Ser Leu Leu Asn Asp Ile Ser Leu Ala Thr Leu Asn
          485
                               490
                                                495
Gln Gly Asp Ser Ile His Gln Met Thr Arg Gln Leu Gln Ala Leu Asn
          500
                           505
Gln Val Ser Arg Gln Thr Asp Val Leu Val Ser Glu Ala Ser Asn Ala
                       520
      515
Ser Glu Arg Leu His Gln Gln Ser Asp Leu Leu Gln Ala Val Ser
 530 535
Arg Phe Arg Leu Pro Ala
<210> 9105
<211> 179
<212> PRT
<213> Enterobacter cloacae
<400> 9105
Gly Arg Ala Met Asn Ser Pro Met Leu Ile Lys Pro Leu Ser Arg Gln
                              10
Asp Ile Leu Thr His Ile Asp Ala Leu Asn Asp Ile Leu Val Asn Cys
                                          30
       20
                          25
Val Asn Gly Gly Ala Ser Val Ser Phe Met Leu Pro Phe Ser Ala Ala
35
                       40
                                        4.5
Lys Ala Gln Thr Phe Trp Leu Gly Val Ala Asp Ser Val Gly Arg Asp
                    55
Glu Arg Thr Val Leu Gly Cys Phe Asp Ala Glu Gln Gly Leu Val Gly
                                75
                70
Thr Val Gln Leu Ile Thr Asp Gln Pro Glu Asn Gln Pro His Arg Ala
            8.5
                              90
Asp Val Ala Lys Leu Leu Val His Glu Lys Ala Arg Arg Lys Gly Ala
         100
                        105
                                            110
Ala Met Ala Leu Met Glu Ser Leu Glu Ala Val Ala Arg Glu Lys Ala
                       120
                             125
Leu Thr Val Leu Val Leu Asp Thr Ser Thr Gly Ser Gly Ala Glu Thr
                 135
                               140
Phe Tyr Gln Arg Ala Gly Trp Gln Lys Ala Gly Glu Ile Ser Arg Tyr
145 150 155 160
Ala Leu Met Pro Asn Gly Asp Met Thr Ala Thr Ser Met Phe Tyr Lys
                              170
Phe Leu
<210> 9106
<211> 151
<212> PRT
<213> Enterobacter cloacae
<400> 9106
Cys Glu Glu His Met Thr Leu Ile Val Arg Pro Leu Gln Thr Glu Asp
                               10
Tyr Pro Gln Trp Arg Pro Leu Trp Asp Gly Tyr Ile His Phe Tyr Glu
                           25
                                             30
```

Cys Tyr Leu Asp Glu Ser Val Thr Ala Ala Thr Trp Asp Arg Ala Leu 40

Thr Asp Ser Ser Pro Leu Phe Cys Arg Val Val Glu Lys Asp Gly Ser

Val Ile Gly Phe Ala Met Cys Val Leu His Glu Gly Thr Trp Ser Thr

5.5

```
Ala Pro Val Cys Tyr Leu Glu Asp Leu Phe Val Asp Ala Ala Glu Arg
                             90
            85
Gly Ala Gly Ala Gly Lys Ala Leu Ile Asp Ala Leu Ile Asp Glu Gly
         100
                          105
Lys Arg Glu Gly Trp Ser Lys Leu Tyr Trp Val Thr Arg Met Asn Asn
      115
                    120
                                     125
Pro Ala Arg Lys Leu Tyr Asp His Tyr Gly Glu Ala Asp Asp Tyr Val
130 135
Arg Tyr Arg Ile Ser Leu
145
<210> 9107
<211> 264
<212> PRT
<213> Enterobacter cloacae
<400> 9107
Ala Leu Ile Cys Ala Ile Phe Asn Pro Leu Pro Leu Asn Gln Glu Pro
                             10
Ala Val Glu His Ile Asp His Ile Leu Val Val Asp Asp Asp Asp Asp
20
                                           3.0
                          25
Ile Arg Glu Leu Ile Val Asp Tyr Leu Val Lys Ser Gly Tyr His Ala
                                     4.5
                      40
Ser Gly Ala Ala Asn Gly Lys Glu Met Arg Val Val Leu Asp Lys Gln
                   55
His Ile Asp Leu Val Val Leu Asp Val Met Met Pro Gly Asp Asp Gly
         70
                     75
Leu Thr Leu Cys Arg Gln Leu Arg Ser Ser Arg His Lys Asp Leu Pro
                              90
Ile Leu Met Leu Thr Ala Arg Asn Glu Asp Thr Asp Arg Ile Leu Gly
   100
                105
                                           110
Leu Glu Met Gly Ala Asp Asp Tyr Val Val Lys Pro Phe Val Ala Arg
                      120
Glu Leu Leu Ala Arg Ile Lys Ala Ile Leu Arg Arg Phe Arg Thr Met
                 135 140
Pro Pro Asn Leu Gln Val Thr Glu Ala Gly Arg Leu Val Val Phe Gly
145 150 155 160
Glu Trp Gln Leu Asp Thr Val Ala Arg His Leu Ile Asp Asn Glu Gly
            165
                              170 175
Met Val Val Ala Leu Ser Gly Ala Glu Tyr Arg Leu Leu Arg Val Phe
         180 185 190
Leu Asp His Pro Gln Arg Val Leu Thr Arg Asp Gln Leu Leu Asn Leu
                       200 205
Thr Gln Gly Arg Asp Ala Glu Leu Phe Glu Arg Ser Ile Asp Leu Leu
 210
                   215 220
Val Ser Arg Val Arg Gln Arg Leu Asn Glu Asp Ala Arg Thr Pro Ala
                230 235
Tyr Ile Lys Thr Val Arg Ser Glu Gly Tyr Val Phe Thr Met Pro Val
             245
                             250
Thr Ile Val Glu Ala Asn Glu
          260
<210> 9108
<211> 434
<212> PRT
<213> Enterobacter cloacae
<400> 9108
Gly Gln Ala Met Lys Ala Ile Ser Ile Leu Ala Cys Gly Ala Asp Pro
```

Thr Ala Gln Arg Met Ser Thr Ser Ala Ile Gln Gln Ala Ile Asn Ser 20 Ala Gln Gln Asn Asp Val Ile Val Ile Pro Gln Gly Arg Phe Leu Thr 35 40 Gly Ala Leu Phe Leu Lys Ser Gly Val Ser Leu Arg Leu Asp Ala Gly 55 Ala Gln Leu Val Gly Ser Gln Asp Leu Ala Asp Tyr Pro Leu Ile Asn 65 70 75 80 Thr Arg Val Ala Gly Ile Asp Met Arg Trp Pro Ala Gly Ile Ile Asn 85 90 Ile Ile Asp Cys Glu Asn Val Ser Ile Thr Gly Thr Gly Thr Ile Asp 100 105 110 Gly Gln Gly Val Ile Trp Trp Gln Arg Phe Trp Gly Asp Asp Glu Arg 115 120 125 Ser Gly Met Val Gly Asp Tyr Ser Ala Arg Gly Leu Arg Trp Val Val 130 135 140 Asp Tyr Asp Cys Gln Arg Pro Arg Asn Ile Leu Val Phe Glu Ser Gln 150 155 Asn Ile Leu Leu Arg Asp Phe Thr Ser Arg Glu Ser Gly Phe Trp Asn 165 170 175 Ile His Leu Cys Tyr Ser Arg Arg Ile Ala Val Glu Gly Val Gln Ile 180 185 190 Ser Asn Ser Ala Gly Pro Ser Thr Asp Gly Ile Asp Val Asp Ser Cys 195 200 205 Glu Gln Val Arg Ile Glu Arg Cys Ile Val Ser Cys Asn Asp Asn 210 215 220 Ile Cys Ile Lys Ser Gly Arg Gly Arg Glu Ala Ala Gln Lys Ala Arg 225 230 235 240 Thr Ala Arg Asp Ile Val Ile Arg Gly Cys Thr Leu Asn Lys Gly Ser 245 250 255 Gly Ile Thr Leu Gly Ser Glu Thr Ser Gly Gly Ile Glu Arg Val Leu 260 265 270 Ile Glu Asp Asn Ala Phe Asn Gly Thr Gly Val Gly Phe Arg Ile Lys 275 280 285 Ser Ala Arg Asn Arg Gly Gly Phe Ile Arg Asp Ile Thr Val Gln Asn 290 295 300 Leu Arg Leu Thr Asp Val Arg Phe Pro Val Leu Ile Gln Leu Asn Trp 305 310 315 320 Phe Pro Gln Tyr Ser Tyr Gly Asp Gln Ser Asn Leu Ser Asp Lys Pro 325 330 Glu His Trp Arg Lys Leu Ala Glu Gly Val Glu Gly Glu Ala Gly Leu $340 \hspace{1cm} 345 \hspace{1cm} 350 \hspace{1cm}$ Thr Glu Val Ser Gly Leu Thr Ile Lys Asn Met Thr Ala Arg Arg Ser 355 360 365 Asp Lys Lys Tyr Phe Ser Arg Ala Phe Phe Ile Glu Gly Tyr Pro Glu 370 375 380 Arg Pro Val Ala Gly Leu Thr Leu Glu Gly Ile Phe Ile Asp Ala Thr 385 390 395 Glu Phe Gly Lys Ile Ser Gly Val Asp Gly Leu Arg Phe Gln Asp Val 405 410 415 Gln Val Thr Ala Val Glu Asn Thr Gln Asp Cys Asn Asp Ser Tyr Glu 425 4.30 420

<210> 9109

Arg

<211> 195 <212> PRT

<213> Enterobacter cloacae

<400> 9109

```
Gly Ile Thr Val Arg Tyr Ser Val Gln Val Val Cys Phe Ala Ala Thr
Gly Gly Thr Met Asp Ile Thr Gln His Leu Ala Thr Thr Leu Lys Ala
Leu Arg Leu Ala Arg Gly Trp Ser Leu Ser Lys Leu Ala Glu Glu Thr
Gly Val Ser Lys Ala Met Leu Gly Gln Ile Glu Arg Asn Glu Ser Ser
                      55
Pro Thr Val Ser Thr Leu Trp Lys Ile Ala Thr Gly Leu Asn Val Pro
                  70
                                     75
Phe Ser Ala Phe Ile Thr Pro Glu Ser Glu Pro Gln Ala Val Phe Asp
                                 90
            8.5
Pro Gln Gln Gln Ala Met Val Val Lys Pro Leu Phe Pro Trp Asp Glu
          100
                            105
                                               110
Gln Leu Lys Phe Asp His Phe Ser Ile Thr Leu Ser Pro Gly Ala Leu
    115
                         120
                                            125
Ser Glu Ser Thr Pro His Glu Ala Gly Val Ile Glu His Val Val Val
 130 135
                                        140
Ile Ser Gly Glu Leu Asp Met Gln Ile Asp Gly Val Trp Arg Thr Ile
                 150
                                    155
Tyr Ala Asp Ser Gly Val Arg Phe Ala Gly Asp Lys Pro His Ala Tyr
         165 170 175
Arg Asn Ser Ser Ala Arg Thr Val His Phe His Ser Leu Ile His Tyr
                            185
Pro Arg
<210> 9110
<211> 153
<212> PRT
<213> Enterobacter cloacae
<400> 9110
Trp Arg Glu Ser Val Phe Ser Glu Leu Ala Cys Ser Ala Ser Gly Trp
Leu Pro Ser Ala Arg Gln Ala Gly Leu Arg Leu Pro Glu Arg Lys Arg
                             25
                                                3.0
Gln Asn Arg Ser Arg Val Ala Gly Ser Arg Gly His Ala Pro Arg Gly
                          40
                                            4.5
Ala Pro Gly Arg Ala Leu Arg Val Arg Val His Pro Ala Leu Ala Ser
                      55
                                        60
Arg Val Gln Gln Pro Asp Pro Pro Phe Gln Ala Asp Ala Asp Arg Arg
                  70
                                     75
Arg Pro Glu Tyr Gly Ser Arg Pro Leu Pro Gly Ala Arg Arg His Pro
                                 90
Arg Ser Pro Arg Arg Thr Asp Thr Ser His Arg Pro Ser Pro Gly Ala
                             105
           100
Ala Ser Gln Arg Phe Leu Pro Pro Arg Gln Thr Gln Arg Tyr Ile Asn
                         120
                                  125
       115
Arg His Met Pro Ala Arg Pro Arg Ala Ala Arg Asp Val Leu Ser Leu
                   135
Ser Ser Phe Cys Cys Phe Leu Ala
                   150
<210> 9111
<211> 270
<212> PRT
<213> Enterobacter cloacae
```

<400> 9111

Gly Arg Glu Leu Met Gln Pro Ser Glu Gly Leu Phe Thr Arg Gln Leu

```
1.0
Pro Gly Asp Arg Tyr Arg Glu Gln Thr Asp Pro Val Leu Gln Leu Glu
                           25
Ala Ile Asn Val Ser Phe Asp Gly Phe Gln Ala Leu Thr Asp Leu Ser
      35
                       4.0
Leu Asn Ile Gly Val Gly Glu Leu Arg Cys Ile Ile Gly Pro Asn Gly
Ala Gly Lys Thr Thr Leu Met Asp Val Ile Thr Gly Lys Thr Arg Pro
                 70
                                  75
Lys Ser Gly Lys Ala Ile Tyr Asp Gln Ser Ile Asp Leu Thr Ala Leu
Glu Pro Ala Ala Ile Ala Arg Gln Gly Ile Gly Arg Lys Phe Gln Lys
                         105
         100
Pro Thr Val Phe Glu Ala Leu Thr Val Gly Glu Asn Leu Glu Ile Ala
     115 120
Met Lys Ala Asp Arg Ser Val Trp Ala Ser Leu Arg Ala Thr Leu Ser
 130 135 140
Gly Glu Gln Arg Asp Arg Ile Asp Glu Met Leu Val Leu Leu Arg Leu
       150 155
Gly Ser Glu Arg Asp Arg Arg Ala Gly Leu Leu Ser His Gly Gln Lys
          165 170
Gln Phe Leu Glu Ile Gly Met Leu Leu Val Gln Asp Pro His Leu Leu
        180 185 190
Leu Leu Asp Glu Pro Ala Ala Gly Met Thr Asp Ala Glu Thr Glu Tyr
                               205
195 200
Thr Ala Glu Leu Phe Arg Thr Leu Ala Gly Lys His Ser Leu Met Val
210 215 220
Val Glu His Asp Met Gly Phe Val Glu Thr Ile Ala Asp His Val Thr
225 230 235
Val Leu His Gln Gly Arg Val Leu Ala Glu Gly Ser Leu Arg Glu Val
           245
                   250
Gln Ala Asn Glu Gln Val Ile Asp Val Tyr Leu Gly Arg
<210> 9112
<211> 198
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(188)
<400> 9112
Gly Glu Gly Met Leu Gln Val Ser Glu Leu Asn Gln Tyr Tyr Gly Gly
                              10
Ser His Ile Leu Arg Gly Val Ser Phe Glu Ala Val Val Gly Glu Val
                           25
Thr Cys Leu Leu Gly Arg Asn Gly Val Gly Lys Thr Thr Leu Leu Arg
                        40
Cys Leu Met Gly Leu Ile Pro Val Lys Ala Gly Glu Val Val Trp Gln
 50
                    55
                                     60
Gly Lys Thr Ile Thr His Ser Lys Pro His Gln Arg Val Gln Ser Gly
                 7.0
                                  7.5
Val Ala Tyr Val Pro Gln Gly Arg Glu Ile Phe Pro Arg Leu Thr Val
                               90
             85
Glu Glu Asn Leu Leu Met Gly Leu Thr Arg Phe Ser Ala Gly Asn Ala
         1.00
                          105
                                             110
Arg Ser Val Pro Glu Glu Ile Trp Gln Leu Phe Pro Val Leu Lys Glu
                        120
                                        125
Met Lys His Arg Arg Gly Gly Asp Leu Ser Gly Gly Gln Gln Gln Gln
```

```
135
Leu Ala Ile Gly Arg Ala Leu Ala Ser Arg Pro Gln Leu Leu Ile Leu
        150
                        155
Asp Glu Pro Thr Glu Gly Ile Gln Pro Ser Val Ile Lys Glu Ile Gly
         165 170
Gln Val Ile Arg Asn Leu Ala Asn Arg Gly Asp Xaa Ala Ile Leu Leu
      180
               185
Gly Gly Ala Ile Leu
     195
<210> 9113
<211> 312
<212> PRT
<213> Enterobacter cloacae
<400> 9113
Ser Val Tyr Lys Ile Leu Ile Phe Gln Gly Arg Lys Met Thr Arg Lys
                           10
Asp Gly Leu Leu Ala Leu Leu Val Val Val Ala Trp Gly Leu Asn Phe
                25
                               30
Val Val Ile Lys Met Gly Leu His Asn Met Pro Pro Leu Met Leu Ala
                           45
35 40
Gly Leu Arg Phe Leu Leu Val Ala Phe Pro Ala Leu Leu Phe Val Ala
50
          55
                                  60
Arg Pro Lys Ile Pro Leu Lys Leu Leu Gly Tyr Gly Leu Thr Ile
                              75
               70
Ser Phe Gly Gln Phe Ala Phe Leu Phe Cys Ala Ile Lys Phe Gly Met
                          90
           85
Pro Ala Gly Leu Ala Ser Leu Val Leu Gln Val Gln Ala Phe Phe Thr
         100 105 110
Ile Ile Leu Gly Ala Phe Val Phe Gly Glu Arg Leu Gln Gly Lys Gln
 115
                     120
                                   125
Leu Ala Gly Ile Ser Leu Ala Val Phe Gly Val Leu Val Leu Ile Glu
 130
                                 140
Gly Ser Leu Asn Gly Gln His Val Ala Leu Leu Gly Phe Met Leu Thr
                             155 160
145
              150
Leu Ala Ala Gly Leu Ser Trp Ala Cys Gly Asn Ile Phe Asn Lys Leu
                           170 175
            165
Ile Met Gln His Glu Ala Arg Pro Ala Val Leu Ser Leu Val Val Trp
         180 185 190
Ser Ala Leu Ile Pro Ile Val Pro Phe Met Ala Ala Ser Phe Ile Leu
                     200
 195
Glu Gly Pro Gln Ala Met Leu Lys Ser Leu Val Glu Ile Asp Leu Thr
 210
               215
                                  220
Thr Ile Leu Ser Leu Ile Tyr Leu Ala Phe Val Ala Ser Ile Ile Gly
              230 235
Tyr Gly Ile Trp Gly Ser Leu Leu Gly Arg Tyr Glu Thr Trp Arg Val
            245
                            250
Ala Pro Leu Ser Leu Leu Val Pro Val Val Gly Leu Ala Ser Ala Ala
         260
                        265
                                        270
Leu Leu Leu Asp Glu Thr Leu Ser Ala Leu Gln Leu Cys Gly Ala Gly
                                   285
    275 280
Leu Ile Met Ala Gly Leu Tyr Ile Asn Val Phe Gly Leu Arg Val Arg
               295
                               300
 290
Arg Ala Thr Arg Val Gln Ser
               310
<210> 9114
<211> 171
<212> PRT
```

<213> Enterobacter cloacae

```
<400> 9114
Ile Arg Arg Trp Arg Trp Gly Arg Gly Asp Cys Pro Pro Arg Asp Gly
Asp Cys Arg Leu Glu Pro Gly Thr Gly Arg Asp Arg Lys Phe Thr Gly
        20
Gly Arg Ser Gly Ala Gly Thr Ala Asp Gln Thr Ser Trp Thr Val Arg
                     40
Ile Leu Met Ser Thr Leu Asp Pro Leu Phe Ala Arg Leu Ala Arg Ser
                55
                             60
Thr Phe Arg Ser Arg Phe His Leu Gly Thr Lys Glu Arg Gln Tyr Cys
               70 75
Trp Asp Lys Gly Ala Glu Thr Ile Asp Lys His Ala Ala Asp Phe Val
       85 90 95
Ala Ala Arg Leu Ala Pro Ala His Pro Val Asn Asp Gly Lys Gln Thr
        100 105 110
Pro Met Arg Gly His Pro Val Phe Ile Ala Gln His Ala Thr Ala Thr
     115 120 125
Cys Cys Arg Gly Cys Leu Ala Lys Trp His Ala Ile Pro Gln Gly Val
130 135 140
Pro Leu Ser Ala Gln Gln Gln Tyr Ile Val Asn Val Ile His His
145 150 155
Trp Leu Val Ile Glu Val Asn Arg Ala Ser
            165
```

<211> 358 <212> PRT

<210> 9115

<213> Enterobacter cloacae

<400> 9115 Asn Arg Ile Arg Thr His Leu Leu Tyr Lys Arg Met Val Leu Tyr Leu 10 15 Arg Gln Leu Asn Leu Pro Gly Asp Asn Ile Met Phe Asn Lys Leu Ala 25 30 Tyr Ser Ala Val Ala Leu Thr Val Ser Leu Gly Thr Val Met Ser Cys Gln Ala Glu Ala Thr Gly Lys Asp Tyr Ala Ser Ala Phe Asn Gln Val Lys Gln Ile Asn Ala Gly Asp Leu Asn Val Gly Tyr Val Asp Ile Gly 7.0 75 65 Pro Lys Glu Gly Gln Pro Val Ile Leu Leu His Gly Trp Pro Tyr Asp 85 90 Ile His Ser Tyr Ala Glu Val Ala Pro Ala Leu Ala Ala Lys Gly Tyr 100 105 110 Arg Val Ile Val Pro Ser Leu Arg Gly Tyr Gly Thr Thr Arg Phe Ile 125 115 120 Ser Asp Lys Thr Pro Arg Asn Gly Gln Pro Ser Ala Met Ala Lys Asp 135 140 130 Ile Val Asn Leu Met Asp Ala Leu Asn Ile Lys Gln Ala Val Phe Ala 145 150 155 160 Gly Tyr Asp Trp Gly Ala Arg Thr Ala Asp Ile Val Ala Ala Leu Trp 165 170 175 Pro Glu Arq Val Lys Ser Leu Val Ser Val Ser Gly Tyr Leu Ile Ser 185 190 180 Ser Gln Ala Ile Gly Lys Gln Pro Leu Pro Pro Lys Ala Glu Val Gln 200 205 195 Trp Trp Tyr Gln Phe Tyr Phe Ala Thr Pro Arg Gly Ala Glu Gly Tyr 210 215 Ala Lys Asn Thr His Asp Phe Ala Arg Leu Ile Trp Ser Gln Ala Ser 230 235

```
Pro Asp Trp Lys Phe Ser Asp Ala Thr Phe Asn Ala Ser Ala Lys Ser
               250 255
         245
Leu Asp Asn Pro Asp His Val Ala Val Thr Leu Ser Asn Tyr Arg Trp
     260
              265
                                      270
Arg Leu Gly Leu Glu Lys Gly Glu Gln Lys Tyr Asp Ala Tyr Glu Gln
 275 280
                                   285
Lys Leu Ala Thr Leu Pro Asn Ile Thr Val Pro Thr Ile Thr Ile Glu
 290 295
                                300
Gly Gly Asn Asn Gly Ala Pro His Pro Val Pro Ala Ala Tyr Ala Gly
305 310 315
Lys Phe Thr Gly Lys Tyr Glu His Arg Thr Phe Gly Ala Thr Val Gly
      325 330 335
His Asn Pro Pro Gln Glu Asp Pro Gln Asp Phe Val Lys Ala Val Val
  340 345
Asp Ala Asp Lys Leu
   355
<210> 9116
<211> 254
<212> PRT
<213> Enterobacter cloacae
<400> 9116
Ile Met Leu Thr Ser Gln Arg Lys Gln Leu Ile Leu Glu Lys Leu Glu
               10 15
Ala Glu Gly Gln Val Gln Ser Thr Ala Leu Ser Leu Phe Phe Ser Val
               25
Ser Glu Asp Thr Ile Arg Arg Asp Leu Arg Glu Leu Ala Ala Glu Gly
                 40 45
Arg Leu Gln Arg Val His Gly Gly Ala Leu Pro Ala Ser Ser Ala Ile
50 55 60
Ala Pro Phe Ala Glu Arg Gln Ser Val Lys Met Asp Ala Lys Lys Arg 65 70 75 80
Val Ala Arg Arg Gly Ala Gln Leu Ile Ser Pro Gly Gln Val Val Ile
           85 90 95
Ile Asp Gly Gly Thr Thr Thr Ser Glu Leu Ile Thr Phe Leu Pro Pro
        100 105 110
Asp Leu Pro Ile Thr Val Val Thr His Ser Pro Gly Ile Ala Leu Gly
   115 120
                                  125
Leu Val Gly His Pro Ser Ile Glu Val Ile Leu Ile Gly Gly Arg Leu
 130 135 140
Tyr Lys His Ser Ile Val Thr Val Gly Ala Ala Ala Ile Glu Gly Ile
            150 155
145
Asn Asn Ile His Ala Asp Leu Phe Phe Met Gly Val Thr Gly Val His
165 170 175
Pro Glu Ala Gly Leu Thr Thr Gly Asp Tyr Glu Glu Ala Cys Ile Lys
       180 185 190
Arg Ala Phe Ser Gly Arg Ala Ala Glu Thr Val Val Leu Ala Ser Pro
195 200 205
Glu Lys Ile Asn Thr Ala Ser Ala Phe Val Ile Gly Asp Leu Ser Leu
               215
                                220
Val Asn Thr Leu Val Val Glu Asn Thr Thr Asp Glu Arg Trp Val Ser
225 230
                             235
Ala Met Lys Glu Lys Gly Val Thr Val Ile Ala Ser Gln
           245
                          250
```

<210> 9117

<211> 223 <212> PRT

<213> Enterobacter cloacae

```
<400> 9117
Phe Ile Pro Asp Val Ala Arg Tyr Ile Leu Tyr Leu His Asp Ser Ala
                             10
Val Tyr Asp Ala Tyr Ser Thr Arg Gly Glu Pro Asn Val Gln Ser Lys
                          25
                                           3.0
Arg Ala Asp Ile Arg Ile Ile Asn Ser Glu Thr Leu Ser Asp Asn Trp
                      4.0
Tyr Asn Leu Lys Lys Tyr Thr Phe Asp Phe Gln Arg Ser Asp Gly Asp
                 5.5
Trp Gln Arg Gln Glu Arg Glu Val Tyr Asp Arg Gly Asn Gly Ala Thr
             70
                                75
Ile Leu Leu Tyr Asn Arg Asp Ser Lys Thr Val Ile Leu Thr Arg Gln
                             90
           8.5
Phe Arg Phe Pro Val Phe Ile Asn Gly His Glu Glu Asp Leu Ile Glu
             105
         100
Ala Ala Ala Gly Leu Leu Asp Asn Leu Asp Pro Glu Ser Arg Ile Lys
                           125
     115 120
Ala Glu Ala Glu Glu Glu Thr Gly Phe Lys Val Thr Arg Val Glu Lys
       135
                          140
Ile Phe Glu Ala Tyr Met Ser Pro Gly Ser Val Thr Glu Lys Leu Tyr
             150 155
Phe Tyr Leu Ala Glu Tyr His Pro Gln Asp Arg Thr Ser Ala Gly Gly
            165 170
Gly Val Lys Ala Glu Gly Glu Asp Ile Asp Val Leu Glu Met Thr Leu
        180 185 190
Asp Asp Ala Leu Gln Gly Ile Glu Asn Gly Gln Ile Val Asp Gly Lys
      195 200 205
Thr Ile Met Leu Leu Tyr His Leu Ala Leu Lys Gly Ile Leu
                   215
```

210 <210> 9118 <211> 261 <212> PRT

<213> Enterobacter cloacae

<400> 9118 Thr Pro Gln His Gly Asp Ala Lys Met Ala Asp Trp Asp Pro Ser Leu 10 Tyr Leu Gln Tyr Ser Ala Glu Arg Thr Arg Pro Ala Ala Glu Leu Leu 20 25 Ala Arg Val Pro Leu Ala Asp Ile Thr Ser Ala Val Asp Leu Gly Cys 3.5 40 4.5 Gly Pro Gly Asn Ser Thr Ala Leu Leu Lys Gln Arg Trp Pro Ser Ala 50 55 60 Gln Ile Ala Gly Val Asp Asn Ser Pro Ala Met Leu Glu Glu Ala Arg 7.0 7.5 Gln Ala Leu Pro Asp Cys His Phe Val Glu Ala Asp Ile Arg His Tyr 85 90 Lys Pro Asp Gln Pro Leu Ser Leu Ile Tyr Ala Asn Ala Ser Leu Gln 105 110 100 Trp Ile Pro Asp His Tyr His Leu Leu Pro His Leu Val Ser Leu Leu 120 125 115 Gln Leu Asn Gly Val Leu Ala Val Gln Met Pro Asp Asn Trp Leu Glu 140 Pro Thr His Ala Leu Met Arg Glu Val Ala Trp Glu Gln Gly Tyr Pro 150 155 Asp Arg Gly Arg Glu Pro Leu Pro Gly Ile His Ala Tyr Tyr Asp Ile 170 165 175 Leu Thr Glu Ala Gly Cys Asp Val Asp Ile Trp Arg Thr Thr Tyr Phe 185 180 190 His Gln Met Ser Ser His Gln Ala Ile Ile Asp Trp Val Ser Ala Thr

```
200
Gly Leu Arg Pro Trp Leu Gln Glu Leu Asn Glu Ser Glu Gln Lys Asn
                             220
   210
                   215
Tyr Leu Lys Arg Tyr Leu Glu Leu Leu Glu Glu Gln Tyr Pro Leu Gln
          230
                            235
Glu Asn Gly Gln Ile Leu Leu Ala Phe Pro Arg Leu Phe Met Val Ala
Gln Arg Val Pro
         260
<210> 9119
<211> 205
<212> PRT
<213> Enterobacter cloacae
<400> 9119
Phe Ile Ala Lys Ile Lys Ser Arg His Arg Ala Asn Ile Val Ile Phe
                             10
Leu Ile Arg Cys Ala His Leu Gln Arg Leu Asp Arg Val Asn Lys Ala
                          25
                                            3.0
Leu Gly Lys Gly Val Arg Tyr Ala Arg Phe His Asn Lys Ala Phe Cys
 3.5
                      40
                               45
Arg Arg Thr Asn Leu Ser Gly Ile Leu Ile Thr Ser Gly His Arg Arg
                                     60
                 5.5
Val Asp Gly Gln Ile Lys Ile Arg Ile Val Gln Asn Asp Lys Arg Ile
                 70
                                 7.5
Gly Thr Ala Gln Leu Gln His Ala Phe Leu Gln Arg Arg Ala Arg Leu
                        90 95
Arg Ala Asn Cys Arg Thr Ser Pro Asn Ala Ala Gly Tyr Gly His Arg
      100 105
Arg Asp Thr Pro Ile Val Asn Arg Leu Ala Asp Ala Val Ile Arg Arg
      115 120 125
Val His Pro Ala Lys Asp Pro Leu Arg Glu Thr Gly Ile Arg Glu Tyr
 130 135 140
Leu Pro Asp Gln Leu Arg Arg Ala Glu His Ile Trp Arg Met Phe Lys
145 150 155 160
Gln Ile Ala Val Pro Cys Gln Gln Asp Arg His Arg Thr Ala Gln His
             165
                             170 175
Leu Pro Glu Arg Glu Ile Pro Arg His His Arg Lys Asn Arg Ser Gln
          180 185
Arg Thr Val Leu Asn His Arg Ile Pne Asp Leu Gly
                        200
<210> 9120
<211> 304
<212> PRT
<213> Enterobacter cloacae
<400> 9120
Tyr Ser Pro Pro Tyr Ser Arg Ile Glu Asn Gly Met Asp Leu Thr Gln
                            10 . 15
1
Leu Glu Met Phe Asn Ala Val Ala Leu Thr Gly Ser Ile Thr Gln Ala
                           25
          20
Ala Gln Lys Val His Arg Val Pro Ser Asn Leu Thr Thr Arg Ile Arg
       35
                       40
Gln Leu Glu Ala Asp Leu Gly Val Glu Leu Phe Ile Arg Glu Asn Gln
                              60
                   5.5
Arg Leu Arg Leu Ser Pro Ala Gly His Asn Phe Leu Arg Tyr Ser Lys
              70
Gln Ile Leu Ala Leu Val Asp Glu Ala Arg Met Val Val Ala Gly Asp
              85
```

```
Glu Pro Gln Gly Leu Phe Ser Leu Gly Ala Leu Glu Ser Thr Ala Ala
                       105
Val Arg Ile Pro Glu Ser Leu Ala Arg Phe Asn Gln Arg Tyr Pro Arg
      115
                    120
Ile Gln Phe Ala Leu Ser Thr Gly Pro Ser Gly Thr Met Ile Asp Gly
 130 135
                                    140
Val Leu Glu Gly Thr Leu Ser Ala Ala Phe Val Asp Gly Pro Leu Ser
    150
145
                                155
His Pro Glu Leu Glu Gly Met Pro Val Tyr Arg Glu Glu Met Met Leu
           165 170
                                 175
Val Thr Pro Ala Gly His Ala Glu Val Ser Lys Ala Thr Gln Val Ser
      180 185 190
Gly Ser Asp Val Tyr Ala Phe Arg Ala Asn Cys Ser Tyr Arg Arg His
    195 200 205
Leu Glu Ser Trp Phe His Ala Asp Arg Val Thr Pro Gly Arg Ile His
 210 215 220
Glu Met Glu Ser Tyr His Gly Met Leu Ala Cys Val Ile Ala Gly Ala
225 230 235
Gly Ile Ala Leu Met Pro Arg Ser Met Leu Glu Ser Met Pro Gly His
      245 250 255
His Gln Val Ala Ala Trp Pro Leu Ala Glu Asn Trp Arg Trp Leu Thr
         260 265 270
Thr Trp Leu Val Trp Arg Arg Gly Ala Met Thr Arg Gln Leu Glu Ala
275 280 285
Phe Ile Ala Leu Leu Asn Glu Arg Gln Pro Pro Ala Pro Ser Cys
           295
<210> 9121
<211> 143
<212> PRT
<213> Enterobacter cloacae
<400> 9121
Ala Phe Thr Gln Glu Asn Pro Ala Val Asn Arg Lys Arg Gly Met Thr
                          10
Met Ser Arg Arg Asn Thr Asp Ala Ile Thr Ile His Ser Ile Leu Asp
                         25
Trp Ile Glu Asp Asn Leu Glu Ser Pro Leu Ser Leu Glu Lys Val Ser
    35 40
Glu Arg Ser Gly Tyr Ser Lys Trp His Leu Gln Arg Met Phe Lys Lys
Glu Thr Gly His Ser Leu Gly Gln Tyr Ile Arg Ser Arg Lys Leu Thr
                              75
                7.0
Glu Ile Ala Gln Lys Leu Lys Glu Ser Asn Glu Pro Ile Leu Tyr Leu
Ala Glu Arg Tyr Gly Phe Glu Ser Gln Gln Thr Leu Thr Arg Thr Phe
         100
                         105 110
Lys Asn Tyr Phe Asp Val Pro Pro His Lys Tyr Arg Ile Thr Ser Met
                      120 125
    115
Pro Gly Glu Ser Arg Tyr Leu Tyr Pro Leu Lys His Cys Ser
   130
                   135
<210> 9122
<211> 337
<212> PRT
<213> Enterobacter cloacae
```

<400> 9122

Met Arg Pro Pro Met Pro Glu Asn Ser Lys Lys Met Thr Asn Leu Arg 10 His Pro Ser Pro Arg Ala Val Val Leu Ala Tyr Asp Gly Leu Cys Thr Phe Glu Phe Gly Val Ala Val Glu Ile Phe Gly Leu Pro Arg Pro Glu 40 Met Gly Asp Asp Trp Tyr Gln Phe Ala Val Ala Ser Val Asp Gly Gly Glu Leu Arg Ala Thr Gly Gly Ile Arg Ile Leu Ala Asp Gly Asp Leu 70 Arg Leu Leu Glu Thr Ala Asp Leu Val Val Val Pro Gly Trp Arg Gly 90 85 Leu Asp Glu Pro Val Pro Glu Ala Leu Cys Gln Ala Leu Arg Ala Ala 100 105 110 His Ala Arg Gly Cys Gln Leu Leu Ser Ile Cys Ser Gly Val Phe Val 115 120 Leu Ala Ala Ser Gly Leu Leu Asp Gly Arg Lys Ala Thr Thr His Trp 130 135 140 Arg Tyr Thr Gln Ala Leu Lys Thr Arg Phe Pro Ala Ile Thr Val Val 145 150 155 Glu Asp Val Leu Tyr Gln Asp Glu Gly Asp Ile Leu Thr Ser Ala Gly 165 170 Ser Ala Ala Gly Ile Asp Leu Cys Leu His Val Val Arg Arg Asn Tyr 185 190 180 Gly Met Glu Ala Ala Asn Arg Val Ala Arg Arg Leu Val Ile Pro Pro 195 200 205 His Arg Asp Gly Ser Gln Thr Gln Gln Leu Ser Arg Pro Val Ala Gln 210 215 220 Leu Arg Glu Ser Gln Arg Leu Gly Gln Leu Phe Asp Tyr Leu His Gln 225 230 235 240 His Leu Ala Val Ser His Thr Val Glu Ser Leu Ala Leu Arg Val Gly 245 250 Met Ser Gln Arg Thr Phe Leu Arg Arg Phe Gln Asp Ala Thr Gly Thr 260 265 270 Thr Pro Ala Arg Trp Leu Leu Thr Ala Arg Leu Gln Arg Ala Lys Asp 275 280 285 Tyr Leu Glu Asn Ser Arg Leu Ser Ile Asp Asn Ile Ala Glu Gln Thr 290 295 300 Gly Phe Gly Gln Ser Ala Thr Leu Arg His His Phe Arg Gln Gln Phe 305 310 315 320 Ala Leu Ser Pro Ala Gln Tyr Arg Lys His Phe Leu Gln Pro Val Arg

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<210> 9123
<211> 79
<212> PRT
<213> Enterobacter cloacae
```

<400> 9123
Met Met Phe Arg Lys Glu Phe Ser Leu Leu Leu Val IIe Ser Ala Leu 1
10
15
Phe Ser Gly Gln Ile Met Ala Glu His Lys Gly His Glu Phe Val Tyr
20
Val Lys Asn Ala Asp His Gln Leu Arg His Glu Ala Asp Ser Asp Glu 35
40
40
Leu Arg Ser Ala Ala Glu Glu Ser Ala Glu Gly Leu Arg Glu His His 50
65
65
70
76
76
76
77
78
78
78
Ala Gly Leu Arg Gly Fro Asp Thr His Ser Ala Gly 75
76
76

<210> 9124 <211> 402 <212> PRT <213> Enterobacter cloacae

<400> 9124 Tyr Leu Ile Pro Asp Val Ile Thr His Asn Gly Val Ser Met Gln Ser Thr Ala Ser Leu Phe Pro Ala Val Leu Ala Gly Phe Val Ala Val Leu 20 25 Val Gly Tyr Ala Ser Ser Ala Ala Ile Ile Trp Gln Ala Ala Ala Ala 35 40 45 Ala Gly Ala Ser Thr Gln Gln Ile Ala Gly Trp Met Thr Ala Leu Gly 60 50 55 Leu Gly Met Gly Ile Ser Thr Leu Val Leu Ser Trp Trp Tyr Lys Ala 70 75 Pro Val Leu Thr Ala Trp Ser Thr Pro Gly Ala Ala Leu Leu Ala Thr 90 95 8.5 Ser Leu His Gly Val Thr Leu Ala Glu Thr Ile Gly Val Phe Ile Phe 100 105 110 Ala Asn Thr Leu Ile Leu Leu Cys Gly Val Thr Gly Leu Phe Ala Arg 115 120 125 Leu Met Lys Leu Ile Pro His Ser Leu Ala Ala Ala Met Leu Ala Gly 130 135 140 Val Leu Leu Gln Phe Gly Leu Lys Ala Phe Ser Asn Leu Glu Gly His 145 150 155 Ile Phe Leu Cys Gly Ser Met Leu Ala Ala Trp Leu Val Ala Lys Ala 165 170 175 Val Ala Pro Arg Tyr Ala Ile Val Ala Thr Leu Leu Val Gly Val Phe 180 190 Val Ala Trp Ala Gly Gly Asp Val Val Thr Asn Arg Met Thr Leu Ser 195 200 205 Val Ile Met Pro Glu Phe Ile Ala Pro Ala Phe Thr Phe Thr Ser Leu 210 215 220 Ile Ser Ile Gly Leu Pro Ile Phe Leu Val Thr Met Ala Ser Gln Asn 225 230 235 240 Ala Pro Gly Phe Ala Thr Met Gln Ala Ser Gly Tyr Pro Leu Ala Val 250 255 245 Ser Pro Leu Ile Val Ala Thr Gly Gly Leu Ala Leu Leu Ser Pro 260 265 270 Phe Gly Val Tyr Ser Ile Cys Ile Ala Ala Ile Thr Ala Ala Ile Cys 275 280 285 Gln Ser Pro Asp Ala His Pro Asp Ala Ser Lys Arg Trp Leu Ala Ala 295 300 290 Ala Ala Ala Gly Gly Phe Tyr Leu Leu Ala Gly Val Phe Gly Gly Ser 305 310 315 Ile Ser Gly Leu Met Ser Ala Leu Pro Leu Ser Gly Ile Gln Thr Leu 325 330 335 Ala Gly Leu Ala Leu Leu Gly Thr Ile Ser Gly Ser Leu Tyr Gln Ala 340 345 350 Leu Asn His Glu Ala Glu Arg Asp Ala Ala Ile Val Thr Phe Leu Met 360 365 Thr Ala Ser Gly Val Thr Leu Leu Gly Ile Gly Ser Ala Phe Trp Gly 375 380 Leu Val Leu Gly Gly Ile Cys Tyr Ala Val Phe Ser Arg Leu Arg Arg 395 390 385 Ala

<210> 9125 <211> 158

<211> 130

<213> Enterobacter cloacae

```
<400> 9125
Asn Cys Asn Arg Tyr Val Arg Pro Val Val Lys Asn Leu Ala Gly Val
Val Asp Leu Phe Ser Arg Lys Val Ile Gly Trp Ser Met Gln Pro Arg
Met Thr Lys Glu Ile Val Leu Asn Ala Leu Leu Met Ala Val Trp Arg
 35
                      4.0
Arg Asn Pro Gln Lys Gln Val Leu Val His Ser Asp Gln Gly Ser Gln
                 5.5
Tyr Thr Ser His Glu Trp Gln Ser Phe Leu Lys Ser His Gly Leu Glu
             7.0
Gly Ser Met Ser Arg Arg Gly Asn Cys His Asp Asn Ala Val Ala Glu
          85
                            90
Ser Phe Phe Gln Leu Leu Lys Arg Glu Arg Ile Lys Lys Arg Ile Tyr
    100 105 110
Gly Thr Arg Asp Glu Ala Arg Ser Asp Ile Phe Asp Tyr Ile Glu Met
    115 120 125
Phe Tyr Asn Ser Lys Arg Arg His Gly Ser Ser Glu Gln Met Pro Pro
130 135 140
Ala Glu Tyr Glu Asn Leu Tyr Tyr Gln Arg Leu Arg Ser Val
       150
<210> 9126
<211> 200
<212> PRT
<213> Enterobacter cloacae
<400> 9126
Lys Tyr Gln Asn Pro Asn Lys Ser Ile Thr Leu Asn Tyr Gly Asp Gln
                10
Arg Met Thr Ile Pro Thr Leu Thr Thr Glu Arg Leu Ile Leu Arg Pro
         20 25 30
Leu Ile Ala Glu Asp Ala Val Gln Ile Gln Gln Arg Tyr Pro Arg Trp
     35
         40
Glu Ile Val Arg Tyr Met Val Ala Ser Val Pro Trp Pro Tyr Pro Glu
               55
Asn Gly Ala Glu Asn Tyr Val Asn Asn Val Ala Leu Pro Asp Met Ala
          70 75
Lys Gly Ile Ala Trp Phe Trp Thr Ile Arg Arg Arg Glu Ala Pro Asp
                            90
Glu Leu Met Gly Leu Ile Cys Leu Tyr Asp Val Glu Asp Asn Asn Arg
        100
                       105 110
Gly Phe Trp Leu Ala Pro Glu Phe His Gly Gln Gly Tyr Met Arg Glu
                       120
    115
                                      125
Ala Ser Ile Ala Ala Thr Asp Tyr Trp Phe Asn Thr Leu Asn Lys Pro
   130
                   135
Val Leu Arg Ala Pro Lys Ala Ala Ala Asn Ser Arg Ser Arg Arg Ile
               150 155
Ser Asp Ser Ser Gly Met Arg Leu Ile Arg Thr Glu Lys Lys Ala Tyr
             165 170
Val Ser Gly Leu Leu Asp Ser Glu Leu Trp Glu Ile Thr Arg Asp Glu
                          185
         180
Trp Asn Ala Arg Gln Val Ser
                       200
      195
```

<210> 9127 <211> 160 <212> PRT

<213> Enterobacter cloacae

```
<400> 9127
Ala Ile Ile Ser Ala Val Thr Lys Leu Leu Ala Arg Ala Thr Ile Val
Lys Ser Thr Ser Asp Leu Phe Asn Asp Ile Ile Pro Leu Gly Arg Leu
         20
                         2.5
Ile His Met Val Asn Gln Lys Lys Asp Arg Leu Leu Asn Asp Tyr Leu
     35
                      4.0
Ser Pro Leu Asp Ile Thr Ala Thr Gln Phe Lys Val Leu Cys Ser Ile
                 5.5
                                   60
Arg Cys Glu Val Cys Ile Thr Pro Val Glu Leu Lys Lys Val Leu Ser
               70
                    75
Val Asp Leu Gly Ala Leu Thr Arg Met Leu Asp Arg Leu Val Cys Lys
            85 90
Gly Trp Val Glu Arg Ser Pro Asn Pro Asn Asp Lys Arg Gly Val Leu
         100 105 110
Val Lys Leu Thr Ser Asp Gly Ala Ala Met Cys Glu Gln Cys His Gln
    115 120 125
Leu Val Gly Gln Thr Leu His Gln Glu Leu Thr Lys Asn Leu Thr Ala
 130 135 140
Asp Glu Val Ala Thr Leu Glu Leu Leu Leu Lys Lys Ile Leu Pro
<210> 9128
<211> 422
<212> PRT
<213> Enterobacter cloacae
<400> 9128
Ser Cys Asn Asn Thr Thr Lys Lys His Lys His Leu Ser Gly Arg Lys
Met Lys Pro Ser Ile Arg Arg Ser Thr Ala Ala Leu Leu Ala Ser Ser
                         25
Leu Leu Leu Thr Ile Gly Arg Gly Ala Thr Leu Pro Phe Met Thr Ile
                      40
Tyr Leu Thr Arg Val Tyr Asp Met Ser Val Glu Asn Ile Gly Tyr Ala
                   55
Leu Thr Val Ala Leu Thr Ile Gly Val Val Phe Ser Leu Gly Phe Gly
                                7.5
Ile Leu Ala Asp Lys Phe Asp Lys Lys Arg Tyr Met Leu Ile Ala Ile
                           90
             85
Val Ala Phe Ile Ala Gly Phe Val Ala Ile Pro Leu Val Asn Asn Val
         100 105
Thr Leu Val Val Leu Phe Phe Ala Leu Ile Asn Cys Ala Tyr Ser Val
                      120
 115
Phe Ser Thr Val Leu Lys Ala Trp Phe Ala Asp Val Leu Thr Ser Ser
                   135 140
Glu Lys Ala His Val Phe Ser Leu Asn Tyr Ser Phe Leu Asn Ile Gly
                150
                                155
Trp Thr Ile Gly Pro Pro Ile Gly Thr Leu Leu Val Met Tyr Ser Leu
             165
                           170
Gln Leu Pro Phe Leu Leu Ala Ala Phe Cys Ala Ala Leu Pro Leu Gly
         180
                         185 190
Phe Ile His Phe Phe Val Gln Lys Ser Ile Ala Ser Asp Ser Pro Glu
      195 200
                              205
Glu Lys Met Pro Trp Gln Pro Ser Val Leu Leu Lys Asp Arg Ala Leu
                                    220
 210
                   215
Phe Trp Tyr Thr Leu Ser Gly Leu Leu Ala Ser Tyr Val Gly Gly Ser
              230
                                235
Phe Ala Thr Cys Ile Ser Gln Tyr Val Leu Ala Ala His Ala Asp Ser
                             250
             245
```

Asp Phe Ala Glu Lys Val Val Ala Val Val Leu Pro Val Asn Ala Ala

```
265
Val Val Val Thr Leu Gln Tyr Ala Leu Gly Arg Lys Ile Thr Ala Ser
     275
           280
                                   285
Asn Ile Arg Pro Leu Met Thr Ala Ala Thr Leu Phe Phe Ile Leu Gly
      295
                               300
Leu Gly Gly Phe Met Leu Ser Gly Glu Asn Leu Ile Tyr Trp Gly Ile
305 310 315
Ala Ala Ile Phe Thr Leu Gly Glu Ile Ile Tyr Ala Pro Gly Glu
        325 330 335
Tyr Met Leu Ile Asp Asn Ile Ala Pro Pro Gly Met Lys Ala Ser Tyr
     340 345 350
Phe Ser Ala Gln Ala Leu Gly Trp Leu Gly Ala Ala Ala Asn Pro Met
 355 360 365
Ile Thr Gly Leu Ile Leu Thr His Leu Pro His Trp Ser Leu Phe Ile
370 375
                      380
Ile Met Met Ala Ala Ile Ile Ala Ala Trp Leu Met Ile Leu Arg Gly
385 390 395 400
Met Arg Val Lys Ser Glu Asp Arg Val Ser Ser Ser Ala Ala Leu Thr
                410 415
      405
Arg Pro Gly Lys Pro
        420
<210> 9129
<211> 267
<212> PRT
<213> Enterobacter cloacae
<400> 9129
Ser Ala Ala Gly Pro Val Arg Cys Gly Ala Thr Ala Ser Phe Ile Gly
                       10
Leu Asp Asp Gly His Arg His Gly Lys Asn Val Ala Phe Ala Ala Asn
              25
Gly Phe Asn Val Gly Arg Arg Ala Gly Ile Phe Ile Gln Ala Leu Ser
                   40
His Ala Ala His Gln Glu Ile Asn Arg Thr Leu Lys Gln Leu Gly Ile
50 55
                     60
Thr Ser Leu Arg Gln Val Gln Gln Leu Ile Ala Gly Gln His Pro Leu
             70 75
Arg Met Ile Glu Glu Tyr Ala Gln Lys Ala Ile Phe Arg Pro Ala Glu
           85 90 95
Arg His Asn His Pro Leu Val Ile Asn Gln Met Thr Arg His Gly Ile
        100 105 110
Gln Leu Pro Phe Thr Glu Tyr His Gln Ala Pro Cys Leu Gly His Leu
                    120 125
   115
Lys Ile Arg Arg His Ser Thr Lys Thr Thr Gln Asp Ser Phe Asp Thr
 130
              135
                               140
Arg Gln Gln Phe Ala Gly His Lys Arg Phe His His Ile Ile Val Gly
              150 155 160
Ala His Leu Gln Ser Gln Asp Pro Val Arg Val Leu Val Ala Arg Gly
      165 170
Glu His Gln Asp Arg Gln Ile Leu Met Pro Ala Ala Ala Gln Leu Ser
        180 185
                                     190
Thr Gln Arg Gln Ala Ile Ile Ala Gly His His His Val Gln His His
                                   205
     195
                    200
Gln Val Asp Met Leu Phe Val Glu His Tyr Ala His Leu Phe Pro Val
                 215
                                220
Arg Arg Ala Arg Gly Val Val Ala Gly Phe His Glu Val Ile Asp Asn
              230 235
225
Gln Phe Thr Asn Ile Pro Val Val Ile Asp Asp Lys Asp Val Ile Asn
           245
                        250
```

Met Leu His Arg Arg Leu Leu Ile Lys Arg

260 265

<210> 9130 <211> 416 <212> PRT <213> Enterobacter cloacae

<400> 9130 Gly Phe Lys Ile Val Ser Ser Ser Phe Arg Gln Arg Ile Pro Asp Ile 10 Pro Met Thr Thr His Thr Val Ser Arg Arg Val Ala Trp Leu Arg Val 20 25 Val Thr Leu Ala Ile Ala Ala Phe Ile Phe Asn Thr Thr Glu Phe Val 35 40 4.5 Pro Val Gly Leu Leu Ser Asp Ile Ala Ala Ser Phe His Met Glu Thr 50 55 60 Ala Gln Val Gly Ile Met Leu Thr I'e Tyr Ala Trp Val Val Ala Leu 65 70 75 80 Met Ser Leu Pro Phe Met Leu Leu Thr Ser Gln Met Glu Arg Arg Lys 85 90 Leu Leu Ile Gly Leu Phe Val Val Phe Ile Ala Ser His Val Leu Ser 100 105 110 Phe Met Ala Trp Asn Phe Thr Val Leu Val Ile Ser Arg Val Gly Ile 115 120 125 Ala Phe Ala His Ala Val Phe Trp Ser Ile Thr Ala Ser Leu Ala Ile 130 135 140 Arg Leu Ala Pro Ala Gly Lys Arg Ala Gln Ala Leu Ser Leu Ile Ala 145 150 155 160 Thr Gly Thr Ala Leu Ala Met Val Leu Gly Leu Pro Ile Gly Arg Ile 165 170 175 Val Gly Gln Tyr Phe Gly Trp Arg Thr Thr Phe Phe Ala Ile Gly Met 180 185 190 Gly Ala Leu Ile Thr Leu Val Cys Leu Ile Lys Leu Leu Pro Lys Leu 195 200 205 Pro Ser Glu His Ser Gly Ser Leu Lys Ser Leu Pro Leu Leu Met Arg 210 215 220 Arg Pro Ala Leu Met Ser Ile Tyr Leu Leu Thr Val Ile Val Val Thr 225 230 235 240 Ala His Tyr Thr Ala Tyr Ser Tyr Ile Glu Pro Phe Val Gln Val Val 245 250 255 Ala Gly Phe Ser Ala Asn Phe Ala Thr Val Leu Leu Leu Ile Leu Gly 260 265 270 Gly Ala Gly Ile Ile Gly Ser Ile Leu Phe Gly Lys Leu Gly Asn Gln 275 280 His Ala Ser Ala Leu Val Ser Ser Ala Ile Gly Leu Leu Leu Ala Cys 295 290 300 Leu Leu Leu Met Pro Ala Ala Gly Ser Glu Ser His Leu Ala Ile 305 310 315 Leu Ser Leu Phe Trp Gly Val Ala Ile Met Ile Ile Gly Leu Gly Met 330 335 325 Gln Val Lys Val Leu Ala Leu Ala Pro Asp Ala Thr Asp Val Ala Met 340 345 Ser Leu Phe Ser Gly Ile Phe Asn Leu Gly Ile Gly Ala Gly Ala Leu 360 365 355 Val Gly Asn Gln Ile Ser Leu His Val Ser Met Ser Ala Ile Gly Tyr 370 375 380 Leu Gly Ala Ile Pro Ala Leu Ile Ala Leu Ile Trp Ser Val Leu Ile 385 390 395 400

Phe Arg Lys Trp Pro Val Ala Met Glu Glu Gln Thr Ser His Gly

410

405

```
<210> 9131
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 9131
Asp Val Thr Glu Glu lle Met Lys Phe Ile Ala Ser Ala Ala Leu Thr
                                 10
Leu Leu Val Leu Val Ser Gly Gln Ser Phe Ala Glu Gln Thr Pro Ser
    20
                              25
Ala Gly Gln Gln Asn Asn Arg Asp Thr Met Ile Met Pro Ser Thr Gln
      35
                          40
                                             4.5
Asn Gln Ser Pro Trp Asp Phe Asn His Met Gly Ala Gly Ser Asp Lys
                                         60
 50 55
Ser Asp Glu Leu Gly Val Pro Tyr Tyr Asn His Asp Leu
                   70
<210> 9132
<211> 163
<212> PRT
<213> Enterobacter cloacae
<400> 9132
Lys Cys Thr Val Arg Ala Leu Leu Leu Arg Tyr Ala Cys Gly Leu Ser
            5
                                 10
Pro Ala Lys Arg Thr Pro Glu Ser Ala Tyr Ile Val Arg Gln Thr Pro
           20
                              25
Ser Ile Cys Ile Ser Ser Ser Pro Leu Ile Thr Thr Cys Ser Ile
      35
                          4.0
Thr Pro Ala Ser Cys Gly Val Asp Ser Leu Ser Ala Pro Gly Asp Arg
 50
                      55
Val Met Glu Lys Trp Ser Asn Leu Ser Cys Ser Ser Gln Gly Lys Ser
                   7.0
                                      75
65
Gly Phe Thr Thr Ile Ala Cys Cys Cys Gly Ser Asn Thr Ala Cys Gly
               85
                                  90
Ser Leu Ser Gly Val Ile Asn Ala Glu Lys Gly Thr Phe Ser Pro Val
           100
                              105
Ala Ile Phe His Lys Val Glu Thr Val Gly Leu Asp Ser Leu Arg Ser
                          120
       115
Ile Cys Pro Ser Ile Ala Phe Asp Thr Pro Val Ser Ser Ala Ser Phe
  130
                      135
                                  140
Asp Arg Leu Gln Pro Arg Ala Arg Arg Ser Ala Phe Ser Val Val Ala
                   150
                                      155
145
Arg Cys
<210> 9133
<211> 123
<212> PRT
<213> Enterobacter cloacae
<400> 9133
His Ala Lys Ala Asn Pro Ala Ser Gln Pro Leu Phe Leu Ile Pro Ser
                                                     15
                                  1.0
Asp Asn Arg Glu Asn Leu Pro Pro Lys Arg Pro Arg Arg Arg Leu Leu
                              25
                                                 3.0
            20
Ser Leu Phe Lys Glu Trp Asn Met Gln Asn Thr Thr Gln Pro Ile Asp
                           4.0
                                             45
Arg Ala Ser Leu Leu Ile Glu Ala Asn Lys Leu Ile Arg Asp His Glu
                       55
                                         60
Asp Thr Leu Ala Gly Ile Glu Ala Thr Gly Val Glu Gln Arg Asn Gly
```

65 70 75 80
Val Leu Val Phe Ser Gly Glu Tyr Phe Leu Asp Glu Gln Gly Leu Pro
95
Thr Pro Lys Ser Thr Ala Val Phe Asn Met Phe Lys Tyr Leu Ala His
100 105 110
Thr Leu Ser Glu Lys Tyr His Leu Val Asp

<210> 9134 <211> 528 <212> PRT

<213> Enterobacter cloacae

<400> 9134 Thr Glu Tyr Glu Asn Asn Asn Met Gln Thr Ala Lys Pro His Leu Glu 5 10 Leu Leu Thr Cys Glu Ala Ala Tyr Arg His Asn Pro Thr Ala Leu Phe 2.0 25 30 His Gln Val Cys Gly Ala Arg Pro Ala Thr Leu Leu Leu Glu Ser Ala 40 4.5 Asp Ile Asp Ser Lys Asp Asp Leu Lys Ser Leu Leu Leu Val Asp Ser 55 60 Ala Leu Arg Ile Thr Ala Ser Gly Asp Thr Val Thr Ile Lys Ala Leu 75 7.0 Ser Glu Asn Gly Ala Ser Leu Leu Pro Leu Leu Asp Ala Ala Leu Pro 85 90 Ser Gly Ile Glu Asn Glu Arg His Pro Asp Leu Arg Ile Leu His Phe 100 105 Pro Pro Val Ser Gln Leu Leu Asp Glu Asp Ala Arg Leu Cys Ser Leu 115 120 125 Ser Val Phe Asp Ala Phe Arg Leu Leu Gln Asn Leu Val Ala Val Pro 130 135 140 Glu Asp Glu Arg Glu Ala Met Phe Phe Gly Gly Leu Phe Ala Tyr Asp 150 155 Leu Val Ala Gly Phe Glu Asn Leu Pro Glu Thr Glu Gln Gly Asn Arg 165 170 175 Cys Pro Asp Tyr Cys Phe Tyr Leu Ala Glu Thr Leu Leu Val Ile Asp 180 185 190 His Gln Lys Lys Tyr Thr Arg Ile Gln Ala Ser Leu Phe Thr Pro Ser 195 200 Glu Ser Glu Lys Asn Arg Leu Ala Gln Arg Ile Ala Gln Leu Gln Gln 215 220 210 Gln Met Ser Glu Ala Pro Pro Ala Leu Pro Val Gln Arg Val Glu Lys 230 235 240 Met Thr Cys Glu Val Ser Gln Thr Asp Asp Gln Tyr Gly Ala Val Val 245 250 Arg Gln Met Gln Lys Ala Ile Arg Ala Gly Glu Ile Phe Gln Val Val 265 260 Pro Ser Arg Arg Phe Ser Leu Pro Cys Pro Ser Pro Leu Ala Ala Tyr 275 280 Asp Val Leu Lys Lys Ser Asn Pro Ser Pro Tyr Met Phe Phe Met Gln 295 300 290 Asp Asn Asp Phe Thr Leu Phe Gly Ala Ser Pro Glu Ser Ser Leu Lys 315 310 Tyr Asp Ala Thr Ser Arg Gln Ile Glu Ile Tyr Pro Ile Ala Gly Thr 330 335 325 Arg Pro Arg Gly Arg Arg Ala Asp Gly Ser Leu Asp Arg Asp Leu Asp 345 350 340 Ser Arg Ile Glu Leu Glu Met Arg Thr Asp His Lys Glu Leu Ser Glu

360

His Leu Met Leu Val Asp Leu Ala Arg Asn Asp Leu Ala Arg Ile Cys

375 Thr Pro Gly Ser Arg Tyr Val Ala Asp Leu Thr Lys Val Asp Arg Tyr 390 395 Ser Phe Val Met His Leu Val Ser Arg Val Val Gly Glu Leu Arg His 405 410 Asp Leu Asp Val Leu His Ala Tyr Arg Ala Cys Met Asn Met Gly Thr 430 420 425 Leu Ser Gly Ala Pro Lys Val Arg Ala Met Gln Leu Ile Ala Glu Ala 435 440 445 Glu Gly Arg Arg Gly Ser Tyr Gly Gly Ala Val Gly Tyr Phe Thr 450 455 460 Ala His Gly Asp Leu Asp Thr Cys Ile Val Ile Arg Ser Ala Tyr Val 465 470 475 Glu Asp Gly Ile Ala Thr Val Gln Ala Gly Ala Gly Ile Val Leu Asp 485 490 Ser Val Pro Gln Ser Glu Ala Asp Glu Thr Arg Ser Lys Ala Arg Ala 500 505 510 Val Leu Arg Ala Ile Ala Thr Ala His His Ala Gln Glu Ile Phe 520 <210> 9135 <211> 424 <212> PRT <213> Enterobacter cloacae <400> 9135 Ser Pro Asn Arg Ala Leu Lys Thr Pro Ala Ser Trp His Arg Tyr Leu 10 Lys Leu Cys Val His Ile Lys Glu Glu Lys Met Thr Thr Leu Leu Asn 25 3.0 Pro Tyr Phe Gly Glu Phe Gly Gly Met Tyr Val Pro Gln Ile Leu Met 40 4.5 Pro Ala Leu Arg Gln Leu Glu Glu Ala Phe Val Ser Ala Gln Lys Asp 5.0 5.5 60 Pro Ala Phe Gln Ala Glu Phe Thr Asp Leu Leu Lys Asn Tyr Ala Gly 65 70 75 Arg Pro Thr Ala Leu Thr Lys Cys Arg Asn Leu Thr Glu Gly Thr Lys 90 85 Lys Thr Asn Gln Val Leu Gly Gln Ala Leu Leu Ala Lys Arg Met Gly 115 120 125 Lys Thr Glu Ile Ile Ala Glu Thr Gly Ala Gly Gln His Gly Val Ala 130 135 140 Ser Ala Leu Ala Ser Ala Leu Leu Gly Leu Lys Cys Arg Ile Tyr Met 150 155 Gly Ala Lys Asp Val Glu Arg Gln Ser Pro Asn Val Phe Arg Met Arg 165 170 Leu Met Gly Ala Glu Val Ile Pro Val His Ser Gly Ser Ala Thr Leu 180 185 190 Lys Asp Ala Cys Asn Glu Ala Leu Arg Asp Trp Ser Gly Ser Tyr Glu 195 200 Thr Ala His Tyr Met Leu Gly Thr Ala Ala Gly Pro His Pro Phe Pro 215 220 Thr Ile Val Arg Glu Phe Gln Arg Met Ile Gly Glu Glu Thr Lys Ala 230 235 Gln Ile Leu Glu Lys Glu Gly Arg Leu Pro Asp Ala Val Ile Ala Cys 250 255 245 Val Gly Gly Ser Asn Ala Ile Gly Met Phe Ala Asp Phe Ile Asp 260 265

Glu Thr Ser Val Gly Leu Ile Gly Val Glu Pro Ala Gly His Gly Ile

```
280
Glu Thr Gly Glu His Gly Ala Pro Leu Lys His Gly Arg Val Gly Ile
                             300
                  295
Tyr Phe Gly Met Lys Ala Pro Met Met Gln Thr Asp Glu Gly Gln Ile
             310
                              315
Glu Glu Ser Tyr Ser Ile Ser Ala Gly Leu Asp Phe Pro Ser Val Gly
            325
                           330 335
Pro Gln His Ala Phe Leu Asn Ser Thr Gly Arg Ala Asp Tyr Val Ser
      340
                        345
Ile Thr Asp Asp Glu Ala Leu Glu Ala Phe Lys Thr Leu Cys Arg Asn
   355 360
                          365
Glu Gly Ile Ile Pro Ala Leu Glu Ser Ser His Ala Leu Ala His Ala
 370 375 380
Leu Lys Met Met Lys Glu Asn Pro Glu Lys Glu Gln Leu Leu Val Val
385 390 395 400
Asn Leu Ser Gly Arg Gly Asp Lys Asp Ile Phe Thr Val His Asp Ile
         405 410 415
Leu Lys Ala Arg Gly Glu Ile
        420
<210> 9136
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 9136
Pro Leu Phe Cys Ala Val Cys Ala Ala Pro Ile Lys Asn Arg Ala Ala
                           10
Val Trp His Trp Lys Val Asn Leu Gly Tyr Pro Pro Ala Ala Pro Phe
                 25
Thr Arg Ile Ala Pro Ala Arg Val Ala Leu Ser Arg Cys Arg Glu Arg
                     40
                                    4.5
Met Gly Arg Ser Met Arg His Ala Ile Ala Pro Ala Pro Ala Met Asp
                 55
                        60
Tyr Arg Arg Phe Thr Lys Ile Cys Phe Ser Ile Gln Ala Leu Met Leu
         70 75 80
Pro Pro Ala Cys Tyr Pro Val Tyr Asn Cys Arg Leu Ile Asn Thr Cys
           85 90
Asn Thr Gln Gly Glu Cys Met Ser Ile Thr Ala Lys Ser Val Tyr Arg
        100 105 110
Asp Thr Gly Asn Phe Phe Arg Asn Gln Phe Ile Thr Phe Leu Leu Ile
                     120
                                    125
Ala Leu Leu Cys Ala Phe Ile Thr Val Val Leu Gly His Ala Phe Ser
                      140
                 135
Pro Ser Asp Glu Gln Ile Ala Thr Leu Ser Gln Gly Asp His Leu Ala
              150
                              155
Gly Ser Ala Gly Leu Phe Asp Leu Val Gln Asn Met Thr Pro Glu Gln
            165
                           170 175
Gln Gln Ile Leu Leu Arg Ala Ser Ala Ala Ser Thr Phe Ser Gly Leu
         180 185 190
Ile Gly Asn Ala Ile Leu Ala Gly Gly Val Leu Leu Met Ile Gln Leu
      195 200 205
Val Ser Ala Gly Gln Arg Val Ser Ala Leu Arg Ala Ile Gly Ala Ser
                  215
                                 220
 210
Ala Pro Val Leu Pro Lys Leu Phe Ile Leu Ile Phe Leu Thr Thr Leu
               230
                             235
Leu Val Gln Met Gly Ile Met Leu Val Val Val Pro Gly Val Leu Leu
           245 250
Ala Ile Val Leu Ser Phe Ala Pro Val Met Val Val Gln Asp Lys Leu
         260 265
```

Gly Ile Phe Thr Ala Met Arg Ser Ser Ile Arg Leu Ala Trp Ala Asn

```
280
Met Arg Leu Val Ala Pro Ala Val Ile Ser Trp Leu Leu Ala Lys Thr
                                       300
                     295
Leu Leu Leu Phe Ala Pro Asn Phe Ala Val Leu Thr Pro Asn Val
           310
                          315
Gly Ala Val Val Ala Asn Thr Leu Ser Asn Leu Ile Ser Ala Val Leu
          325 330
Leu Val Tyr Leu Phe Arg Leu Tyr Met Leu Ile Arg Gln
          340
                            345
<210> 9137
<211> 155
<212> PRT
<213> Enterobacter cloacae
<400> 9137
Pro Tyr Ser Leu Gln Pro Glu Ile Ile Val Ala Ser Arg Leu Lys Ser
                                1.0
Ser Val Thr Ser Leu Lys Thr Met Thr Thr Asn Asp Ala Pro Gln Gly
                      25
                                               30
Glu Leu Val Leu Arg Thr Leu Ala Met Pro Ala Asp Thr Asn Ala Asn
                  40
                                          45
Gly Asp Ile Phe Gly Gly Trp Leu Met Ser Gln Met Asp Met Gly Gly
                                       60
               55
Ala Ile Leu Ala Lys Glu Ile Ala His Gly Arg Val Val Thr Val Arg
                  7.0
                                    7.5
Val Asp Gly Met Thr Phe Leu Arg Pro Val Ala Val Gly Asp Val Val
                                90
              8.5
Cys Cys Tyr Ala Arg Cys Val Lys Arg Gly Thr Thr Ser Val Ser Ile
          100
                          105
Asn Ile Glu Val Trp Val Lys Lys Val Ser Ser Glu Pro Ile Gly Gln
 115
                         120
                                 125
Arg Tyr Lys Ala Thr Glu Ala Leu Phe Ile Tyr Val Ala Val Asp Ser
                   135
130
Asp Gly Lys Pro Arg Gln Leu Pro Arg Ser
                  150
<210> 9138
<211> 915
<212> PRT
<213> Enterobacter cloacae
<400> 9138
Ser Phe Val Leu Leu Cys Val Thr Gln Val Gly Ser Ala Leu Thr Ile
Leu Ser Asp Val Ser Ser Ala Gly Leu Leu Lys Glu Phe Lys His Tyr
          20
                             25
Gln Glu Ser Ile Met Ala Val Thr Asn Ile Ala Glu Leu Asn Ala Leu
                                      4.5
                         4.0
Val Glu Arg Val Lys Lys Ala Gln Arg Glu Tyr Ala Asn Phe Thr Gln
                      55
 50
Glu Gln Val Asp Lys Ile Phe Arg Ala Ala Ala Leu Ala Ala Ala Asp
                  70
                                    7.5
Ala Arg Ile Pro Leu Ala Lys Met Ala Val Ala Glu Ser Gly Met Gly
                                 90
              85
Ile Val Glu Asp Lys Val Ile Lys Asn His Phe Ala Ser Glu Tyr Ile
           100
                             105
                                               110
Tyr Asn Ala Tyr Lys Asp Glu Lys Thr Cys Gly Val Leu Ser Glu Asp
       115
Asp Thr Phe Gly Thr Ile Thr Ile Ala Glu Pro Ile Gly Ile Ile Cys
                      135
                                        140
```

```
Gly Ile Val Pro Thr Thr Asn Pro Thr Ser Thr Ala Ile Phe Lys Ser
                             155
         150
Leu Ile Ser Leu Lys Thr Arg Asn Ala Ile Ile Phe Ser Pro His Pro
         165
                          170
Arg Ala Lys Asp Ala Thr Asn Lys Ala Ala Asp Ile Val Leu Gln Ala
        180
                       185
                                       190
Ala Ile Ala Ala Gly Ala Pro Lys Asp Leu Ile Gly Trp Ile Asp Gln
     195
Pro Ser Val Glu Leu Ser Asn Ala Leu Met His His Pro Asp Ile Asn
      215
                                220
Leu Ile Leu Ala Thr Gly Gly Pro Gly Met Val Lys Ala Ala Tyr Ser
225 230 235
Ser Gly Lys Pro Ala Ile Gly Val Gly Ala Gly Asn Thr Pro Val Val
      245 250 255
Ile Asp Glu Thr Ala Asp Ile Lys Arg Ala Val Ala Ser Val Leu Met
        260 265 270
Ser Lys Thr Phe Asp Asn Gly Val Ile Cys Ala Ser Glu Gln Ser Val
     275 280 285
Val Val Val Asp Ser Val Tyr Asp Ala Val Arg Glu Arg Phe Ala Ser
 290 295 300
His Gly Gly Tyr Leu Leu Gln Gly Lys Glu Leu Lys Ala Val Gln Asp
305 310 315 320
Val Ile Leu Lys Asn Gly Ala Leu Asn Ala Ala Ile Val Gly Gln Pro
           325 330 335
Ala Tyr Lys Ile Ala Glu Leu Ala Gly Phe Ser Val Pro Ala Thr Thr
        340 345 350
Lys Ile Leu Ile Gly Glu Val Lys Val Val Asp Glu Ser Glu Pro Phe
   355 360 365
Ala His Glu Lys Leu Ser Pro Thr Leu Ala Met Tyr Arg Ala Lys Asp
 370 375 380
Phe Asp Asp Ala Val Glu Lys Ala Glu Lys Leu Val Ala Met Gly Gly
              390
                            395 400
Ile Gly His Thr Ser Cys Leu Tyr Thr Asp Gln Asp Asn Gln Pro Glu
           405 410 415
Arg Val Ala Tyr Phe Gly Gln Lys Met Lys Thr Ala Arg Ile Leu Ile
        420
                      425 430
Asn Thr Pro Ala Ser Gln Gly Gly Ile Gly Asp Leu Tyr Asn Phe Lys
     435 440 445
Leu Ala Pro Ser Leu Thr Leu Gly Cys Gly Ser Trp Gly Gly Asn Ser
                 455
                                460
Ile Ser Glu Asn Val Gly Pro Lys His Leu Ile Asn Lys Lys Thr Val
465 470 475
Ala Lys Arg Ala Glu Asn Met Leu Trp His Lys Leu Pro Lys Ser Ile
                          490
         485
Tyr Phe Arg Arg Gly Ser Leu Pro Ile Ala Leu Asp Glu Val Ile Thr
        500
                     505 510
Asp Gly His Lys Arg Ala Leu Ile Val Thr Asp Arg Phe Leu Phe Asn
                    520
                                   525
Asn Gly Tyr Ala Asp Gln Ile Thr Ser Val Leu Lys Ala Ala Gly Val
  530
                  535
                                 540
Glu Thr Glu Val Phe Phe Glu Val Glu Ala Asp Pro Thr Leu Ser Val
               550
                              555
Val Arg Lys Gly Ala Glu Leu Ala Asn Ser Phe Lys Pro Asp Val Ile
            565
                           570
                                          575
Ile Ala Leu Gly Gly Gly Ser Pro Met Asp Ala Ala Lys Ile Met Trp
        580
                        585
                                       590
Val Met Tyr Glu His Pro Glu Thr His Phe Glu Glu Leu Ala Leu Arg
     595
                    600
                                   605
Phe Met Asp Ile Arg Lys Arg Ile Tyr Lys Phe Pro Lys Met Gly Val
                        620
                 615
  610
Lys Ala Lys Met Ile Ala Val Thr Thr Thr Ser Gly Thr Gly Ser Glu
```

```
Val Thr Pro Phe Ala Val Val Thr Asp Asp Ala Thr Gly Gln Lys Tyr
          645
                          650
Pro Leu Ala Asp Tyr Ala Leu Thr Pro Asp Met Ala Ile Val Asp Ala
                                      670
        660
                       665
Asn Leu Val Met Glu Met Pro Lys Ser Leu Cys Ala Phe Gly Gly Leu
 675
           680
                                   685
Asp Ala Val Thr His Ala Leu Glu Ala Tyr Val Ser Val Leu Ala Ser
 690 695
Glu Phe Ser Asp Gly Gln Ala Leu Gln Ala Leu Lys Leu Lys Glu
    710
                             715
Asn Leu Pro Ala Ser Tyr Asn Glu Gly Ser Lys Asn Pro Val Ala Arg
         725
                          730
Glu Arg Val His Ser Ala Ala Thr Ile Ala Gly Ile Ala Phe Ala Asn
                                      750
       740 745
Ala Phe Leu Gly Val Cys His Ser Met Ala His Lys Leu Gly Ser Gln
 755 760 765
Phe His Ile Pro His Gly Leu Ala Asn Ala Leu Leu Ile Ser Asn Val
 770 775 780
Ile Arg Tyr Asn Ala Asn Asp Asn Pro Thr Lys Gln Thr Ala Phe Ser
    790 795
Gin Tyr Asp Arg Pro Gin Ala Arg Arg Arg Tyr Ala Glu Ile Ala Asp
          805 810
His Leu Gly Leu Ser Ala Pro Gly Asp Arg Thr Ala Ala Lys Ile Glu
       820 825 830
Lys Leu Leu Ala Trp Leu Glu Ser Leu Lys Ala Glu Leu Gly Ile Pro
 1 835 840 845
Lys Ser Ile Arg Glu Ala Gly Val Gln Glu Ala Asp Phe Leu Ala His
 850 855 860
Val Asp Lys Leu Ser Glu Asp Ala Phe Asp Asp Gln Cys Thr Gly Ala
                   875
865 870
Asn Pro Arg Tyr Pro Leu Ile Ser Glu Leu Lys Gln Ile Leu Leu Asp
           885 890 895
Thr Tyr Tyr Ala Arg Asn Phe Thr Val Ala Asn Ser Glu Arg Arg Ser
                       905
Ile Pro Asn
```

<210> 9139 <211> 214 <212> PRT

915

<213> Enterobacter cloacae

<400> 9139 Asn Arg Asn Asp Ile Arg Cys Pro Ala Arg Pro Gln Thr Gly Asp Ile 10 Ala Met Ser Glu Asp Arg His Gln Gln Arg Gln Gln Arg Leu Lys Glu 20 25 Gln Val Asp Ala Arg Val Ala Ala Ala Gln Asp Glu Arg Gly Ile Leu 3.5 40 4.5 Ile Val Phe Thr Gly Asn Gly Lys Gly Lys Thr Thr Ala Ala Phe Gly 5.5 Thr Ala Thr Arg Ala Val Gly His Gly Gln Lys Val Gly Val Ile Gln 70 7.5 Phe Ile Lys Gly Glu Trp Pro Asn Gly Glu Arg Asn Leu Leu Glu Pro 90 85 His Gly Val Glu Phe Gln Val Met Ala Thr Gly Phe Thr Trp Asp Thr 105 110 100 Gln Asn Arg Glu Thr Asp Thr Ala Ala Cys Leu Ala Val Trp Glu His 120 115 Ala Lys Arg Met Leu Ser Asp Pro Ser Leu Asn Met Val Leu Leu Asp

4808 135 Glu Ile Thr Tyr Met Val Ala Tyr Asp Tyr Leu Ser Leu Glu Ala Val 150 155 Leu Ala Ala Leu Lys Asn Arg Pro Ala His Gln Thr Val Ile Val Thr 165 170 175 Gly Arg Gly Cys His Arg Asp Ile Leu Glu Leu Ala Asp Thr Val Ser 180 185 190 Glu Leu Arg Pro Val Lys His Ala Phe Asp Ala Gly Ile Lys Ala Gln 195 200 Ile Gly Ile Asp Tyr 210 <210> 9140 <211> 84 <212> PRT <213> Enterobacter cloacae <400> 9140 Asn Ser Gly Glu Cys Arg Met Lys Glu Ile Val Pro Asp Tyr Arg Leu 10 Asp Met Val Gly Glu Pro Cys Pro Tyr Pro Ala Val Ala Thr Leu Glu 25 20 Ala Leu Pro Gln Leu Lys Lys Gly Glu Ile Leu Glu Val Val Ser Asp 45 40 Cys Pro Gln Ser Ile Asn Asn Ile Pro Leu Asp Ala Lys Asn His Gly 60 50 55 Tyr Thr Val Leu Asp Ile Gln Gln Asp Gly Pro Thr Ile Arg Tyr Leu 65 Ile Gln Lys <210> 9141 <211> 188 <212> PRT <213> Enterobacter cloacae

<400> 9141 Phe Val Ser Asn Trp Asp Arg Arg Met Lys Gln Phe Leu Asp Phe Leu Pro Leu Ile Val Phe Phe Ala Phe Tyr Lys Leu Tyr Asp Ile Tyr Ala 25 2.0 Gly Thr Leu Ala Leu Ile Val Ala Thr Ala Val Val Leu Ile Tyr Ser 35 40 Trp Val Arg Tyr Arg Lys Val Glu Lys Met Ala Leu Ile Thr Phe Leu 5.0 Met Val Ala Val Phe Gly Gly Leu Thr Leu Phe Phe His Asn Asp Glu 7.0 75 Phe Ile Lys Trp Lys Val Thr Val Ile Tyr Gly Leu Phe Ala Gly Ala 85 90 Leu Leu Ile Ser Gln Trp Val Met Lys Lys Pro Leu Ile Gln Arg Met 105 100 Leu Gly Lys Glu Leu Thr Leu Pro Gln Ala Val Trp Gly Arg Leu Asn 115 120 125 Ile Ala Trp Ala Leu Phe Phe Ile Leu Cys Gly Leu Ala Asn Ile Tyr 135 140 130 Ile Ala Phe Trp Leu Pro Gln Asn Ile Trp Val Asn Phe Lys Val Phe 150 155 Gly Leu Thr Ala Leu Thr Leu Ile Phe Thr Leu Leu Ser Gly Val Tyr 170 165 Ile Tyr Arg His Met Pro Gln Asp Asp Lys His 180 185

<210> 9142

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<211> 684
<212> PRT
<213> Enterobacter cloacae
<400> 9142
Ala Leu Lys Gln Gln Pro Gly Val Ser Ile Ile Thr Ala Lys Asp Ile
                          10
Glu Lys Asp Pro Pro Val Asn Asp Leu Ser Glu Ile Ile Arg Lys Met
                     25
Pro Gly Val Asn Leu Thr Gly Asn Ser Ala Thr Gly Ser Arg Gly Asn
    35 40
Asn Arg Gln Ile Asp Ile Arg Gly Met Gly Pro Glu Asn Thr Leu Ile
               55 60
Leu Ile Asp Gly Val Pro Val Thr Ser Arg Asn Ser Val Arg Tyr Ser
65 70 75
Trp Arg Gly Glu Arg Asp Thr Arg Gly Asp Thr Asn Trp Val Pro Pro
         85
               90
Glu Met Val Glu Arg Ile Glu Val Leu Arg Gly Pro Ala Ala Ala Arg
        100 105 110
Tyr Gly Ser Gly Ala Ala Gly Gly Val Val Asn Ile Ile Thr Lys Arg
115 120 125
Pro Thr Asn Asp Trp His Gly Ser Leu Ser Leu Tyr Thr Asn Gln Pro
130 135 140
Glu Asn Asp Lys Glu Gly Ala Thr Lys Arg Ala Asn Phe Asp Leu Ser
145
              150 155 160
Gly Pro Leu Ala Gly Asp Ala Leu Thr Met Arg Leu Tyr Gly Asn Ile
           165 170 175
Asn Lys Thr Asp Ala Asp Ala Glr Asp Ile Asn Thr Ala Gln Asn Gly
 180
            185 190
Ser Tyr Ala Ala Gly Arg Glu Gly Val Arg Asn Lys Asp Ile Asn Ala
      195 200 205
Leu Leu Ser Trp Lys Leu Thr Pro Gln Gln Ile Ile Asp Phe Asp Tyr
210
               215 220
Ser Tyr Ser Arg Gln Gly Asn Ile Tyr Ala Gly Asp Thr Gln Tyr Ser
            230 235
Asn Ser Asn Val Ser Pro Asp Gly Leu Val Ser Ser Leu Tyr Gly His
           245 250
Glu Thr Asn Arg Met Tyr Arg Gln Ser Tyr Gly Ile Thr His Asn Gly
      260
                      265
Ile Trp Asp Trp Gly Gln Ser Lys Phe Gly Val Tyr Tyr Glu Lys Thr
                   280
Asn Asn Thr Arg Leu Glu Glu Gly Ser Thr Gly Lys Val Glu Gly Met
                  295
                                 300
   290
Ile Asn Ser Asp Lys Tyr Asp Thr Ser Arg Leu Glu Ser Tyr Arg Ser
            310 315
Thr Gly Glu Leu Asn Ile Pro Phe Phe Trp Leu Val Glu Gln Thr Leu
               330 335
Thr Val Gly Ala Glu Trp Asn Arg Asp Glu Leu Asn Asp Pro Ala Ser
                            350
                        345
         340
Met Gln Ala Thr Asn Val Ser Gly Glu Val Ile Asn Gly Val Pro Gly
                     360 365
Thr Ala Ser Glu Arg Asn Ser Lys Asn Ser Ala Asp Leu Thr Gly Ile
                               380
                  375
Tyr Leu Glu Asp Asn Ile Glu Ala Arg Gln Gly Thr Asn Leu Ile Pro
385 390 395
Gly Ile Arg Phe Asp Tyr His Asn Gln Phe Gly Ser Asn Trp Ser Pro
                410
           405
Ser Leu Asn Val Ser Gln Asp Leu Gly Asp Met Phe Lys Val Lys Ala
                     425
                                       430
```

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Gly Ile Ala Arg Val Phe Lys Ala Pro Asn Leu Tyr Gln Ser Ser Glu
                   440
     435
Gly Tyr Leu Leu Ser Thr Arg Gly Asn Gly Cys Pro Asn Asn Val Ser
 450
                 455
Glu Gly Ser Cys Tyr Leu Leu Gly Asn Pro Asp Leu Asp Pro Glu Ile
                            475
    470
465
Ser Val Asn Lys Glu Ile Gly Leu Ala Phe Ala Leu Glu Gly Tyr Glu
         485 490
Ala Gly Ile Thr Trp Phe Arg Asn Asp Tyr Lys Asn Lys Ile Val Ser
       500 505 510
Gly Thr Asp Val Leu Gly Gln Thr Ser Ser Gly Ala Asn Ile Leu Gln
     515 520
                        525
Trp Gln Asn Gly Gly Lys Ala Val Val Glu Gly Leu Glu Gly Asn Leu
 530 535 540
Thr Val Pro Val Ile Arg Asp Thr Leu Thr Trp Arg Thr Asn Ala Thr
              550 555 560
Tyr Met Ile Gln Ser Lys Ser Lys Asp Thr Gly Asn Pro Leu Ser Ile
           565 570 575
Ile Pro Lys Tyr Thr Val Asn Thr Met Leu Asp Trp Glu Val Asn Ser
            585 590
        580
Lys Leu Ser Ala Asn Val Ser Trp Thr Met Tyr Gly Arg Gln Lys Pro
     595 600 605
Arg Glu Asn Ala Glu Ile Arg Lys Glu Glu Asn Ala Met Ser Asn Arg
610
                615 620
Glu Ile Gly Ala Tyr Ser Ile Val Gly Ile Gly Ser Asn Tyr Gln Leu
                           635
              630
Thr Lys Asn Leu Arg Leu Asn Ala Gly Ile Ser Asn Leu Phe Asp Lys
           645 650 655
Gln Ile Tyr Arg Glu Asn Asp Gly Ala Ser Thr Tyr Asn Glu Pro Gly
        660 665
Arg Ala Tyr Tyr Ala Gly Val Thr Leu Ser Phe
                     680
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<210> 9143 <211> 111 <212> PRT <213> Enterobacter cloacae

<400> 9143 Arg Asn Cys His Phe Tyr Arg Leu Arg Ser Phe Ala Val Leu Tyr Val 1.0 Ile Tyr Ala Glu Asp Val Pro Asp Ser Leu Glu Lys Arg Leu Ser Val 25 20 Arg Pro Ala His Leu Ala Arg Leu Gln Leu Leu Gln Asp Glu Gly Arg 45 35 40 Leu Leu Thr Ala Gly Pro Met Pro Ala Val Asp Ser Asn Asp Pro Gly 5.5 Ala Ala Gly Phe Thr Gly Ser Ala Val Ile Ala Glu Phe Glu Ser Leu 75 70 Glu Ala Ala Gln Ala Trp Ala Glu Ala Asp Pro Tyr Val Ala Ala Gly 90 85 Val Tyr Glu Lys Val Thr Val Arg Pro Tyr Lys Lys Val Phe 105 100

<210> 9144 <211> 504 <212> PRT <213> Enterobacter cloacae

<400> 9144

Ile Leu Met Arg Lys Leu Ile Thr Ile Arg Phe Gln Lys Asp Phe Leu

Phe Met Thr Thr Phe Tyr Thr Val Val Ser Trp Leu Val Ile Leu Gly 25 Tyr Trp Leu Leu Ile Ala Gly Val Thr Leu Arg Ile Leu Met Lys Arg 4.0 Arg Ala Val Pro Ser Ala Met Ala Trp Leu Leu Ile Ile Tyr Ile Leu Pro Leu Val Gly Ile Ile Ala Tyr Leu Ser Phe Gly Glu Leu His Leu 65 70 7.5 Gly Lys Arg Arg Ala Glu Arg Ala Arg Ala Met Trp Pro Ser Thr Ala 85 90 Lys Trp Leu Ala Asp Leu Lys Ala Cys Lys His Ile Phe Ala Glu Glu 100 105 110 Asn Ser Ser Val Ala Ala Ser Leu Phe Lys Leu Cys Glu Arg Arg Gln 115 120 125 Gly Ile Ala Gly Val Lys Gly Asn Gln Leu Gln Leu Met Thr Ser Ser 130 135 140 Asp Asp Val Met Gln Ala Leu Ile Arg Asp Ile Gln Leu Ala Arg His 145 150 155 Asn Ile Glu Met Val Phe Tyr Ile Trp Gln Pro Gly Gly Met Ala Asp 165 170 175 Gln Val Ala Glu Ser Leu Met Ala Ala Ala Arg Arg Gly Ile His Cys 180 185 190 Arg Leu Met Leu Asp Ser Ala Gly Ser Val Ala Phe Phe Arg Ser Pro 195 200 205 Trp Ala Gly Met Met Arg Asn Ala Gly Ile Glu Val Val Glu Ala Leu 210 215 220 Lys Val Asn Leu Phe Arg Val Phe Leu Arg Arg Met Asp Leu Arg Gln 225 230 235 His Arg Lys Met Val Leu Ile Asp Asn Tyr Ile Ala Tyr Thr Gly Ser 245 250 255 Met Asn Met Val Asp Pro Arg Phe Phe Lys Gln Asp Ser Gly Val Gly 260 265 270 Gln Trp Ile Asp Leu Met Ala Arg Met Glu Gly Pro Ile Ala Thr Ser 275 280 285 Met Gly Ile Val Tyr Ser Cys Asp Trp Glu Ile Glu Thr Gly Lys Arg 295 300 Ile Leu Pro Pro Pro Pro Asp Gly Asn Ile Met Pro Phe Glu Glu Ala 310 315 320 Ser Gly His Thr Ile His Thr Ile Ala Ser Gly Pro Gly Phe Pro Glu 325 330 335 Asp Leu Ile His Gln Ala Leu Leu Thr Ala Ala Tyr Ser Ala Arg Glu 345 340 Tyr Leu Ile Met Thr Thr Pro Tyr Phe Val Pro Ser Asp Asp Leu Leu 360 355 His Ala Ile Cys Thr Ala Ala Gln Arg Gly Val Asp Val Ser Ile Ile 375 380 370 Met Pro Arg Lys Asn Asp Ser Leu Leu Val Gly Trp Ala Ser Arg Ala 390 395 385 Phe Phe Ser Glu Leu Leu Ala Ala Gly Val Lys Ile Tyr Gln Phe Glu 405 410 Gly Gly Leu Leu His Thr Lys Ser Val Leu Val Asp Gly Glu Leu Ser 425 430 420 Leu Val Gly Thr Val Asn Leu Asp Met Arg Ser Leu Trp Leu Asn Phe 440 445 435 Glu Ile Thr Leu Val Ile Asp Asp Ala Gly Phe Gly Gly Asp Leu Ala 455 460 Ala Val Gln Asp Asp Tyr Ile Ser Arg Ser Arg Leu Leu Asp Ala Arg 475 470 Leu Trp Ala Lys Arg Pro Leu Trp Gln Arg Ile Ala Glu Arg Leu Phe 485

Tyr Phe Phe Ser Pro Leu Leu 500

<210> 9145 <211> 114

<212> PRT <213> Enterobacter cloacae

<400> 9145

Gln Val Val Ile Met Glu Met Asp Leu Asn Asn Arg Leu Thr Glu Asp 5 10 Glu Thr Leu Glu Gln Ala Tyr Asp Ile Phe Leu Glu Leu Ala Val Asp 25 30 Asn Leu Asp Pro Ala Asp Val Ile Leu Phe Asn Leu Gln Phe Glu Glu

4.0 4.5 Arg Gly Gly Ala Glu Leu Phe Asp Pro Ser Glu Asp Trp Ala Glu His 5.0 55 60

Val Asp Phe Asp Leu Asn Pro Asp Phe Phe Ala Glu Val Val Ile Gly 75 70 Leu Ala Asp Glu Asp Gly Gly Glu Ile Asn Asp Ile Phe Ala Arg Val

85 90 Leu Leu Cys Arg Glu Lys Asp His Lys Leu Cys His Ile Leu Trp Arg 105

Glu

<210> 9146 <211> 218 <212> PRT

<213> Enterobacter cloacae

195

210

Ala Lys Met Gly His Leu Leu Ser Glu

100

<400> 9146 Ser Asn Thr Glu Ser Ile Met Gly Gln Arg His Glu Thr Cys Gln Pro 10 Gly Leu Asp Asn His Met Gln Leu Lys Arg Val Ala Glu Ala Lys Leu 20 25 Pro Thr Pro Trp Gly Asp Phe Leu Met Val Gly Phe Glu Glu Leu Ala 35 4.0 Thr Gly Gln Asp His Val Ala Leu Val Phe Gly Asp Ile Ser Gly Gln 55 60 50 Thr Pro Val Leu Ser Arg Val His Ser Glu Cys Leu Thr Gly Asp Ala 70 Leu Phe Ser Leu Arg Cys Asp Cys Gly Phe Gln Leu Glu Ala Ala Leu 90 85 Ser His Ile Ala Glu Glu Gly Arg Gly Val Leu Leu Tyr His Arg Gln 105 100 Glu Gly Arg Asn Ile Gly Leu Leu Asn Lys Ile Arg Ala Tyr Ala Leu 115 120 125 Gln Asp Gln Gly Tyr Asp Thr Val Glu Ala Asn His Gln Leu Gly Phe 135 140 130 Ala Ala Asp Glu Arg Asp Phe Thr Leu Cys Ala Asp Met Phe Lys Leu 155 160 150 Leu Gly Val Asp Glu Val Arg Leu Leu Thr Asn Asn Pro Lys Lys Val 165 170 175 Glu Ile Leu Thr Glu Ala Gly Ile Asn Ile Val Glu Arg Val Pro Leu 190 180 185 Ile Val Gly Arg Asn Pro Lys Asn Ala His Tyr Leu Asp Thr Lys Ala 205

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<210> 9147
<211> 257
<212> PRT
<213> Enterobacter cloacae
<400> 9147
Gly Ala Thr Val His Tyr Gln Pro Gln Lys Asn Leu Leu Gln Asn Arg
                        10
Ile Ile Leu Val Thr Gly Ala Ser Asp Gly Ile Gly Arg Glu Ala Ala
                        25
         2.0
                                             30
Leu Thr Tyr Ser Glu Tyr Gly Ala Ser Leu Ile Leu Leu Gly Arg Asn
                       40
                                        4.5
Glu Glu Lys Leu Lys Ala Val Ala Arg Glu Ile Glu Asn Ala Gly Gly
              55
                                     60
Thr Pro Thr Pro Trp Tyr Thr Leu Asp Leu Leu Thr Cys Thr Pro Ala
                70
                               75
Ser Cys Gln Ala Ile Ala Gln Arg Ile Ser Thr His Tyr Pro Arg Leu
                              90
                                             95
            85
Asp Gly Val Leu His Asn Ala Gly Leu Leu Gly Glu Val Arg Pro Met
          100 105
                                            110
Asp Glu Gln Asp Pro Glu Ile Trp Gln Gln Val Met Gln Val Asn Val
 115 120 125
Asn Gly Thr Phe Phe Leu Thr Gln Ala Leu Leu Pro Leu Leu Leu Asn
                 135
                                     140
 130
Ser Asp Ser Gly Ser Leu Val Phe Thr Ser Ser Ser Val Gly Arg Gln
                 150
                                  155
145
Gly Arg Ala Asn Trp Gly Ala Tyr Ala Val Ser Lys Phe Ala Thr Glu
                               170
             165
Gly Met Met Gln Val Leu Ala Glu Glu Tyr Gln Ser Arg His Leu Arg
                           185
          180
Val Asn Cys Ile Asn Pro Gly Gly Thr Arg Thr Lys Met Arg Ala Ser
                       200
 195
Ala Phe Pro Thr Glu Asp Pro Gln Lys Leu Lys Thr Pro Ala Asp Ile
                    215 220
   210
Met Pro Leu Tyr Leu Trp Leu Met Gly Asp Asp Ser Arg Arg Lys Thr
              230 235 240
Gly Met Thr Phe Asp Ala Gln Pro Gly Arg Lys Pro Gly Ile Ser Gln
                               250
              245
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<210> 9148
<211> 551
<212> PRT
<213> Enterobacter cloacae
<400> 9148
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Ser Ala Arg Gly Thr Ala Arg His Cys Tyr Arg Thr Pro Cys Thr Gly 10 Asp Phe Leu Met Ala Asp Ile Leu Leu Leu Asp Asn Ile Asp Ser Phe 25 Thr Tyr Asn Leu Ala Asp Gln Leu Arg Ala Asn Gly His Asn Val Val 40 45 Ile Tyr Arg Asn His Val Pro Ala Gln Thr Leu Ile Asp Arg Leu Ala 55 Thr Met Gln Asn Pro Val Leu Met Leu Ser Pro Gly Pro Gly Ala Pro 70 75 65 Ser Glu Ala Gly Cys Met Pro Glu Leu Leu Thr Arg Met Arg Gly Lys 85 90 Leu Pro Ile Ile Gly Ile Cys Leu Gly His Gln Ala Ile Val Glu Ala 105 110

Tyr Gly Gly Tyr Val Gly Gln Ala Gly Glu Ile Leu His Gly Lys Ala 125 Ser Ser Ile Glu His Asp Gly Gln Ala Met Phe Ala Gly Leu Pro Asn 130 135 140 Pro Leu Pro Val Ala Arg Tyr His Ser Leu Val Gly Ser Asn Ile Pro 145 150 155 Ala Gly Leu Thr Ile Asn Ala Ser Phe Glu Gly Met Val Met Ala Val 165 170 Arg His Asp Ala Asp Arg Val Cys Gly Met Gln Phe His Pro Glu Ser 180 185 190 Ile Leu Thr Ser Asn Gly Gly Arg Leu Leu Glu Gln Thr Leu Asp Trp 195 200 205 Ala Leu Gln Lys Leu Glu Gln Thr Asn Thr Leu Gln Pro Ile Leu Glu 210 215 220 Lys Leu Tyr Gln Ala Gln Thr Leu Ser Gln Gln Glu Ser His Gln Leu 225 230 235 240 Phe Ser Ala Val Val Arg Gly Glu Leu Lys Pro Glu Gln Leu Ala Ala 245 250 255 Ala Leu Val Ser Met Lys Val Arg Gly Glu Ser Pro Gln Glu Ile Ala 260 265 270 Gly Ala Ala Thr Ala Leu Leu Glu Asn Ala Ala Pro Phe Pro Arg Pro 275 280 285 Asp Tyr Pro Phe Ala Asp Ile Val Gly Thr Gly Gly Asp Gly Ser Asn 290 295 300 Ser Ile Asn Ile Ser Thr Ala Ser Ala Phe Val Ala Ala Ala Cys Gly 305 310 315 320 Leu Lys Val Ala Lys His Gly Asn Arg Ser Val Ser Ser Arg Ser Gly 325 330 335 Ser Ser Asp Leu Leu Ala Ala Phe Gly Ile Asn Leu Asp Met Asn Ala 340 345 350 Glu Arg Ser Arg Glu Ala Leu Asp Asp Leu Gly Val Cys Phe Leu Phe 355 360 365 Ala Pro Lys Tyr His Thr Gly Phe Arg His Ala Met Pro Val Arg Gln 375 380 370 Gln Leu Lys Thr Arg Thr Leu Phe Asn Val Leu Gly Pro Leu Ile Asn 395 400 390 Pro Ala His Pro Pro Leu Ala Leu Ile Gly Val Tyr Ser Pro Glu Leu 405 410 415 Val Leu Pro Ile Ala Glu Thr Leu Arg Val Leu Gly Tyr Gln Arg Ala 420 425 430 Ala Val Val His Ser Gly Gly Met Asp Glu Val Ser Leu His Ala Pro 440 435 Thr Leu Val Ala Glu Leu Asn His Gly Glu Val Leu Asn Tyr Gln Leu 450 455 460 Glu Ala Ala Asp Phe Gly Leu Thr Pro Tyr His Gln Asp Ala Leu Ala 470 475 Gly Gly Thr Pro Glu Glu Asn Arg Asp Ile Leu Thr Arg Leu Leu Gln 485 490 Gly Lys Gly Glu Ala Ala His Glu Ala Ala Val Ala Ala Asn Val Ala 505 500 Met Leu Met Arg Leu His Gly Glu Glu Asp Leu Lys Ala Asn Ala Gln 520 525 Lys Val Leu Ala Val Leu Arg Ser Gly Ala Ala Tyr Asp Arg Val Thr 530 535 540 Ala Leu Ala Ala Arg Gly 550

<210> 9149 <211> 454

<211> 454 <212> PRT

<213> Enterobacter cloacae

<400> 9149 Ile Met Gln Thr Val Leu Ala Lys Ile Val Ala Asp Lys Ala Ile Trp 1.0 Val Glu Ala Arg Lys Gln Gln Gln Pro Leu Ala Ser Phe Gln Asn Asp 20 25 Val Val Pro Ser Ser Arg Arg Phe Tyr Asp Ala Leu Gln Gly Ala Arg 35 40 Thr Ala Phe Ile Leu Glu Cys Lys Lys Ala Ser Pro Ser Lys Gly Val 50 55 60 Ile Arg Asp Asp Phe Asp Pro Ala Arg Ile Ala Gly Ile Tyr Lys His 70 75 His Ala Ser Ala Ile Ser Val Leu Thr Asp Glu Lys Tyr Phe Gln Gly 85 90 95 Ser Phe Asp Phe Leu Pro Val Val Ser Gly Ile Ala Pro Gln Pro Ile 100 105 110 Leu Cys Lys Asp Phe Ile Ile Asp Pro Tyr Gln Ile Trp Leu Ala Arg 115 120 125 Phe Tyr Gln Ala Asp Ala Cys Leu Leu Met Leu Ser Val Leu Asp Asp 130 135 140 Glu Gln Tyr Arg Gln Leu Ser Ala Val Ala His Ser Leu Asn Met Gly 145 150 155 160 Val Leu Thr Glu Val Ser Asn Glu Glu Glu Leu Glu Arg Ala Ile Ala 165 170 175 Leu Glu Ala Lys Val Val Gly Ile Asn Asn Arg Asp Leu Arg Asp Leu 180 185 190 Ser Ile Asp Leu Asn Arg Thr Arg Gln Leu Ala Pro Arg Leu Gly Ala 200 205 195 Gly Val Thr Val Ile Ser Glu Ser Gly Ile Asn Ser Tyr Ala Gln Val 210 215 220 Arg Glu Leu Ser His Phe Ala Asn Gly Phe Leu Ile Gly Ser Ala Met 225 230 235 Met Glu His Asp Asp Leu Asn Ala Ala Val Arg Arg Val Leu Leu Gly 245 250 255 Glu Asn Lys Val Cys Gly Leu Thr Arg Glu Gln Asp Ala Gln Ala Ala 260 265 270 Tyr Glu Ala Gly Ala Ile Tyr Gly Gly Leu Ile Phe Val Glu Ser Ser 280 285 275 Pro Arg Ala Val Asn Glu Glu Gln Ala Arg Lys Val Met Ala Ala Ala 295 300 Pro Leu Asn Tyr Val Gly Val Phe Arg Asp Ala Asp Ile Asn Asp Val 310 315 305 Ala Ala Lys Ala Asp Aia Leu Ser Leu Ser Ala Val Gln Leu His Gly 325 330 Asp Glu Asp Gln Ala Tyr Ile Asp Ala Leu Arg His Ala Leu Ala Pro 340 345 350 Gin Val Gin Ile Trp Lys Ala Gin Ser Val Gly Ala Thr Leu Pro Ala 355 360 365 Arg Asn Leu Lys His Val Asp Lys Tyr Val Leu Asp Asn Gly Gln Gly 370 375 380 Gly Thr Gly Gln Arg Phe Asp Trp Ser Leu Leu Arg Gly Glu Val Leu 390 395 385 Asp Asn Val Leu Leu Ala Gly Gly Leu Ser Pro Asp Asn Cys Val Glu 405 410 415 Ala Ala Lys Thr Gly Cys Ala Gly Leu Asp Phe Asn Ser Gly Val Glu 425 430 420 Ser Gln Pro Gly Ile Lys Asp Ala Ser Lys Leu Ala Ser Val Phe Lys 440 435 Thr Leu Arg Ala Tyr

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<210> 9150
<211> 287
<212> PRT
<213> Enterobacter cloacae
<400> 9150
Gln Arg Tyr Leu His Arg Ser Arg Tyr Ser Glu Ser Thr Arg Gly Asn
                           10
Leu Met Glu Arg Tyr Asp Asn Ala Phe Ala Gln Leu Lys Ala Arg Gln
      20
             25
Glu Gly Ala Phe Val Pro Phe Val Thr Leu Gly Asp Pro Gly Pro Glu
     35 40
                                    45
Gln Ser Leu Lys Ile Ile Asp Thr Leu Ile Asp Ala Gly Ala Asp Ala
       55 60
Leu Glu Leu Gly Ile Pro Phe Ser Asp Pro Leu Ala Asp Gly Pro Thr
               70 75
Ile Gln Asn Ala Thr Leu Arg Ala Phe Ala Ala Gly Val Thr Pro Gly
         85 90 95
Gln Cys Phe Glu Met Leu Ala Ala Ile Arg Gln Lys His Pro Thr Ile
        100 105
                             110
Pro Ile Gly Leu Leu Met Tyr Ala Asn Leu Val Phe Ser Arg Gly Ile
                    120 125
115
Asp Ala Phe Tyr Ala Glu Cys Ala Arg Val Gly Val Asp Ser Val Leu
130 135 140
Val Ala Asp Val Pro Val Glu Glu Ser Ala Pro Phe Arg Gln Ala Ala
                   155
              150
Met Arg His Asn Val Ala Pro Ile Phe Ile Cys Pro Pro Asn Ala Asp
      165 170 175
Asp Asp Leu Leu Arg Gln Ile Ala Ser Tyr Gly Arg Gly Tyr Thr Tyr
   180
                        185 190
Leu Leu Ser Arg Ala Gly Val Thr Gly Ala Glu Asn Lys Ala Ala Leu
                     200 205
195
Pro Leu His His Leu Val Glu Lys Leu Ala Glu Tyr His Ala Ala Pro
                215 220
210
Pro Leu Gln Gly Phe Gly Ile Ser Ser Pro Asp Gln Val Thr Ala Ala
               230 235
225
Ile Asp Ala Lys Ala Ala Gly Ala Ile Ser Gly Ser Ala Ile Val Lys
                           250 255
            245
Ile Ile Glu Lys Asn Val Asp Lys Pro Gln Gln Met Leu Ala Glu Leu
        260 265 270
His Ala Phe Val Thr Ser Met Lys Ala Ala Thr Arg Lys Ala
                     280
<210> 9151
<211> 409
<212> PRT
<213> Enterobacter cloacae
<400> 9151
Val Gln Arg Leu Phe Met Ser Trp Tyr Ser Phe Lys Gln Thr Tyr Leu
                            1.0
1
Val Lys Phe Trp Ser Pro Val Pro Ala Val Ile Ala Ala Gly Ile Leu
    20
                        25
                                        30
Ser Thr Tyr Tyr Phe Gly Ile Thr Gly Thr Phe Trp Ala Val Thr Gly
                                     45
                     40
Glu Phe Thr Arg Trp Gly Gly Gln Leu Leu Gln Leu Ala Gly Val His
                  55
Ala Glu Glu Trp Gly Tyr Phe Lys Leu Ile His Leu Glu Gly Thr Pro
```

85

75

Leu Thr Arg Ile Asp Gly Met Met Ile Ile Gly Met Phe Gly Gly Cys 90

```
Phe Ala Ala Ala Leu Trp Ala Asn Asn Val Lys Leu Arg Met Pro Lys
                                      110
    100
                     105
Ser Arg Ile Arg Ile Met Gln Ala Val Val Gly Gly Ile Ile Ala Gly
  115 120
                                   125
Phe Gly Ala Arg Leu Ala Met Gly Cys Asn Leu Ala Ala Phe Phe Thr
 130 135
                                140
Gly Ile Pro Gln Phe Ser Leu His Ala Trp Phe Phe Ala Val Ala Thr
145 150 155
Ala Ile Gly Ser Tyr Phe Gly Ala Lys Phe Thr Leu Leu Pro Leu Phe 165 \\ 170 \\ 175
Arg Ile Pro Val Lys Met Thr Lys Val Ser Ala Ala Ser Pro Leu Thr
      180 185 190
Gln Lys Pro Asp Gln Ala Arg Arg Arg Phe Arg Leu Gly Met Leu Val
   195 200 205
Phe Phe Ala Met Val Ala Trp Ala Ile Cys Thr Ala Met Asn Gln Pro
 210 215 220
Lys Leu Gly Leu Ala Met Leu Phe Gly Val Gly Phe Gly Leu Leu Ile
225 230 235 240
Glu Arg Ala Gln Ile Cys Phe Thr Ser Ala Phe Arg Asp Met Trp Ile
     245 250 255
Thr Gly Arg Thr Met Met Ala Lys Ala Ile Ile Ala Gly Met Ala Val
 260 265
Ser Ala Ile Gly Ile Phe Ser Tyr Val Gln Leu Gly Val Glu Pro Lys
275 280
Ile Met Trp Ala Gly Pro Asn Ala Val Ile Gly Gly Leu Leu Phe Gly
                 295
Phe Gly Ile Val Leu Ala Gly Gly Cys Glu Thr Gly Trp Met Tyr Arg
              310 315
305
Ala Val Glu Gly Gln Val His Tyr Trp Trp Val Gly Leu Gly Asn Val
           325
                          330 335
Ile Gly Ser Thr Leu Leu Ala Cys Tyr Trp Asp Asp Val Ser Pro Val
         340
                       345
                           350
Leu Ala Thr Asn Trp Asp Lys Val Asn Leu Leu Lys Thr Phe Gly Pro
     355
                    360
                                   365
Leu Gly Gly Leu Leu Val Thr Tyr Ala Leu Leu Leu Ile Ala Phe Leu
 370
                 375 380
Leu Val Val Ala Gln Glu Lys Arg Phe Phe Arg Arg Ala Thr Ala Lys
              390
                             395
385
Thr Glu Thr Gln Glu Asn Ala Ala
           405
```

<210> 9152

<211> 145 <212> PRT

<213> Enterobacter cloacae

<400> 9152 Phe Asp Ala Phe Tyr Phe Cys Arg Cys Ala Met Ser Asp His Asn Pro 10 1.5 Cys Met Thr Cys Gly Ala Cys Cys Ala Tyr Phe Arg Val Ser Phe Tyr 3.0 Trp Ala Glu Ala Ser Asp Gly Gly Gly Thr Val Pro Val Asp Leu Thr 35 40 Glu Pro Leu Thr Pro Phe Leu Arg Cys Met Arg Gly Thr Asn Gln Lys 60 Gln Ser Arg Cys Val Ala Leu Glu Gly Glu Pro Gly Val Ser Thr Arg 70 7.5 80 Cys Ser Ile Tyr Ala Asp Arg Pro Ser Pro Cys Arg Thr Phe Ala Met 90

85 90 95 Ser Gly Glu Asp Gly Gln Val Asn Glu Ala Cys Asn Arg Ala Arg Ala

Asp Gly Gin Val Ash Glu Ala Cys Ash Arg Ala 100 105 110

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4818
Arg Tyr Gly Leu Pro Pro Leu Tyr Lys Asp Met Leu Phe His Thr Ser
           120
    115
Leu Asp Ala Ala Thr Ser Val Leu Ser Gly Val Gln Leu Pro Ala Asn
         135
                         140
145
<210> 9153
<211> 117
<212> PRT
<213> Enterobacter cloacae
<400> 9153
His Ala Val Ser Pro Trp Thr Cys Ser Ile Ala Glu Leu Asn Val Ile
                             10
Gln Thr Leu Phe Asp Phe Pro Thr Tyr Phe Lys Phe Phe Ile Gly Leu
                                          30
        20
                           25
Phe Ala Leu Val Asn Pro Val Gly Ile Ile Pro Val Phe Ile Ser Met
                      40
                                        4.5
Thr Ser Tyr Gln Thr Ala Ala Ala Arg Asn Lys Thr Asn Leu Thr Ala
                    5.5
                                60
Asn Leu Ser Trp Arg Phe Ile Ile Leu Ser Ser Leu Tyr Leu Gly Asn
                                   75
                 70
Ala Ile Leu Gln Phe Phe Gly Ile Ser Ile Asp Ser Phe Arg Tyr Ser
            85 90
Arg Arg Asp Pro Gly Gly Asp Asp Cys His Val Asp Asp Gln Arg Gln
                           105
         100
Ala Gly Gly Gly
       115
<210> 9154
<211> 318
<212> PRT
<213> Enterobacter cloacae
<400> 9154
His Ser Ser Gly Thr Arg Gln Lys Val Arg Ala Met Leu Lys Phe Ile
Leu Arg Arg Cys Leu Glu Ala Ile Pro Thr Leu Phe Ile Leu Ile Thr
          20
                            2.5
                                              30
Ile Ser Phe Phe Met Met Arg Leu Ala Pro Gly Ser Pro Phe Thr Gly
                         4.0
   35
Glu Arg Thr Leu Pro Pro Glu Val Met Ala Asn Ile Glu Ala Lys Tyr
 50
                     55
His Leu Asn Asp Pro Ile Thr Thr Gln Tyr Phe Asn Tyr Leu Lys Gln
                 7.0
                                   7.5
Leu Ala His Gly Asp Phe Gly Pro Ser Phe Lys Tyr Lys Asp Tyr Ser
              85
                                90
                                                  95
Val Asn Asp Leu Val Ala Ser Ser Phe Pro Val Ser Ala Lys Leu Gly
          100
                            105
                                110
Ala Ala Ala Phe Ile Leu Ala Val Val Leu Gly Val Thr Ala Gly Val
       115
                         120
                                           125
Ile Ala Ala Leu Lys Gln Asn Thr Arg Trp Asp Tyr Ala Val Met Gly
                     135
                          140
   130
Val Ala Met Thr Gly Val Val Ile Pro Ser Phe Val Val Ala Pro Leu
                         155
                  150
145
Leu Val Met Ile Phe Ala Ile Thr Leu Lys Trp Leu Pro Gly Gly Gly
              165
                             170
```

Trp Asn Gly Gly Ala Leu Lys Phe Met Ile Leu Pro Met Val Ala Leu

185 Ser Leu Ala Tyr Ile Ala Ser Ile Ala Arg Ile Thr Arg Gly Ser Met

Asp Arg

```
200
Ile Glu Val Leu His Ser Asn Phe Ile Arg Thr Ala Arg Ala Lys Gly
                 215
                             220
Leu Pro Met Arg Arg Ile Ile Phe Arg His Ala Leu Lys Pro Ala Leu
         230
                            235
Leu Pro Val Leu Ser Tyr Met Gly Pro Ala Phe Val Gly Ile Ile Thr
         245
               250
Gly Ser Met Val Ile Glu Thr Ile Tyr Gly Leu Pro Gly Ile Gly Gln
      260 265 270
Leu Phe Val Asn Gly Ala Leu Asn Arg Asp Tyr Ser Leu Val Leu Ser
275 280
                         285
Leu Thr Ile Leu Val Gly Ala Leu Thr Ile Leu Phe Asn Ala Val Val
290 295 300
Asp Val Leu Tyr Ala Val Ile Asp Pro Lys Ile Arg Tyr
               310
<210> 9155
<211> 307
<212> PRT
<213> Enterobacter cloacae
<400> 9155
Leu Glu His Ala Met Met Leu Ser Lys Lys Asn Ser Glu Ala Leu Glu
                          1.0
Asn Phe Ser Glu Lys Leu Glu Val Glu Gly Arg Ser Leu Trp Gln Asp
               25
                                       3.0
Ala Arg Arg Arg Phe Met His Asn Arg Ala Ala Val Ala Ser Leu Val
                  40
                            4.5
Val Leu Val Leu Ile Ala Leu Phe Val Thr Leu Ala Pro Met Leu Ser
                  55
                      60
Leu Phe Thr Tyr Phe Asp Thr Asp Trp Gly Met Met Ser Ser Ala Pro
              7.0
                             7.5
Asp Met Glu Ser Gly His Tyr Phe Gly Thr Asp Ser Ser Gly Arg Asp
           85
               9.0
Leu Leu Val Arg Val Ala Ile Gly Gly Arg Ile Ser Leu Met Val Gly
       100 105 110
Ile Ala Ala Ala Leu Val Ala Val Ile Val Gly Thr Leu Tyr Gly Ser
 115
                    120 125
Leu Ser Gly Tyr Leu Gly Gly Lys Val Asp Ser Val Met Met Arg Leu
                135 140
Leu Glu Ile Leu Asn Ser Phe Pro Phe Met Phe Phe Val Ile Leu Leu
             150 155
Val Thr Phe Phe Gly Gln Asn Ile Leu Leu Ile Phe Val Ala Ile Gly
        165 170 175
Met Val Ser Trp Leu Asp Met Ala Arg Ile Val Arg Gly Gln Thr Leu
        180 185
Ser Leu Lys Arg Lys Glu Phe Ile Glu Ala Ala Gln Val Gly Gly Val
     195 200 205
Ser Thr Ala Asn Ile Val Val Arg His Ile Val Pro Asn Val Leu Gly
                  215
                                 220
Val Val Val Tyr Ala Ser Leu Leu Val Pro Ser Met Ile Leu Phe
               230 235
Glu Ser Phe Leu Ser Phe Leu Gly Leu Gly Thr Gln Glu Pro Leu Ser
          245 250 255
Ser Trp Gly Ala Leu Leu Ser Asp Gly Ala Asn Ser Met Glu Val Ser
         260
                        265 270
Pro Trp Leu Leu Tyr Pro Ala Gly Phe Leu Val Val Thr Leu Phe
     275 280 285
Cys Phe Asn Phe Ile Gly Asp Gly Leu Arg Asp Ala Leu Asp Pro Lys
 290
                  295
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305
<210> 9156
<211> 271
<212> PRT
<213> Enterobacter cloacae
<400> 9156
Arg Asn Ser Val Met Ile Val Val Leu Ser Glu Lys Gly Glu Asp Met
                            10
Leu Ser Ile Ala Arg Arg Thr Ala Ala Gly Ala Ala Val Leu Leu Val
 20
                         25
Ile Pro Leu Val Val Trp Phe Ser Gly Trp Met Trp Gln Pro Gly Gln
 35 40
Asn Glu Thr Trp Leu Lys Ala Leu Tyr Trp Ile Thr Glu Thr Val Thr
             5.5
                                   60
Gln Pro Trp Gly Ile Ile Thr His Val Leu Leu Cys Gly Trp Phe Leu
               7.0
                               75
Trp Cys Leu Arg Phe Arg Leu Arg Ala Ala Leu Val Leu Phe Ala Ile
            85
                            90
Leu Gly Gly Ala Ile Leu Ile Gly Gln Gly Val Lys Ser Trp Val Lys
         100 105 110
Asp Arg Val Gln Glu Pro Arg Pro Phe Val Val Trp Leu Glu Lys Thr
 115 120 125
His His Val Pro Val Asp Glu Phe Tyr Asn Leu Lys Arg Lys Asp Arg
                  135 140
 130
Gly Ala Leu Val Lys Glu Gln Leu Ala Glu Gln Gln Asp Ile Pro Thr
145 150
                    155 160
Phe Leu Arg Lys His Trp Gln Lys Glu Thr Gly Phe Ala Phe Pro Ser
            165 170 175
Gly His Thr Met Phe Ala Ala Ser Trp Ala Leu Leu Gly Val Gly Leu
         180 185
Leu Trp Pro Arg Arg Arg Thr Leu Thr Ile Ala Ile Leu Leu Val Trp
                      200 205
      195
Ala Thr Gly Val Met Gly Ser Arg Met Leu Leu Gly Met His Trp Pro
                   215 220
 210
Arg Asp Leu Val Val Ala Thr Leu Ile Ser Trp Val Leu Val Thr Leu
             230 235 240
225
Ala Thr Trp Leu Ala Gln Arg Phe Cys Gly Pro Leu Thr Pro Pro Pro
         245 250 255
Glu Glu Lys Glu Glu Ile Ala Glu Arg Glu Ser Gly Gly Thr
<210> 9157
<211> 157
<212> PRT
<213> Enterobacter cloacae
<400> 9157
Val Leu Phe Ile Ser Gly Thr Pro Phe Phe Ser Ser Ser Ala Ser Arg
                           10
Leu Ile Arg Ser Gly Ile Ala Gly Gly Ile Leu Val Val Thr Ile Ala
                          25
         20
Met Ser Met Ile Ser Gly Lys Leu Gly Glu Asp Lys Gln Asn Lys Gln
                     4.0
Glu Lys Ser Glu Thr Ala Ile Arg Glu Ser Ile Gly Val Val Pro Leu
                   55
Ala Leu Pro Leu Met Ala Gly Pro Gly Ala Ile Ser Ser Thr Ile Val
                             75
             70
Trp Gly Thr Arg Tyr His Ser Leu Met His Leu Ile Gly Phe Ser Val
```

```
Ala Ile Ala Leu Phe Ala Leu Cys Cys Trp Gly Val Phe Arg Met Ala
      100
             105
Pro Trp Leu Val Arg Leu Leu Gly Gln Thr Gly Ile Asn Val Ile Thr
      115 120
Arg Ile Met Gly Leu Leu Met Ala Leu Gly Ile Glu Phe Ile Val
 130 135 140
Thr Gly Ile Lys Ser Ile Phe Pro Gly Leu Val His
145 150 155
<210> 9158
<211> 341
<212> PRT
<213> Enterobacter cloacae
<400> 9158
Ala Ala Gly Gly Ala Gly Met Asn Ala Ile Asp Glu Lys Arg Asn Val
                     10
Leu Leu Glu Ile Ala Asp Leu Lys Val His Phe Asp Ile Lys Asp Gly
       20
                      25
Lys Gln Trp Phe Trp Gln Pro Ala Lys Thr Leu Lys Ala Val Asp Gly
 35
         40
Val Thr Leu Arg Leu Tyr Glu Gly Glu Thr Leu Gly Val Val Gly Glu
 50
                55
Ser Gly Cys Gly Lys Ser Thr Phe Ala Arg Ala Ile Ile Gly Leu Val
        70
                             7.5
Lys Ala Thr Asp Gly Lys Val Ala Trp Leu Gly Lys Asp Leu Leu Gly
           85
               90
Met Lys Pro Asp Glu Trp Arg Asp Val Arg Ser Asp Ile Gln Met Ile
       100
             105
Phe Gln Asp Pro Leu Ala Ser Leu Asn Pro Arg Met Thr Ile Gly Glu
      115 120
Ile Ile Ala Glu Pro Leu Arg Thr Tyr His Pro Lys Met Pro Arg Gln
130 135
                                 140
Glu Val Arg Asp Arg Val Lys Ala Met Met Leu Lys Val Gly Leu Leu
               150 155
145
Pro Asn Leu Ile Asn Arg Tyr Pro His Glu Phe Ser Gly Gly Gln Cys
                            170
            165
Gln Arg Ile Gly Ile Ala Arg Ala Leu Ile Leu Glu Pro Lys Leu Ile
             185 190
         180
Ile Cys Asp Glu Pro Val Ser Ala Leu Asp Val Ser Ile Gln Ala Gln
                      200 205
      195
Val Val Asn Leu Leu Gln Lys Leu Gln Arg Glu Met Gly Leu Ser Leu
                                  220
 210 215
Ile Phe Ile Ala His Asp Leu Ala Val Val Lys His Ile Ser Asp Arg
              230
                               235
Val Leu Val Met Tyr Leu Gly His Ala Val Glu Leu Gly Thr Tyr Asp
                            250
                                            255
            245
Glu Val Tyr His Asn Pro Leu His Pro Tyr Thr Lys Ala Leu Met Ser
         260 265
                            270
Ala Val Pro Val Pro Asp Pro Asp Leu Glu Lys Asn Lys Thr Ile Gln
      275 280 285
Leu Leu Glu Gly Glu Leu Pro Ser Pro Ile Asn Pro Pro Ser Gly Cys
 290
                 295
                      300
Val Phe Arg Thr Arg Cys Pro Ile Ala Gly Pro Glu Cys Ala Lys Thr
               310
                               315
Arg Pro Val Leu Glu Gly Ser Phe Arg His Ala Val Ser Cys Leu Lys
                            330
                                            335
Val Asp Pro Leu
         340
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<211> 288
<212> PRT
<213> Enterobacter cloacae
<400> 9159
Cys Gln Pro Leu Phe Phe Glu Val Asn Val Ser Arg Leu Phe Thr Ser
                                  1.0
Ala Arg Gln Arg Leu Tyr His Leu Leu Phe Asp Pro Glu Thr Val Ser
          20
                             25
                                                 30
Gly Arg Arg Phe Glu Gly Leu Cys Gly Leu Phe Ala Leu Ile Ser Val
                          40
Ile Ile Ile Phe Ile Glu Ser Gly Ala Gly Thr Gln Tyr His Met Thr
                     55
Tyr Glu Glu Trp His Val Phe Val Trp Leu Glu Leu Ile Val Thr Leu
                   70
                                   7.5
Val Phe Thr Ala Glu Tyr Val Leu Arg Val Ile Ser Trp Pro Asn Pro
               8.5
                                  90
Ala Lys Tyr Val Phe Ser Phe Trp Gly Phe Ile Asp Leu Ala Thr Ile
                              105
           100
Leu Pro Leu Tyr Val Met Trp Leu Trp Pro Glu Ile Ser Leu Asn Tyr
       115
                          120
                                             125
Val Phe Ala Trp Arg Ala Met Arg Ala Ile Arg Val Leu Arg Ile Leu
  130
                    135
                                          140
Lys Leu Leu Arg Phe Met Pro Ser Leu Arg Val Phe Trp Val Ala Ile
145 150
                                     155
Val Ser Ala Arg His Gln Leu Ile Leu Phe Tyr Ser Phe Ile Ala Ile
               165
                                 170
                                                     175
Val Met Ile Val Phe Gly Ser Leu Met Tyr Leu Ile Glu Gly Pro Lys
                              185
           180
Tvr Glv Phe Thr Thr Leu Asn Ala Ser Val Tyr Trp Ala Ile Val Thr
                         200
                                              205
       195
Val Thr Thr Val Gly Tyr Gly Asp Ile Thr Pro His Thr Pro Leu Gly
                       215
                                          220
Arg Ile Val Ala Ser Val Leu Ile Leu Ile Gly Tyr Ser Val Ile Ala
                                      235
                   230
225
Ile Pro Thr Gly Leu Ile Thr Thr His Met Ser Ser Ala Phe Gln Asn
               245
                                  250
Ser Lys Gln Gln Arg Lys Cys Pro Lys Cys Gln Gln Gly Asn His Glu
                           265 270
           260
Pro Gly Ala Arg Phe Cys His Arg Cys Gly Asn Ala Leu Pro Asp
                           280
                                              285
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<210> 9160 <211> 216 <212> PRT <213> Enterobacter cloacae

<400> 9160 Arg Cys Pro Leu Asn Ile Gln Ala Ile Asn Phe Cys Ser Leu Phe Pro 1.0 Ser Ala Phe Arg Asp Ile Leu Ser Pro Leu Asn Val Met Ile Leu Lys 20 Asp Glu Ser Leu Ser Leu Asp Phe Tyr Cys Thr Phe Gly Ala Gly Cys 35 40 Ala Gln Gly Arg Phe Arg Thr Phe Val Ile Phe Leu Ile Gly Arg Leu 55 Cys Phe Arg Met Gly Asn Thr Leu Ala Leu Leu Lys Glu Gln Arg Met 70 7.5 Asn Gly Lys Val Met Ala Ala Leu Phe Gly Ile Ala Ile Leu Ser Gly 90 Cvs Ala Ser Ser Lys Thr Ser Pro Glu Arg His Ala Phe Tyr Phe Val

Gln Met Glu 290

100 105 Ser His Gln Ser Ser Phe Thr Gly Gly Asn Tyr Thr Ser Ser Val Gln 115 120 Lys Asn Tyr Gln Leu Asn Val Ala Gln Phe Arg Glu Leu Tyr Ala Arg 130 135 140 Gly Lys Ala Asp Arg Ala Glu Gly Arg Thr Gln Ala Glu Ala Ser Glu 150 155 Tyr Ala Gln Ser Ile Arg Asp Gln Leu Lys Glu Asn Ala Thr Ser Gln 165 170 175 Glu Leu Phe Ala Gly Asn Thr Lys Asp Lys Trp Ser Ser Asp Met Asp 180 185 190 Ser Lys Asp Ala Ile Leu Phe Gly Asn Glu Leu Ala Ala Thr Tyr Leu 195 200 Asp Gly Tyr Asn Gly Val Gln 210 <210> 9161 <211> 292 <212> PRT <213> Enterobacter cloacae <400> 9161 Leu Gln Cys Lys Asp Asn Asn Asn Val Lys Thr Leu Ile Trp Met Pro 10 Leu Phe Cys Pro His Val Arg Leu Asn Cys Ala Arg Thr Lys Cys Leu 20 Ile Glu Tyr Asp Cys Tyr Leu His Leu Lys Ser Arg Phe Gly Phe Leu 40 35 Thr Leu Met Ile Met Thr Ser Met Thr Leu Asp Leu Pro Arg Arg Phe 55 Pro Trp Pro Thr Leu Leu Ser Val Val Ile His Gly Ala Val Val Ala 70 7.5 Gly Leu Leu Tyr Thr Ser Val His Gln Val Ile Glu Met Pro Ala Pro 90 95 85 Ala Gln Pro Ile Ser Val Thr Met Val Ser Pro Ala Asp Leu Glu Pro 100 105 Pro Gln Val Ala Pro Pro Pro Pro Gln Pro Val Val Glu Pro Glu Pro 120 125 115 Glu Pro Glu Pro Glu Pro Val Pro Glu Pro Pro Lys Glu Ala Pro Val 135 140 1.30 Val Ile His Lys Pro Glu Pro Lys Pro Lys Pro Lys Pro Lys 150 155 160 Pro Val Lys Lys Val Glu Val Arg Pro Val Glu Pro Arg Ala Thr Gln 165 170 175 Pro Val Glu Asn Ala Ala Pro Ser Arg Pro Leu Met Asn Asn Thr Thr 185 190 180 Thr Ala Thr Lys Pro Thr Val Thr Ala Pro Ala Gly Pro Arg Ala Leu 200 205 195 Ser Arg Asn Gln Pro Gln Tyr Pro Ala Arg Ala Gln Ala Leu Arg Ile 215 220 210 Glu Gly Arg Val Arg Val Lys Phe Asp Val Thr Ala Asp Gly Arg Val 230 235 Asp Asn Val Glu Ile Leu Ser Ala Gln Pro Ala Asn Met Phe Glu Arg 245 250 255 Glu Val Lys Ser Ala Met Arg Arg Trp Arg Tyr Glu Ala Gly Lys Pro 260 265 270 Gly Asn Gly Leu Ile Val Asn Ile Val Phe Arg Leu Asn Gly Gly Ala 280 285 275

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<210> 9162
<211> 218
<212> PRT
<213> Enterobacter cloacae
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<400> 9162 Asn His Asn Asp Gly Ala Asp Met Lys Lys Leu Ala Val Ala Ala Leu Ile Leu Ser Ser Leu Ser Gly Gly Ala Tyr Ala His Glu Ala Gly Glu 20 25 Phe Phe Ile Arg Ala Gly Ser Ala Thr Val Arg Pro Thr Glu Gly Ser 40 4.5 Asp Asn Val Leu Gly Met Gly Gly Phe Asn Val Ser Asn Asn Thr Gln 55 60 Leu Gly Leu Thr Phe Thr Tyr Met Ala Thr Asp Asn Val Gly Val Glu 70 75 Leu Leu Ala Ala Thr Pro Phe Arg His Arg Val Gly Leu Gly Pro Thr 95 8.5 90 Gly Asp Ile Ala Thr Val His His Leu Pro Pro Thr Leu Met Ala Gln 100 105 110 Trp Tyr Phe Gly Asp Ser Ser Ser Lys Val Arg Pro Tyr Ile Gly Ala 115 120 125 Gly Val Asn Tyr Thr Thr Phe Phe Asp Glu Lys Phe Asn Asp Thr Gly 130 135 140 Lys Glu Ala Gly Leu Ser Asp Leu Ser Leu Lys Asp Ser Trp Gly Met 150 155 145 Ala Gly Gln Val Gly Leu Asp Tyr Leu Ile Asn Arg Asp Trp Leu Ile 165 170 175 Asn Ala Ser Val Trp Tyr Met Asp Ile Asp Thr Asp Val Arg Phe Lys 180 185 190 Ala Gly Gly Gln Gln Gln Ser Ile Asn Thr Arg Leu Asp Pro Trp Val 195 200 Phe Met Phe Ser Ala Gly Tyr Arg Phe

<210> 9163 <211> 211 <212> PRT <213> Enterobacter cloacae

210

<400> 9163 Arg Glu Gly Ser Met Ser Gln Phe Phe Tyr Ile His Pro Asp Asn Pro 10 Gln Pro Arg Leu Ile Asn Gln Ala Val Glu Ile Val Arg Lys Gly Gly 25 20 Val Ile Val Tyr Pro Thr Asp Ser Gly Tyr Ala Leu Gly Cys Lys Ile 35 40 Glu Asp Lys Gly Ala Met Glu Arg Ile Cys Arg Ile Arg Gln Leu Pro 5.5 Asp Gly His Asn Phe Thr Leu Met Cys Arg Asp Leu Ser Glu Leu Ser 70 75 Thr Tyr Ala Tyr Val Asp Asn Val Ala Phe Arg Leu Ile Lys Asn Asn 90 85 Thr Pro Gly Asn Tyr Thr Phe Ile Leu Lys Gly Thr Lys Glu Val Pro 105 100 Arg Arg Leu Leu Gln Glu Lys Arg Lys Thr Ile Gly Met Arg Val Pro 125 115 120 Ser Asn Pro Ile Ala Gln Ala Leu Leu Glu Thr Leu Gly Glu Pro Met 135 140 Leu Ser Thr Ser Leu Met Leu Pro Gly Ser Glu Phe Thr Glu Ser Asp 150 155

Leu

Pro Glu Glu Ile Lys Asp Arg Leu Glu Lys Val Val Glu Leu Ile Ile 165 His Gly Gly Tyr Leu Gly Gin Gln Pro Thr Thr Val Val Asp Leu Thr 190 180 185 Glu Asp Ala Pro Glu Val Ile Arg Glu Gly Val Gly Asp Val Lys Pro 200 205 Phe Leu 210 <210> 9164 <211> 354 <212> PRT <213> Enterobacter cloacae <400> 9164 Ile Lys Val Glu Arg Val Glu Leu Leu Ser Gln Tyr Gly Leu Phe Leu Ala Lys Ile Ala Thr Val Val Ile Ala Val Ala Val Ile Ala Val Leu 25 20 Ile Val Asn Leu Thr Gln Arg Lys Arg Gln Arg Gly Glu Leu Arg Ile 40 45 Thr Arg Leu Ser Glu Gln Tyr Lys Glu Met Gln Glu Glu Met Ser Leu 60 55 Ala Leu Leu Asp Asp His Gln Gln Lys Leu Trp Leu Lys Ala Gln Lys 7.5 70 Lys Lys His Lys Gln Asp Ala Lys Ala Ala Lys Ala Lys Ala Lys Leu 85 90 Ala Thr Pro Gln Ala Asp Ala Lys Pro Arg Val Tyr Val Leu Asp Phe 105 110 Lys Gly Ser Met Asp Ala His Glu Val Ser Ser Leu Arg Glu Glu Val 115 120 125 Thr Ala Val Leu Ala Val Ala Thr Ala Gln Asp Gln Val Val Val Arg 130 135 140 Leu Glu Ser Pro Gly Gly Val Val His Gly Tyr Gly Leu Ala Ala Ser 145 150 155 Gln Leu Gln Arg Leu Arg Asp Lys Gln Ile Pro Leu Thr Val Ala Val 165 170 175 Asp Lys Val Ala Ala Ser Gly Gly Tyr Met Met Ala Cys Val Ala Asp 180 185 190 Lys Ile Val Ala Ala Pro Phe Ser Ile Ile Gly Ser Ile Gly Val Val 195 200 205 Ala Gln Ile Pro Asn Phe Asn Arg Phe Leu Lys Asn Lys Glu Ile Asp 215 220 210 Ile Glu Leu His Thr Ala Gly Gln Tyr Lys Arg Thr Leu Thr Leu Leu 230 235 240 225 Gly Glu Asn Thr Glu Glu Gly Arg Gln Lys Phe Arg Glu Asp Leu Asn 245 250 255 Glu Thr His His Leu Phe Lys Asp Phe Val His Arg Met Arg Pro Thr 260 265 270 Leu Asp Ile Glu Gln Val Ala Thr Gly Glu His Trp Tyr Gly Thr Gln 280 285 Ala Gln Glu Lys Gly Leu Val Asp Glu Val Gly Thr Ser Asp Asp Leu 295 300 290 Leu Leu Asn Leu Met Asp Gly Arg Glu Leu Val Gly Val Arg Phe Thr 310 315 320 Arg Arg Lys Arg Leu Leu Asp Arg Phe Thr Asn Ser Ala Ala Glu Ser 330 325 Ala Asp Arg Leu Leu Arg Trp Leu Gln Arg Gly Gln Lys Pro Leu 345 350 340

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<210> 9165
<211> 947
<212> PRT
<213> Enterobacter cloacae
<400> 9165
Ile Val Lys Pro Arg His Gly Gly Val Phe Cys Phe Ile Pro Arg Val
        5
Gly Pro Phe Leu Asn Leu Ser Ile Trp Val Val Ile Lys Thr Leu Arg
   20 25
His Leu Cys Val Ile Phe Asn Tyr Ser Pro Asp Asp Cys Gln Asp Ile
    35 40 45
Pro Val Phe Lys Glu Glu Leu Met Ser Leu Thr Leu Arg Glu Ala Ser
 50 55 60
Lys Asp Thr Leu Gln Ala Glu Asn Lys Thr Trp Arg Tyr Tyr Ser Leu
      70 75
Pro Leu Ala Ala Arg Thr Leu Gly Asp Ile Ser Arg Leu Pro Lys Ser
               90 95
Leu Lys Val Leu Leu Glu Asn Leu Leu Arg Trp Gln Asp Gly Asp Ser
       100 105 110
Val Thr Glu Glu Asp Ile Gln Ala Leu Ala Gly Trp Leu Lys Asn Ala
    115 120 125
His Ala Asp Arg Glu Ile Ala Tyr Arg Pro Ala Arg Val Leu Met Gln
 130 135 140
Asp Phe Thr Gly Val Pro Ala Val Val Asp Leu Ala Ala Met Arg Glu
145 150 155 160
Ala Val Lys Arg Leu Gly Gly Asp Thr Ala Lys Val Asn Pro Leu Ser
         165 170 175
Pro Val Asp Leu Val Ile Asp His Ser Val Thr Val Asp His Phe Gly
   180 185 190
Asp Asp Asp Ala Phe Gly Glu Asn Val Arg Leu Glu Met Glu Arg Asn
     195 200 205
His Glu Arg Tyr Val Phe Leu Lys Trp Gly Gln Gln Ala Phe Ser Arg
 210 215 220
Phe Ser Val Val Pro Pro Gly Thr Gly Ile Cys His Gln Val Asn Leu
            230 235 240
Glu Tyr Leu Gly Lys Ala Val Trp Ser Glu Leu Gln Asp Lys Glu Trp
           245 250 255
Val Ala Tyr Pro Asp Thr Leu Val Gly Thr Asp Ser His Thr Thr Met
       260 265 270
Ile Asn Gly Leu Gly Val Leu Gly Trp Gly Val Gly Gly Ile Glu Ala
275 280 285
Glu Ala Ala Met Leu Gly Gln Pro Val Ser Met Leu Ile Pro Asp Val
                 295 300
   290
Val Gly Phe Lys Leu Thr Gly Lys Leu Ser Glu Gly Ile Thr Ala Thr
                           315
      310
305
Asp Leu Val Leu Thr Val Thr Gln Met Leu Arg Lys His Gly Val Val
           325 330
Gly Lys Phe Val Glu Phe Tyr Gly Asp Gly Leu Asp Ser Leu Pro Leu
                       345 350
        340
Ala Asp Arg Ala Thr Ile Ala Asn Met Ala Pro Glu Tyr Gly Ala Thr
                        365
      355
                    360
Cys Gly Phe Phe Pro Ile Asp Ser Val Thr Leu Glu Tyr Met Arg Leu
                 375
                     380
Ser Gly Arg Ser Glu Glu Gln Val Ala Leu Val Glu Ala Tyr Thr Lys
              390 395
Ala Gln Gly Met Trp Arg Asn Pro Gly Asp Glu Pro Val Phe Thr Ser
                              415
          405
                          410
Thr Leu Glu Leu Asp Met Gly Thr Val Glu Ala Ser Leu Ala Gly Pro
                       425
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Lys Arg Pro Gln Asp Arg Val Ala Leu Ser Asn Val Pro Lys Ala Phe 440 435 Ala Ala Ser Asn Glu Leu Glu Val Asn Ala Ala Gln Lys Asp His Arg 450 455 Pro Val Asp Tyr Val Leu Asn Gly His Gln Tyr Gln Leu Pro Asp Gly 470 475 480 Ala Val Val Ile Ala Ala Ile Thr Ser Cys Thr Asn Thr Ser Asn Pro 485 490 495 Ser Val Leu Met Ala Ala Gly Leu Leu Ala Lys Lys Ala Val Glu Leu 505 510 500 Gly Leu Lys Pro Gln Pro Trp Val Lys Ala Ser Leu Ala Pro Gly Ser 515 520 525 Lys Val Val Ser Asp Tyr Leu Ala Gln Ala Arg Leu Thr Pro Tyr Leu 530 535 540 Asp Glu Leu Gly Phe Asn Leu Val Gly Tyr Gly Cys Thr Thr Cys Ile 545 550 555 560 Gly Asn Ser Gly Pro Leu Pro Glu Pro Ile Glu Val Ala Ile Arg Gln 565 570 575 Gly Asp Leu Thr Val Gly Ala Val Leu Ser Gly Asn Arg Asn Phe Glu 580 585 590 Gly Arg Ile His Pro Leu Val Lys Thr Asn Trp Leu Ala Ser Pro Pro 595 600 605 Leu Val Val Ala Tyr Ala Leu Ala Gly Asn Met Asn Ile Asn Leu Ala 615 620 610 Thr Asp Pro Ile Gly His Asp Arg Lys Asn Glu Pro Val Tyr Leu Lys 630 635 640 Asp Ile Trp Pro Ser Ser Arg Glu Ile Ala Arg Ala Val Glu Lys Val 645 650 655 Ser Thr Glu Met Phe Arg Lys Glu Tyr Ala Glu Val Phe Glu Gly Thr 660 665 670 Ala Glu Trp Lys Ala Ile Asp Val Val Gly Ser Asp Thr Tyr Asp Trp 675 680 685 Gln Asp Asp Ser Thr Tyr Ile Arg Leu Ser Pro Phe Phe Asp Glu Met 695 700 690 Leu Ala Glu Pro Ala Pro Leu Lys Asp Ile His Gly Ala Arg Ile Leu 710 715 720 705 Ala Met Leu Gly Asp Ser Val Thr Thr Asp His Ile Ser Pro Ala Gly 725 730 735 Ser Ile Lys Ala Asp Ser Pro Ala Gly Arg Tyr Leu Gln Ser Arg Gly 745 750 740 Val Glu Arg Arg Asp Phe Asn Ser Tyr Gly Ser Arg Arg Gly Asn His 760 765 755 Glu Val Met Met Arg Gly Thr Phe Ala Asn Ile Arg Ile Arg Asn Glu 770 775 780 Met Val Pro Gly Val Glu Gly Gly Met Thr Arg His Leu Pro Asp Thr 790 795 Glu Val Ile Ser Ile Tyr Asp Ala Ala Met Lys Tyr Gln Gln Glu Gly 805 810 815 Thr Pro Leu Ala Val Ile Ala Gly Lys Glu Tyr Gly Ser Gly Ser Ser 820 825 830 Arg Asp Trp Ala Ala Lys Gly Pro Arg Leu Leu Gly Val Arg Val Val 840 845 835 Ile Ala Glu Ser Phe Glu Arg Ile His Arg Ser Asn Leu Ile Gly Met 855 860 850 Gly Ile Leu Pro Leu Glu Phe Pro Gln Gly Val Thr Arg Lys Thr Leu 870 875 Glv Leu Thr Gly Glu Glu Gln Ile Asp Ile Ser Gly Leu Gln Asn Leu 885 890 Gln Pro Gly Lys Thr Val Pro Val Lys Leu Thr Arg Ala Asp Gly Thr 900 905 Thr Glu Val Leu Asp Cys Arg Cys Arg Ile Asp Thr Ala Thr Glu Leu

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920
Thr Tyr Tyr Gln Asn Asp Gly Ile Leu His Tyr Val Ile Arg Lys Met
  930
                    935
Leu Asp
945
<210> 9166
<211> 116
<212> PRT
<213> Enterobacter cloacae
<400> 9166
Thr Arg Phe Ile Arg Ser Asn His Ile Thr Gly Ser His Val Lys Tyr
                         10
Leu Leu Ile Phe Leu Leu Val Leu Ala Ile Phe Val Ile Ser Val Thr
  20 25
Leu Gly Ala Gln Asn Asp Gln Gln Val Ser Phe Asn Tyr Leu Leu Ala
           40
                               4.5
Gln Gly Glu Tyr Arg Val Ser Ser Leu Leu Ala Val Leu Phe Ala Ala
           55
                          60
Gly Phe Val Ile Gly Trp Leu Val Cys Gly Met Phe Trp Leu Lys Val
                70 75
Arg Val Ser Leu Val Arg Ala Glu Arg Lys Ile Lys Arg Leu Glu His
                  90
             8.5
Gln Leu Thr Pro Ala Ser Asp Ile Pro Ala Ser Ser Gly Val Pro Val
                        105
Val Lys Glu
    115
<210> 9167
<211> 363
<212> PRT
<213> Enterobacter cloacae
<400> 9167
Ser Asn Met Leu Glu Leu Leu Phe Leu Leu Pro Val Ala Ala Ala
                              10
Tyr Gly Trp Tyr Met Gly Arg Arg Ser Ala Gln Gln Thr Lys Gln Asp
                           25
          20
Glu Ala Asn Arg Leu Ser Arg Asp Tyr Val Ala Gly Val Asn Phe Leu
    35
                      4.0
                                        4.5
Leu Ser Asn Gln Gln Asp Lys Ala Val Asp Leu Phe Leu Asp Met Leu
                    5.5
Lys Glu Asp Thr Gly Thr Val Glu Ala His Leu Thr Leu Gly Asn Leu
                                7.5
65
               70
Phe Arg Ser Arg Gly Glu Val Asp Arg Ala Ile Arg Ile His Gln Thr
              85
                             90
Leu Met Glu Ser Ala Ser Leu Thr Tyr Glu Gln Arg Leu Leu Ala Val
         100
                           105 110
Gln Gln Leu Gly Arg Asp Tyr Met Ala Ala Gly Leu Tyr Asp Arg Ala
                        120
                                       125
       115
Glu Asp Met Phe Ser Gln Leu Val Asp Glu Thr Asp Phe Arg Ile Gly
                     135
                                      140
   130
Ala Leu Gln Gln Leu Leu Gln Ile Tyr Gln Ala Thr Ser Asp Trp Gln
                      155
              150
Lys Ala Ile Asp Thr Ala Glu Arg Leu Val Lys Leu Gly Lys Asp Lys
                                      175
                             170
Gln Arg Val Glu Ile Ala His Phe Tyr Cys Glu Leu Ala Leu Gln Gln
           180
               185
                                             190
Met Gly Ser Asp Asp Met Asp Lys Ala Met Ala Leu Leu Lys Lys Gly
                         200
       195
```

```
Ala Ala Ala Asp Arg Asn Ser Ala Arg Ile Ser Ile Met Met Gly Arg
                            220
 210
                  215
Val Phe Met Ala Asn Gly Asp Tyr Ala Lys Ala Val Glu Ser Leu Leu
               230
                              235
Arg Val Ile Asp Gln Asp Lys Glu Leu Val Ser Glu Thr Leu Glu Met
           245 250 255
Leu Gln Thr Cys Tyr Gln Gln Leu Gly Lys Gln Asp Glu Trp Val Ala
             265
        260
Phe Leu Arg Arg Cys Val Glu Glu Asn Thr Gly Ala Thr Ala Glu Leu
 275 280 285
Met Leu Ser Asp Val Val Glu Glu His Glu Gly Ser Asp Thr Ala Gln
 290 295 300
Val Tyr Ile Thr Arg Gln Leu Gln Leu His Pro Thr Met Arg Val Phe
305 310 315
                                              320
His Lys Leu Met Asp Tyr His Leu Asn Asp Ala Glu Glu Gly Arg Ala
       325 330 335
Lys Glu Ser Leu Met Val Leu Arg Asp Met Val Phe Asn Arg Gly Asp
    340 345 350
Trp Pro Asp Gln Arg Leu Ile Leu Ala Lys Ser
                     360
<210> 9168
<211> 583
<212> PRT
<213> Enterobacter cloacae
<400> 9168
Gln Glu Val Lys Lys Asn Leu Tnr Val Ala Lys Lys Thr Pro Ala Leu
                           10
Tyr Arg Pro Gln Gln Gly Ile Thr Gln Leu Ala Lys Ala Ser His Tyr
       20
                         25
Asn Glu Trp Ser Ile Asn Thr Met Ser Ile Ile Thr Lys Lys Ser Leu
               4.0
                              4.5
 35
Val Ala Ala Gly Ile Leu Thr Ala Leu Ile Ala Gly Asn Ala Ala Met
                  55
50
Ala Ala Asp Val Pro Ala Gly Val Gln Leu Ala Glu Lys Gln Thr Leu
             70 75 80
65
Val Arg Asn Asn Gly Ala Glu Val Gln Ser Leu Asp Pro His Lys Ile
                90
                                           95
           8.5
Glu Gly Val Pro Glu Ser Asn Val Asn Arg Asp Leu Phe Glu Gly Leu
       100 105 110
Leu Val Thr Asp Val Asn Gly His Pro Ala Pro Gly Val Ala Glu Lys
                     120 125
Trp Asp Asn Lys Asp Phe Lys Val Trp Thr Phe His Leu Arg Lys Asp
               135
                                 140
  130
Ala Lys Trp Ser Asp Gly Thr Pro Val Thr Ala Glu Asp Phe Val Tyr
145 150 155 160
Ser Trp Gln Arg Leu Ala Asp Pro Asn Thr Ala Ser Pro Tyr Ala Ser
            165 170
Tyr Leu Gln Tyr Gly His Ile Ala Asn Ile Asp Asp Ile Ile Thr Gly
         180
                         185 190
Lys Lys Pro Val Thr Asp Leu Gly Val Lys Ala Ile Asp Ala Asn Thr
          200
                                     205
      195
Phe Glu Val Thr Leu Ser Glu Pro Val Pro Tyr Phe Tyr Lys Leu Leu
                   215
                                  220
  210
Val His Pro Ser Val Ser Pro Val Pro Lys Ser Ala Val Glu Lys Phe
               230
225
                               235
Gly Glu Lys Trp Thr Gln Pro Ala Asn Ile Val Thr Asn Gly Ala Tyr
                           250
Lys Leu Lys Asp Trp Val Val Asn Glu Arg Met Val Leu Glu Arg Asn
```

270

```
Pro Gln Tyr Trp Asp Asn Ala Lys Thr Val Ile Asn Gln Val Thr Tyr
               280
Leu Pro Ile Ser Ser Glu Val Thr Asp Val Asn Arg Tyr Arg Ser Gly
                                   300
                  295
Glu Ile Asp Met Thr Tyr Asn Asn Met Pro Ile Glu Leu Phe Pro Lys
                                315
Leu Lys Lys Glu Ile Pro Lys Glu Val His Val Asp Pro Tyr Leu Cys
                             330
            325
Thr Tyr Tyr Tyr Glu Ile Asn Asn Gln Lys Ala Pro Phe Thr Asp Val
              345
         340
Arg Val Arg Thr Ala Leu Lys Leu Ala Leu Asp Arg Asp Ile Ile Val
 355 360 365
Asn Lys Val Lys Asn Gln Gly Asp Leu Pro Ala Tyr Ser Tyr Thr Pro
                                   380
370 375
Pro Tyr Thr Asp Gly Met Lys Leu Val Glu Pro Glu Trp Phe Lys Trp
    390
                               395
Ser Gln Glu Lys Arg Asn Glu Glu Ala Lys Lys Leu Leu Ala Glu Ala
     405 410 415
Gly Tyr Thr Ala Asp Lys Pro Leu Thr Phe Ser Leu Leu Tyr Asn Thr
      420 425 430
Ser Asp Leu His Lys Lys Leu Ala Ile Ala Val Ala Ser Ile Trp Lys
435 440 445
Lys Asn Leu Gly Val Asn Val Lys Leu Glu Asn Gln Glu Trp Lys Thr
 450 455 460
Phe Leu Asp Thr Arg His Gln Gly Thr Phe Asp Val Ala Arg Ala Gly 465 470 475 480
Trp Cys Ala Asp Tyr Asn Glu Pro Thr Ser Phe Leu Asn Thr Met Leu
     485 490 495
Ser Asp Ser Ser Asn Asn Thr Ala His Tyr Lys Ser Pro Ala Phe Asp
 500 505 510
Lys Leu Ile Gly Glu Thr Leu Lys Val Ala Asp Asp Ala Gln Arg Ala
515 520 525
Asp Leu Tyr Ala Lys Ser Glu Gln Gln Leu Asp Lys Asp Ser Ala Ile
530 535 540
Val Pro Val Tyr Tyr Val Asn Ala Arg Leu Val Lys Pro Trp Val
             550 555 560
Gly Gly Tyr Thr Gly Lys Asp Pro Leu Asp Asn Ile Ser Val Lys Asn
                     570
Leu Tyr Ile Ile Lys His
         580
<210> 9169
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 9169
Cys Pro Arg Pro Glu Arg Pro Leu Arg Ser Ala Val Met Thr Ile Ile
                          1.0
Glu Thr Ala Thr Ala Pro Gln Ala Gln Gln Arg Thr Ser Ala Leu Leu
                          25
         20
Asp Val Lys Asp Leu Arg Val Thr Phe Lys Thr Pro Asp Gly Asp Val
      35
                                       45
                      4.0
Thr Ala Val Asn Asp Leu Asn Phe Asp Leu Arg Ala Gly Glu Thr Leu
                 55
                                    60
Gly Ile Val Gly Glu Ser Gly Ser Gly Lys Ser Gln Thr Ala Phe Ala
                                7.5
               7.0
Leu Met Gly Leu Leu Ala Ser Asn Gly Val Ile Gly Gly Ser Ala Thr
```

90 Phe Asn Gly Lys Glu Ile Leu Asn Leu Pro Glu His Glu Leu Asn Lys

8.5

```
Leu Arg Ala Glu Gln Ile Ser Met Ile Phe Gln Asp Pro Met Thr Ser
                     120
 115
Leu Asn Pro Tyr Leu Arg Val Gly Glu Gln Leu Met Glu Val Leu Met
                                 140
                  135
Leu His Lys Gly Leu Gly Lys Ala Glu Ala Phe Glu Glu Ser Val Lys
              150
                              155
Met Leu Asp Ala Val Lys Met Pro Glu Ala Arg Lys Arg Met Arg Met
                          170
           165
Tyr Pro His Glu Phe Ser Gly Gly Met Arg Gln Arg Val Met Ile Ala
                       185
                                       190
        180
Met Ala Leu Leu Cys Arg Pro Lys Leu Leu Ile Ala Asp Glu Pro Thr
                   200 205
     195
Thr Ala Leu Asp Val Thr Val Gln Ala Gln Ile Met Thr Leu Leu Asn
                 215
 210
                                 220
Glu Leu Lys Arg Glu Phe Asn Thr Ala Ile Ile Met Ile Thr His Asp
      230
                             235
Leu Gly Val Val Ala Gly Ile Cys Asp Lys Val Leu Val Met Tyr Ala
        245 250 255
Gly Arg Thr Met Glu Tyr Gly Asn Ala Arg Asp Val Phe Tyr Gln Pro
     260 265 270
Ala His Pro Tyr Ser Ile Gly Leu Leu Asn Ala Val Pro Arg Leu Asp
275 280 285
Ala Glu Gly Glu Ser Leu Leu Thr Ile Pro Gly Asn Pro Pro Asn Leu
290 295 300
Leu Arg Leu Pro Lys Gly Cys Pro Phe Gln Pro Arg Cys Pro His Ala
305 310 315 320
Met Glu Ile Cys Asn Ser Ala Pro Pro Leu Glu Ala Phe Val Pro Gly
 325 330
Arg Leu Arg Ala Cys Phe Lys Pro Leu Glu Glu Leu Val
        340
              345
```

<210> 9170 <211> 213 <212> PRT

<213> Enterobacter cloacae

<400> 9170

Asp Val Phe Ala Glu Phe Gly Val Leu Asn Phe Trp Thr Tyr Val Val 10 Gly Ala Phe Phe Ile Val Leu Val Pro Gly Pro Asn Thr Leu Phe Val 25 Leu Lys Thr Gly Ile Gly His Gly Val Lys Lys Gly Tyr Leu Ala Ala 40 45 Thr Gly Val Phe Ile Gly Asp Ala Val Leu Met Phe Leu Ala Trp Ala 5.5 60 Glv Val Ala Ala Leu Ile Gln Thr Thr Pro Val Leu Phe Asn Ile Val 70 75 80 Arg Tyr Leu Gly Ala Phe Tyr Leu Leu Trp Leu Gly Gly Lys Met Leu 8.5 90 Trp Ser Val Met Thr Arg Gln Lys Asn Ala His Glu Ser Ser Ala Glu 100 105 110 Pro Ala Ser Ala Ile Leu Lys Arg Ser Leu Val Leu Ser Leu Thr Asn 115 120 125 Pro Lys Ala Ile Leu Phe Tyr Val Ser Phe Phe Val Gln Phe Ile Asp 130 135 Val Asn Ala Lys Asn Thr Gly Thr Ser Pne Leu Ile Leu Ala Thr Thr 145 150 155 Leu Glu Leu Ile Ser Phe Met Tyr Met Ser Phe Leu Ile Phe Ser Gly 165 170 Ala Phe Val Thr Arg Tyr Leu Lys Thr Lys Lys Lys Leu Ala Lys Leu 185

```
Gly Asn Gly Leu Ile Gly Leu Leu Phe Val Gly Phe Ala Ala Arg Leu
   195
                     200
Ala Ser Leu His
   210
<210> 9171
<211> 317
<212> PRT
<213> Enterobacter cloacae
<400> 9171
Phe Gln Tyr Phe Thr Val Ser Arg Tyr His Arg Gly Phe Gly Cys Leu
Gln Pro Val Met Gly Ser Ala Leu Ser Asp Thr Thr Tyr Ala Val Ile
                        25
Tyr Asp Leu His Ser His Thr Gln Ala Ser Asp Gly Leu Leu Thr Pro
      35
                   4.0
                               4.5
Glu Ala Leu Val His Arg Ala Val Glu Met Arg Val Gly Thr Leu Ala
                  55
                         60
Ile Thr Asp His Asp Thr Thr Asp Gly Ile Pro Ala Ala Arg Ala Glu
               7.0
                       75
Ile Val Arg Ser Gly Leu Ala Leu Asp Leu Val Ala Gly Val Glu Ile
          85 90
Ser Thr Val Trp Glu Asn His Glu Ile His Ile Val Gly Leu Asn Ile
        100 105 110
Asp Thr Glu His Pro Ala Met Arg Ala Phe Leu Gln Glu Gln Lys Thr
 115 120 125
Arg Arg Asn Gln Arg Ala Glu Met Ile Gly Glu Arg Leu Glu Lys Ala
 130 135 140
His Ile Pro Gly Ala Leu Glu Gly Ala Arg Lys Leu Ala Asn Gly Gly
    150 155 160
Ala Val Thr Arg Gly His Phe Ala Arg Phe Leu Val Asp Ala Gly Lys
       165 170
                                        175
Ala Thr Thr Met Ala Asn Val Phe Lys Lys Tyr Leu Ala Arg Gly Lys
      180 185 190
Thr Gly Tyr Val Pro Pro Gln Trp Cys Thr Ile Lys Gln Ala Ile Asp
     195 200 205
Val Ile His His Ser Gly Gly Lys Ala Val Leu Ala His Pro Gly Arg
 210 215 220
Tyr Asn Leu Ser Ala Lys Trp Leu Lys Arg Leu Leu Ala His Phe Ala
225 230 235 240
Glu Cys Gly Glu Ala Met Glu Val Ala Gln Cys Gln Gln Ala Pro
          245 250
Asn Glu Arg Ser Gln Leu Ala Thr Tyr Ala Arg Gln Phe Gly Leu Leu
    260 265 270
Gly Ser Gln Gly Ser Asp Phe His Gln Pro Cys Ala Trp Ile Glu Leu
 275 280 285
Gly Arg Lys Leu Trp Leu Pro Ala Gly Val Glu Pro Val Trp Gln Leu
 290 295
                                 300
Trp Glu Gln Pro Gln Gln Ile Glu Glu Arg Glu Val
              310
<210> 9172
<211> 295
<212> PRT
<213> Enterobacter cloacae
<400> 9172
Gly Ser Ser Met Ser Glu Lys Leu Gln Lys Val Leu Ala Arg Ala Gly
                           10
His Gly Ser Arg Arg Glu Ile Glu Ala Ile Ile Glu Ala Gly Arg Val
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Ser Val Asp Gly Lys Ile Ala Thr Leu Gly Asp Arg Val Glu Ile Val 4.0 Pro Gly Leu Lys Ile Arg Ile Asp Gly His Leu Ile Ser Val Lys Glu 55 Ser Ala Glu Gln Ile Cys Arg Val Leu Ala Tyr Tyr Lys Pro Glu Gly Glu Leu Cys Thr Arg Asn Asp Pro Glu Gly Arg Pro Thr Val Phe Asp Arg Leu Pro Lys Leu Arg Gly Ala Arg Trp Ile Ala Val Gly Arg Leu 105 Asp Val Asm Thr Cys Gly Leu Leu Leu Phe Thr Thr Asp Gly Glu Leu 115 120 Ala Asn Arg Leu Met His Pro Ser Arg Glu Val Glu Arg Glu Tyr Ala 135 140 Val Arg Val Phe Gly Gln Val Asp Glu Asn Lys Leu Arg Asp Leu Ser 150 155 Arg Gly Val Gln Leu Glu Asp Gly Pro Ala Ala Phe Lys Thr Ile Lys 165 170 175 Phe Thr Gly Gly Glu Gly Ile Asn Gln Trp Tyr Asn Val Thr Leu Thr 180 185 Glu Gly Arg Asn Arg Glu Val Arg Arg Leu Trp Glu Ala Val Gly Val 195 200 Gln Val Ser Arg Leu Ile Arg Val Arg Tyr Gly Asp Ile Leu Leu Pro 210 215 220 Lys Gly Leu Pro Arg Gly Gly Tyr Thr Glu Leu Asp Leu Thr Gln Thr 230 235 Asn Tyr Leu Arg Asp Leu Val Gly Leu Thr Pro Glu Thr Ser Ser Lys 245 250 Val Ala Val Glu Lys Asp Arg Arg Arg Met Lys Ala Asn Gln Ile Arg 260 265 270 Arg Ala Val Lys Arg His Ser Gln Val Ser Ser Asn Arg Arg Ser Gly 275 Ser Arg Asn Asn Asn Gly 290

<210> 9173 <211> 870 <212> PRT

<213> Enterobacter cloacae

<400> 9173 Val Lys Val Asn Met Gly Lys Ala Leu Val Ile Val Glu Ser Pro Ala Lys Ala Lys Thr Ile Asn Lys Tyr Leu Gly Asn Asp Tyr Val Val Lys 2.5 Ser Ser Val Gly His Ile Arg Asp Leu Pro Thr Ser Gly Ser Ala Ser 40 Lys Lys Ser Ala Asp Ser Thr Ser Thr Lys Gly Ala Lys Lys Pro Lys 55 Lys Asp Glu Arg Ser Ala Leu Val Asn Arg Met Gly Val Asn Pro Trp 70 75 Gln Asn Trp Asp Ala His Tyr Glu Val Leu Pro Gly Lys Glu Lys Val 8.5 90 Val Asn Glu Leu Lys Gln Leu Ala Glu Lys Ala Asp His Ile Tyr Leu 100 105 Ala Thr Asp Leu Asp Arg Glu Gly Glu Ala Ile Ala Trp His Leu Arg 120 Glu Val Ile Gly Gly Asp Asp Lys Arg Tyr Ser Arg Val Val Phe Asn 135 140 Glu Ile Thr Lys Asn Ala Ile Arg Gin Ala Phe Glu Lys Pro Gly Glu

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150
                            155
Leu Asn Ile Asp Arg Val Asn Ala Gln Gln Ala Arg Arg Phe Met Asp
           165
                    170
Arg Val Val Gly Tyr Met Val Ser Pro Leu Leu Trp Lys Lys Val Ala
        180
                       185
Arg Gly Leu Ser Ala Gly Arg Val Gln Ser Val Ala Val Arg Leu Val
     195
                   200 205
Val Glu Arg Glu Arg Glu Ile Lys Ala Phe Val Pro Glu Glu Phe Trp
   210 215
                     220
Glu Val Asp Ala Asn Val Thr Thr Pro Gly Gly Asp Ala Leu Pro Leu
      230
                  235 240
Gln Val Ser His His Asn Asp Lys Pro Phe Arg Pro Glu Asn Arg Asp
          245 250 255
Gln Thr Met Ala Ala Val Ala Leu Leu Glu Lys Ala Arg Tyr Gln Val
      260 265 270
Leu Asp Arg Glu Asp Lys Pro Thr Ser Ser Lys Pro Gly Ala Pro Phe
 275 280 285
Ile Thr Ser Thr Leu Gln Gln Ala Ala Ser Thr Arg Leu Gly Tyr Gly
 290 295 300
Val Lys Lys Thr Met Met Ala Gln Arg Leu Tyr Glu Ala Gly Tyr
   310 315
Ile Thr Tyr Met Arg Thr Asp Ser Thr Asn Leu Ser Gln Asp Ala Val
      325 330 335
Asn Met Val Arg Gly Tyr Ile Glu Asp Asn Phe Gly Lys Lys Tyr Leu
 340 345 350
Pro Asp Ser Pro Asn Gln Tyr Ala Ser Lys Glu Asn Ser Gln Glu Ala
355 360 365
His Glu Ala Ile Arg Pro Ser Asp Val Ser Val Leu Ala Glu Ser Leu
 370 375 380
Lys Asp Met Glu Ala Asp Ala Gln Lys Leu Tyr Gln Leu Ile Trp Arg
385 390 395
Gln Phe Val Ala Cys Gln Met Thr Pro Ala Lys Tyr Asp Ser Thr Thr
    405 410 415
Leu Thr Val Gly Ala Gly Asp Phe Arg Leu Lys Ala Arg Gly Arg Ile
 420 425 430
Leu Arg Phe Asp Gly Trp Thr Lys Val Met Pro Ala Leu Arg Lys Gly
435 440 445
Asp Glu Asp Arg Thr Leu Pro Ser Val Asn Lys Gly Asp Glu Leu Ser
 450 455 460
Leu Val Asp Leu Val Pro Ala Gln His Phe Thr Lys Pro Pro Ala Arg
465 470 475
Phe Ser Glu Ala Ser Leu Val Lys Glu Leu Glu Lys Arg Gly Ile Gly
        485 490
Arg Pro Ser Thr Tyr Ala Ser Ile Ile Ser Thr Ile Gln Asp Arg Gly
 500 505 510
Tyr Val Arg Val Glu Asn Arg Arg Phe Tyr Ala Glu Lys Met Gly Glu
515 520 525
Ile Val Thr Asp Arg Leu Glu Ala Asn Phe Arg Glu Leu Met Asn Tyr
 530 535 540
Asp Phe Thr Ala Gln Met Glu Asp Ser Leu Asp Glu Val Ala Ser His
545 550 555
Lys Ala Glu Trp Lys Lys Val Leu Asp Ser Phe Phe Ser Asp Phe Thr
565 570 575
Asn Gln Leu Glu Lys Ala Glu Lys Asp Pro Glu Glu Gly Gly Met Leu
   580 585
                                    590
Pro Asn Gln Met Val Leu Thr Ser Ile Asp Cys Pro Thr Cys Gly Arg
                  600
Lys Met Gly Ile Arg Thr Ala Thr Thr Gly Val Phe Leu Gly Cys Ser
 610 615
Gly Tyr Ala Leu Ser Pro Lys Glu Arg Cys Lys Thr Thr Ile Asn Leu
             630
                           635
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Val Pro Glu Asn Glu Val Leu Asn Val Leu Glu Gly Asp Asp Ala Glu
         645
                  650
Thr Asn Ala Leu Arg Ala Lys Arg Arg Cys Lys Lys Cys Gly Thr Ala
        660
                       665
Met Asp Ser Tyr Leu 11e Asp Pro Lys Arg Lys Leu His Val Cys Gly
                    680
Asn Asn Pro Thr Cys Asp Gly Tyr Glu Ile Glu Glu Gly Glu Phe Arg
                 695
                                700
Ile Lys Gly Tyr Asp Gly Pro Ile Val Glu Cys Glu Lys Cys Gly Ser
              710
                             715
Glu Met His Leu Lys Met Gly Arg Phe Gly Lys Tyr Met Ala Cys Thr
           725 730
                                         735
Asn Asp Asp Cys Lys Asn Thr Arg Lys Ile Leu Arg Asn Gly Glu Val
        740 745 750
Ala Pro Pro Lys Glu Asp Pro Val Pro Leu Pro Glu Leu Pro Cys Glu
     755
         760 765
Lys Ser Asp Ala Tyr Phe Val Leu Arg Asp Gly Ala Ala Gly Val Phe
      775 780
Leu Ala Ala Asn Thr Phe Pro Lys Ser Arg Glu Thr Arg Ala Pro Leu
785 790 795 800
Val Glu Glu Leu Tyr Arg Phe Arg Asp Arg Leu Pro Glu Lys Leu Arg
   805 810 815
Tyr Leu Ala Asp Ala Pro Gln Gln Asp Pro Glu Gly Asn Lys Thr Val
 820 825 830
Val Arg Phe Ser Arg Lys Thr Lys Gln Gln Tyr Val Ala Ala Glu Lys
835 840 845
Glu Gly Lys Ala Thr Gly Trp Ser Ala Phe Phe Val Asp Gly Lys Trp
850 855
Val Glu Gly Lys Lys
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<210> 9174 <211> 330

<212> PRT

<213> Enterobacter cloacae

<400> 9174 Ile Gly Trp Ser Gly Met Lys Leu Gln Gln Leu Arg Tyr Ile Val Glu 5 10 Val Val Asn His Asn Leu Asn Val Ser Ser Thr Ala Glu Gly Leu Tyr 20 25 Thr Ser Gln Pro Gly Ile Ser Lys Gln Val Arg Met Leu Glu Asp Glu 40 Leu Gly Ile Gln Ile Phe Ala Arg Ser Gly Lys His Leu Thr Gln Val Thr Pro Ala Gly Gln Glu Ile Ile Arg Ile Ala Arg Glu Val Leu Ser 70 75 Lys Val Asp Ala Ile Lys Ser Val Ala Gly Glu His Thr Trp Pro Asp 8.5 90 Lys Gly Ser Leu Tyr Ile Ala Thr Thr His Thr Gln Ala Arg Tyr Ala 100 105 110 Leu Pro Gly Val Ile Lys Gly Phe Ile Glu Arg Tyr Pro Arg Val Ser 120 Leu His Met His Gln Gly Ser Pro Thr Gln Ile Ala Glu Ala Val Ser 130 135 140 Lys Gly Asn Ala Asp Phe Ala Ile Ala Thr Glu Ala Leu His Leu Tyr 145 150 155 160 Asp Asp Leu Val Met Leu Pro Cys Tyr His Trp Asn Arg Ser Ile Val 165 170 Val Thr Pro Asp His Pro Leu Ala Gly Lys Gly Glu Val Thr Ile Glu 185

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Glu Leu Ala Gln Tyr Pro Leu Val Thr Tyr Thr Phe Gly Phe Thr Gly
 195
                        200
Arg Ser Glu Leu Asp Thr Ala Phe Asn Arg Ala Gly Leu Thr Pro Arg
                     215
                                      220
Ile Val Phe Thr Ala Thr Asp Ala Asp Val Ile Lys Thr Tyr Val Arg
                 230
                                   235
Leu Gly Leu Gly Val Gly Val Ile Ala Ser Met Ala Val Asp Pro Val
              245
                              250
Ser Asp Pro Asp Leu Val Arg Leu Asp Ala His Asp Ile Phe Ser His
         260
                        265
Ser Thr Thr Lys Ile Gly Phe Arg Arg Ser Thr Phe Leu Arg Ser Tyr
      275
                     280 285
Met Tyr Asp Phe Ile Gln Arg Phe Ala Pro His Leu Thr Arg Asp Val
   290
                   295 300
Val Asp Thr Ala Val Ala Leu Arg Ser Asn Glu Asp Ile Glu Glu Met
305
              310 315
Phe Lys Asp Ile Lys Leu Pro Ala Lys
             325
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<210> 9175 <211> 64

<212> PRT

<213> Enterobacter cloacae

<400> 9175

35 40 45 Asn Ser His Gly Gly Gly Arg Lys Ser Asp Asn Ser

<210> 9176

<211> 189 <212> PRT

<213> Enterobacter cloacae

<400> 9176

Ile Tyr Arg Glu His Ala Ala Gly Pro Ser Ala Arg Ser Thr Phe Pro 5 1.0 Leu Phe His Trp Ser Glu Asn Met Asn Met Lys Tnr Val Glu Asp Val 20 25 3.0 Phe Ile His Leu Leu Ser Asp Thr Tyr Ser Ala Glu Lys Gln Leu Thr 40 4.5 Arg Ala Leu Ser Lys Leu Ala Arg Ala Ala Ser Ser Glu Lys Leu Ser 55 60 Ala Ala Phe Thr Ala His Leu Glu Glu Thr Gln Gly Gln Ile Glu Arg 70 7.5 Ile Asp Gln Ile Ile Glu Gln Glu Ser Gly Leu Lys Leu Lys Arg Met 85 90 Lys Cys Val Ala Met Glu Gly Leu Ile Glu Glu Ala Asn Glu Val Ile 100 105 110 Glu Ser Thr Glu Lys Asn Glu Val Arg Asp Ala Ala Leu Ile Ala Ala 120 125 Ala Gln Lys Val Glu His Tyr Glu Ile Ala Ser Tyr Gly Thr Leu Ala 135 140 Thr Leu Ala Glu Gln Leu Gly Tyr Lys Lys Ala Val Lys Leu Leu Ala 150 155

Glu Thr Leu Glu Glu Glu Lys Glu Thr Asp Leu Lys Leu Thr Asp Leu

165 175 Ala Val Gly Asn Ile Asn Gln Lys Ala Gln Lys Gly 180 <210> 9177 <211> 551 <212> PRT <213> Enterobacter cloacae <400> 9177 Tyr Arg Arg Leu Ser Leu Arg Ile Thr Met Ala Gly Trp His Thr Arg 10 Ala Ile Ile Tyr Gln Ile Asp Thr Ala Leu Phe Tyr Asp Leu Asn Gly 20 25 Asp Gly Cys Gly Asp Ile Ala Gly Ile Ala Ala Lys Leu Arg Tyr Ile 35 4.0 Arg Arg Met Gly Ala Thr Val Ile Trp Ile Thr Pro Phe Tyr Leu Thr 50 55 Pro Phe Leu Asp Glu Gly Tyr Asp Val Ser Asp His Leu Gln Val Asp 65 70 75 Pro Arg Phe Gly Lys Leu Asn Asp Ile Ile Ala Phe Ile Glu Gln Ala 85 90 95 Arg Glu Leu Gly Met Gln Val Ile Ile Glu Leu Leu Ile Gln His Thr 100 105 110 Ser Asp Ala His Pro Trp Pae Gln Gln Ala Arg Arg Asn Pro Gln Ser 115 120 125 Pro Tyr Arg Asp Tyr Tyr Leu Trp Ser Asp Thr Asp Asp Asp Asp Thr 135 140 Pro Pro Met Phe Pro Gly Val Glu Lys Ser Ile Trp Thr Trp Asp Asp 145 150 155 160 Glu Ala Gly Gln Tyr Tyr Arg His Met Phe Tyr His His Glu Pro Asp 165 170 Leu Asn Leu Ala Ser Pro Ala Val Leu Lys Glu Val Glu Asn Ile Ile 180 185 Ile Phe Trp Leu Lys Leu Gly Vai Ser Gly Phe Arg Leu Asp Ala Ala 195 200 205 Ser His Leu Thr Lys Gln Ala Gly Arg Gly Asp Glu Lys Arg Gly Leu 210 215 220 Trp Ile Leu Glu His Leu Arg Arg Leu Ile Glu Gln Arg Asn Pro Asp 230 235 Ala Ile Leu Leu Gly Glu Val Asp Val Glu Val Glu Ala Tyr Lys Asp
245 250 255 250 255 Tyr Phe Gly Gln Asn Asp Arg Leu Asn Leu Val Leu Asn Phe Trp Leu 260 265 270 Asn Lys Tyr Phe Tyr Val Ser Leu Ala Glu Lys Ser Ala Arg Pro Leu 275 280 285 Arg Asn Ala Val Lys Lys Met Ile Val Pro Pro Asp Ser Cys Cys Phe 290 295 300 Ala Asn Trp Leu Arg Asn His Asp Glu Leu Asp Leu Glu Gly Ile Gly 310 315 Lys Lys Thr Lys Gln Thr Val Ile Asp Ala Phe Ala Pro Asp Glu Glu 325 330 Met Ser Val Tyr Gln Arg Gly Ile Arg Arg Arg Leu Ala Pro Met Leu 340 345 350 Asn Gly Asp Arg Lys Arg Leu Ala Phe Cys His Ala Val Leu Phe Ser 355 360 365 Leu Pro Gly Val Pro Val Met Arg Tyr Gly Asp Glu Ile Gly Met Gly 375 380 Asp Asp Leu Glu Leu Glu Glu Arg Tyr Ala Val Arg Thr Pro Met Gln 390 395

Trp Ala Gly Ser Gln Gly Gly Phe Ser Asp Ala Asp Pro Glu Thr

```
405
                              410
Phe Ile Ala Pro Met Ile Asp Arg Gly Pro Tyr Arg Tyr Gln Lys Ile
         420
                          425
Asn Val Ala Asp Ser Leu Leu His Arg Asn Ser Leu Leu His Cys Ile
    435
                     440
                                    445
Ile Asp Ile Ala Asn Thr Arg Ser Glu Phe Pro Glu Ile Gly Val Ala
       455
                           460
Pro Phe Arg Leu Ile Asn Ile Asp Ser Asp Ala Val Leu Gly Ile Tyr
       470 475
Tyr Glu Thr Asp Thr Arg Ser Ile Leu Thr Phe Val Asn Phe Ser Asp
           485 490 495
Lys Pro Val Asn Phe Thr Ala Arg Gly Ile Arg His Ala Thr Trp Thr
         500 505 510
Ala Cys Leu Ala Asp Lys Arg Tyr Asn Asp Ala Leu Val Cys Gly Lys
     515 520 525
Thr Val Ala Leu Asn Leu Ser Gly Tyr Gly Tyr Arg Trp Phe Trp Thr
 530 535
Asp Arg Thr Ala Leu Arg
<210> 9178
<211> 145
<212> PRT
<213> Enterobacter cloacae
<400> 9178
Gln Gln Tyr Leu Ile Ser Gln Asp Ile Gln Asn Glu Gly Tyr Gln Met
                           10
Lys Leu Ser Val Ile Ser Ala Leu Leu Ile Leu Ile Ile Pro Thr Ala
20
                          25
                                           30
Trp Ala Asp Asn Asn Gly Gly Leu Gln Lys Gly Asp Ala Pro Pro Pro
35
                       40
Pro His Ala Leu Asp Ser Gly Tyr Arg Gly Thr Asp Asp Ala Arg Ile
                   55
                                 60
Met Thr Ile Thr Gln Ala Lys Glu Met His Asp Gly Ala Ser Ile Ser
65 70
                                75
Leu Arg Gly Asn Leu Ile Asp Gly Asn Gly Asp Lys Tyr Val Phe Gln
          85
                             90
Asp Lys Thr Gly Lys Ile Asp Val Ile Ile Pro Lys Ala Val Phe Asp
         100 105
                                          110
Asp Arg Thr Val Glu Pro Asp Asn Met Ile Ser Ile Ser Gly Ser Leu
 115 120
                                     125
Asp Lys Lys Ser Ser Pro Pro Val Val Arg Val Ser His Leu Gln Lys
                  135
                                    140
145
<210> 9179
<211> 191
<212> PRT
<213> Enterobacter cloacae
<400> 9179
Thr Ile Lys His Phe Gly Thr Gly Ala Ser Met Ser Ile Gln Glu His
                             10
Val Ile Leu Val Asn Asp Gln Gly Lys Val Ile Gly Thr Gin Glu Lys
                          25
                                           30
Tyr Ala Ala His Thr Ser His Thr Pro Leu His Leu Ala Phe Ser Ser
                    4.0
                                    4.5
Trp Leu Phe Asn Ala Asn Gly Glu Cys Leu Ile Thr Arg Arg Ala Leu
```

Ser Lys Lys Ala Trp Pro Gly Val Trp Thr Asn Ser Val Cys Gly His 70 Pro Gln Ala Asp Glu Ala Thr Glu Gln Ala Ile Ile Arg Arg Cys Arg 85 90 Phe Glu Val Gly Ala Glu Ile Thr Asp Ile Thr Pro Ile Ala Pro Glu 100 105 110 Phe Arg Tyr Arg Glu Ala Asp Pro Ser Gly Ile Val Glu Asn Glu Ile 115 120 125 Cys Pro Val Tyr Ala Ala Arg Val Thr Asn Thr Leu Ala Ile Asn Asp 140 135 Asp Glu Val Met Glu Tyr Gln Trp Val Glu Leu Asp Ala Leu Phe Arg 145 150 155 160 Ala Leu Asp Ala Thr Pro Trp Ala Phe Ser Pro Trp Met Val Gln Glu 165 170 175 Ala Asn Thr Ala Arg Glu Lys Leu Ser Ala Phe Ala Ala Gln 180 185

<210> 9180 <211> 178 <212> PRT <213> Enterobacter cloacae

<400> 9180 Asp Ser Tyr Ala Met Asn Ile Gly Leu Phe Tyr Gly Ser Ser Thr Cys 10 Tyr Thr Glu Met Ala Ala Glu Lys Ile Arg Asp Ile Ile Gly Pro Glu 20 25 Leu Val Thr Leu His Asn Leu Lys Asp Asp Ala Val Ala Leu Met Glu 4.0 45 Gln Tyr Asp Val Leu Ile Leu Gly Ile Pro Thr Trp Asp Phe Gly Glu 55 60 Ile Gln Glu Asp Trp Glu Ala Ile Trp Asp Gln Leu Asp Ser Val Asn 70 7.5 Phe Glu Gly Lys Ile Ile Ala Met Tyr Gly Met Gly Asp Gln Leu Gly 85 90 Tyr Gly Glu Trp Phe Leu Asp Ala Leu Gly Met Leu His Asp Lys Leu 100 105 Ala Pro Lys Gly Ala Thr Phe Ile Gly Tyr Trp Pro Thr Glu Gly Tyr 115 120 Glu Phe Thr Ser Pro Lys Pro Val Ile Ala Asp Gly Gln Leu Phe Val 130 135 140 Gly Leu Ala Leu Asp Glu Thr Asn Gln Tyr Asp Leu Ser Asp Glu Arg 145 150 155 Leu Gln Thr Trp Cys Glu Gln Ile Leu Gly Glu Met Ala Glu Gln Phe 170

<210> 9181 <211> 211 <212> PRT <213> Enterobacter cloacae

<400> 9181
Ala Pro Cys Pro Met Gin Lys Glu Asn Asn Met Arg Ala Leu Ile Ala I
1 5 10 15
Leu Leu Leu Ees Ees Ser Thr Phe Gly Phe Ala Ala Pro Ser Asp 20 25 30
Asp Ala Ser Ser Asp Gln Leu Ala Lys Leu Leu Phe Asn Asp Pro Asn 35 40
Ser Pro Arg Thr Gly Ala Ala Ser Pro Lys Leu Thr Ile Val Ser Phe

```
Thr Asp Tyr Asn Cys Pro Tyr Cys Lys Gln Phe Asp Pro Met Leu Glu
               70
                                75
Lys Ile Val Gln Glu Asn Pro Asp Val Gln Leu Ile Val Lys Leu Leu
            85
Pro Phe Lys Gly Gln Ser Ser Val Asn Ala Ala Lys Ala Ala Leu Ser
         100
                         105
Thr Trp Gln Gln Ala Pro Asp Lys Phe Trp Ala Leu His Gln Arg Leu
     115
                      120
                                   125
Met Met Lys Lys Gly Tyr His Asp Asp Ala Ser Ile Ala Ala Ala Lys
                135
                         140
Val Lys Thr Gly Thr Asp Ser Ile Lys Thr Asp Asp Lys Thr Met Asp
            150 155
Ser Leu Lys Met Asn Leu Ile Leu Ala Gln Val Leu Asn Ile Gln Gly
          165 170 175
Thr Pro Ala Thr Ile Ile Gly Asp Gln Met Val Ala Gly Ala Ile Pro
    180 185 190
Tyr Asp Asp Leu Glu Gly Leu Val Lys Glu Gln Leu Ala Asn Ala Arq
 195 200
Gly Lys
  210
<210> 9182
<211> 301
<212> PRT
<213> Enterobacter cloacae
<400> 9182
Ser Glu Lys Ile Thr Lys Glu Gly Glu Thr Met Phe Arg His Val Lys
                         10
Gln Leu Gln Tyr Thr Val Arg Val Ala Glu Pro Asn Pro Gly Leu Ala
20
                      25
Asn Leu Leu Glu Gln Pne Gly Gly Pro Gln Gly Glu Leu Ala Ala
35 40
Ala Cys Arg Tyr Phe Thr Gln Gly Leu Ser Asp Asp Pro Gly Arg
50 55
Lys Asp Met Leu Met Asp Ile Ala Thr Glu Glu Leu Ser His Leu Glu
65 70
                              75
Ile Ile Gly Thr Leu Val Gly Met Leu Asn Lys Gly Ala Lys Gly Glu
           85
                            90
Leu Ala Glu Gly Val Glu Asn Glu Ala Glu Leu Tyr Arg Ser Met Thr
        100 105
                                         110
Glu Asn Gly Asn Asp Ser His Ile Thr Ser Leu Leu Tyr Gly Gly Gly
                     120 125
Thr Pro Leu Thr Asn Ser Gly Gly Val Pro Trp Thr Ala Ala Tyr Val
 130 135
                                  140
Asp Thr Ile Gly Glu Pro Thr Ala Asp Leu Arg Ser Asn Ile Ala Ala
               150 155
Glu Ala Arg Ala Lys Ile Ile Tyr Glu Arg Leu Ile Asn Val Thr Asp
           165
                      170 175
Asp Pro Gly Val Lys Asp Ala Leu Ala Phe Leu Met Thr Arg Glu Ala
       180 185
                             190
Ala His Gln Leu Ser Phe Glu Lys Ala Leu Gln Ser Ile Arg Asn Asn
     195
                     200
Phe Pro Pro Gly Lys Leu Pro Pro Ile Glu Glu Tyr Thr Asn Lys Tyr
                  215
                                  220
Tyr Asn Met Ser Glu Gly Gly Glu Val Arg Gly Ser Trp Asn Ser Asp
            230 235
Lys His Phe Asp Tyr Val Glu Ser Pro Gln Pro Ala Val Asp Gly Gly
            245 250
```

Asp Gly Gly Ala Ser Val Thr Leu Thr Thr Glu Gln Ala Thr Leu Val

```
260
                       265
Lys Ala Met Cys Ala Arg Thr Lys Ser Asp Pro Asn Ala Asp Pro Leu
              280
Thr Gly Ala Glu Leu Gly Ala Gly Lys Lys Pro
                295
<210> 9183
<211> 359
<212> PRT
<213> Enterobacter cloacae
<400> 9183
Tyr Ile Gly His Pro Cys Pro Ser Ala Val Arg Arg Arg Val Cys Ser
                         10
Gly Arg Gly Glu Asp Leu Met Gly Val Asp Ile Pro Val Ile Trp Phe
        20
                       25
Ala Ile Ile Val Phe Ala Thr Leu Met Tyr Ile Ile Met Asp Gly Phe
              40
Asp Leu Gly Ile Gly Met Leu Phe Ser Phe Val Gly Asp Ala Lys Glu
            5.5
                               60
Arg Asp Val Met Val Asn Ser Val Ala Pro Val Trp Asp Gly Asn Glu
65 70 75
Thr Trp Leu Val Leu Gly Gly Ala Gly Leu Phe Gly Ala Phe Pro Leu
         85 90 95
Ala Tyr Ala Val Ile Ile Asp Ala Leu Thr Ile Pro Leu Thr Ala Met
 100 105 110
Leu Ile Gly Leu Ile Phe Arg Gly Val Ala Phe Glu Phe Arg Phe Lys
115 120 125
Ala Thr Pro Ser His Arg Lys Phe Trp Asp Tyr Ser Phe Ala Gly Gly
130 135 140
Ser Leu Leu Ala Thr Phe Ser Glr. Gly Ile Val Val Gly Ala Met Ile
145 150 155
Asn Gly Phe Asp Val Glu Gly Arg Arg Phe Val Gly Ser Ser Leu Asp
     165 170 175
Trp Phe Thr Pro Phe Asn Leu Phe Cys Gly Leu Gly Leu Ile Val Ala
 180 185 190
Tyr Thr Leu Leu Ala Thr Thr Trp Leu Ile Met Lys Ser Glu Gly Ala
 195 200 205
Leu Gln Asn Arg Met Arg Glu Leu Thr Arg His Val Leu Leu Ala Leu
 210 215
                               220
Ile Ala Val Ile Ala Val Val Ser Ile Trp Thr Pro Leu Gly Trp Gln
225 230 235
Phe Val Ala Glu Arg Trp Phe Thr Leu Pro Asn Phe Phe Trp Phe Leu
      245 250 255
Pro Val Pro Val Leu Val Ala Val Phe Ser Leu Trp Ile Trp Arg Leu
   260
                      265 270
Thr Arg Asn Pro Asp Ser His Ala Arg Pro Phe Leu Leu Thr Leu Gly
                   280 285
Leu Ile Phe Leu Gly Phe Ser Gly Leu Gly Ile Ser Leu Trp Pro His
 290 295
                               300
Ile Ile Pro Pro His Ile Thr Leu Trp Glu Ala Ala Ala Pro Pro Ala
305 310 315
Ser Gln Leu Phe Met Leu Ile Gly Thr Leu Leu Ile Ile Pro Val Ile
      325 330 335
Leu Val Tyr Thr Ala Trp Ser Tyr Tyr Val Phe Arg Gly Lys Val Ser
                      345
       340
Asp Thr Glu Gly Tyr His
```

<210> 9184 <211> 310

```
<212> PRT
<213> Enterobacter cloacae
<400> 9184
Arg Cys Asn Tyr Pro Ser Asn Leu Thr Pro Asn Lys Glu Leu Ala Met
                       10
Ser Asp Asn Glu Gln Arg Thr Asn Ala Tyr Pro Thr Pro Pro Phe Pro
         20
                         2.5
Lys Gln Pro Gln Thr Pro Pro Gly Leu Ser Ser Glu Met Glu Pro Val
                      40
                                      45
Pro Asp His Gly Glu Lys Ser Tyr Lys Gly His Gly Arg Leu Ala Gly
                  55
                                   60
Lys Lys Ala Leu Ile Thr Gly Gly Asp Ser Gly Ile Gly Arg Ala Val
                70
Ala Ile Ala Tyr Ala Arg Glu Gly Ala Asp Val Ala Ile Asn Tyr Leu
            8.5
                            90
Pro Glu Glu Glu Glu Asp Ala Ala Glu Val Ile Thr Leu Ile Lys Ala
     100 105
Glu Gly Arg Asn Ala Val Ala Leu Pro Gly Asp Val Arg Asp Glu Thr
 115 120 125
Phe Cys Gln Asn Leu Val Glu Gln Ala Val Ser Lys Leu Gly Gly Leu
130 135 140
Asp Ile Leu Val Asn Asn Ala Gly Arg Gln Gln Tyr Arg Glu Ser Leu
145 150 155
Glu Glu Leu Thr Thr Glu Asp Phe Asp Ala Thr Phe Lys Thr Asn Val
   165 170
Tyr Ala Pro Phe Trp Ile Thr Lys Ala Ala Leu Arg His Met Lys Ala
   180 185 190
Pro Ala Ser Ile Ile Asn Thr Ser Ser Val Gln Ala Val Lys Pro Ser
195 200
                                      205
Ala Val Leu Leu Asp Tyr Ala Glr Thr Lys Ala Cys Leu Ala Val Phe
210
                 215
                                  220
Thr Lys Ala Leu Ala Lys Gln Leu Gly Pro Lys Gly Ile Arg Val Asn
225
    230 235
Ala Val Ala Pro Gly Pro Tyr Trp Thr Val Leu Gln Pro Ser Gly Gly
          245 250 255
Gln Pro Gln Glu Lys Val Lys His Phe Gly Glu Ser Thr Pro Leu Gly
       260 265
                                          270
Arg Pro Gly Gln Pro Val Glu Ile Ala Pro Leu Tyr Val Thr Leu Ala
   275 280
Ser Asp Glu Cys Ser Tyr Thr Ser Gly Gln Val Trp Cys Ser Asp Gly
 290
                   295
Gly Asp Gly Val Ile
<210> 9185
<211> 509
<212> PRT
<213> Enterobacter cloacae
<400> 9185
Gln Ile Thr Ile Ser Thr Asn Cys Tyr Ile Val Thr Phe Asn Ser Ala
                          10
Leu Leu Asp Ser Lys Ser Ile Ser Pro Glu Leu Arg Ile Ala Lys Met
                         25
                                          30
Lys Lys Leu Thr Leu Pro Lys Asp Phe Leu Trp Gly Gly Ala Val Ala
                   40
                                      45
Ala His Gln Val Glu Gly Gly Trp Asn Lys Gly Gly Lys Gly Pro Ser
Ile Cys Asp Val Leu Thr Gly Gly Ala His Gly Val Pro Arg Glu Ile
```

7.0

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Thr Gln Glu Val Ile Glu Gly Lys Tyr Tyr Pro Asn His Glu Ala Val
           85
Asp Phe Tyr Gly His Tyr Lys Glu Asp Ile Lys Leu Phe Ala Glu Met
        100
Gly Phe Lys Cys Phe Arg Thr Ser Ile Ala Trp Thr Arg Ile Phe Pro
                    120
                                   125
Lys Gly Asp Glu Thr Gln Pro Asn Glu Glu Gly Leu Lys Phe Tyr Asp
            135 140
Asp Met Phe Asp Glu Leu Leu Lys Tyr Asn Ile Glu Pro Val Ile Thr
    150 155
Leu Ser His Phe Glu Met Pro Leu His Leu Val Gln Glu Tyr Gly Gly
      165 170 175
Trp Thr Asn Arg Lys Val Val Asp Phe Phe Val Arg Phe Ser Glu Val
    180 185 190
Val Phe Glu Arg Tyr Lys Asn Lys Val Lys Tyr Trp Met Thr Phe Asn
   195 200 205
Glu Ile Asn Asn Gln Arg Asn Trp Arg Ala Pro Leu Phe Gly Tyr Cys
210 215 220
Cys Ser Gly Val Val Tyr Thr Glu His Asp Asn Pro Glu Glu Thr Met
225 230 235 240
Tyr Gln Val Leu His His Gln Phe Val Ala Ser Ala Leu Ala Val Lys
    245 250 255
Ala Ala Arg Arg Ile Asn Pro Glu Met Lys Val Gly Cys Met Leu Ala
 260 265 270
Met Val Ala Leu Tyr Pro Tyr Ser Cys Lys Pro Glu Asp Val Met Phe
275 280 285
Ala Gln Glu Ser Met Arg Glu Arg Tyr Val Phe Thr Asp Val Gln Leu 290 295 300
Arg Gly Tyr Tyr Pro Ser Tyr Val Leu Asn Glu Trp Glu Arg Arg Gly
      310 315
Phe Ser Ile Arg Met Glu Ala Gly Asp Glu Gln Ile Leu Arg Glu Gly
          325 330 335
Thr Cys Asp Tyr Leu Gly Phe Ser Asp Tyr Met Thr Asn Ala Val Lys
       340 345 350
Ala Glu Gly Gly Thr Gly Asp Ala Ile Ser Gly Phe Glu Gly Ser Val
355 360
Pro Asn Pro His Val Lys Ala Ser Asp Trp Gly Trp Gln Ile Asp Pro
 370 375 380
Val Gly Leu Arg Tyr Ser Leu Cys Glu Leu Tyr Glu Arg Tyr Gln Lys
              390 395 400
Pro Leu Phe Ile Val Glu Asn Gly Phe Gly Ala Tyr Asp Lys Val Glu
405 410 415
Glu Asp Gly Ser Ile Asn Asp Asp Tyr Arg Ile Asp Tyr Leu Arg Ala
       420 425 430
His Val Glu Glu Met Met Lys Ala Val Thr Trp Asp Gly Val Asp Leu
                    440 445
Met Gly Tyr Thr Pro Trp Gly Cys Ile Asp Cys Val Ser Phe Thr Thr
                 455 460
Gly Gln Tyr Ser Lys Arg Tyr Gly Phe Ile Tyr Val Asn Lys His Asp
            470
                             475
Asp Gly Thr Gly Asp Met Ser Arg Ser Arg Lys Lys Ser Phe Glu Trp
         485 490
Tyr Lys Thr Val Ile Ala Ser Asn Gly Glu Thr Leu
                       505
```

<210> 9186

<211> 202

<211> 202 <212> PRT

<213> Enterobacter cloacae

Ile Phe Arg Val Pro Arg Arg Pro Leu Ser Ala Thr Arg Trp Trp Arg Ala Pro Phe Arg Met Thr Thr Trp Arg Gly Trp Ser Lys Asn Ser Trp 25 Gln Thr Pro Val Ala Ser Lys Leu Pro Arg Leu Leu Arg Glu Leu Gly Val Trp Leu Leu Ile Gly Val Ala Val Ser Leu Ala Val Asp Tyr Phe 55 60 Arg Gln Pro Ala Leu Pro Gln Asn Phe Ser Ala Thr Ala Leu His Thr 70 75 Leu Asp Gly Gln Pro Val Asp Leu Ile Ala Met Ser Lys Glu Arg Pro 8.5 90 Leu Leu Val Tyr Val Trp Ala Thr Trp Cys Gly Val Cys Arg Tyr Thr 100 105 Thr Pro Ser Val Ala Ala Leu Ala Ala Asp Gly Gly Asn Val Met Ser 115 120 Val Ala Leu Arg Ser Gly Asp Asn Ala Thr Leu Glu Thr Trp Met Arg 130 135 140 Lys Lys Lys Ala Met Met Pro Thr Val Asn Asp Ala Ser Gly Glu Leu 145 150 155 Ala Arg Glu Trp Asp Val Lys Val Thr Pro Thr Leu Val Val Ile Ser 165 170 175 His Gly Glu Val Lys Ser Ile Thr Thr Gly Trp Thr Ser Gly Trp Gly 180 185 Met Arg Leu Arg Leu Trp Leu Ala Ser

<210> 9187 <211> 307 <212> PRT

<213> Enterobacter cloacae

<400> 9187 Tyr Ala Val Ala Ile Thr Asn Ser Leu Thr Glu Gln Leu Ala Lys Arg 10 Met Thr Val Asp Thr Gly Met Arg Met Leu Val Ser Phe Gly Val Val 25 Leu Ile Leu Asn Leu Ile Phe Leu Met Gly Arg His Ile Thr Ile Lys 35 40 Val Met Gly Phe Leu Val Phe Pro Leu Ile Ala Tyr Phe Leu Phe Val 55 Ser Leu Tyr Leu Thr Gly Ser Trp Gln Pro Ser Leu Leu Thr Ser Gln 7.0 75 Met Ala Phe Asp Gln His Thr Leu His Gln Val Trp Ile Ser Ile Pro 85 90 Val Met Val Phe Ala Phe Ser His Thr Pro Ile Ile Ser Thr Phe Ala 105 110 Val Asp Arg Arg Glu Lys Tyr Gly Glu Glu Ala Met Gly Lys Cys Lys 120 125 Lys Ile Met Lys Val Ala Tyr Leu Ile Ile Cys Leu Ser Val Leu Phe 135 140 Phe Val Phe Ser Cys Leu Leu Ser Ile Pro Pro Ser Tyr Ile Val Ala 150 155 160 Ala Lys Glu Glu Gly Val Thr Ile Leu Ser Ala Leu Ser Met Met Pro 165 170 Ser Ser Pro Ala Trp Leu Gly Ile Ser Gly Ile Ile Val Ala Ile Ile 180 185 Ala Met Ser Lys Ser Phe Leu Gly Thr Tyr Phe Gly Val Ile Glu Gly 195 200 Ala Thr Glu Ile Val Lys Ser Ser Leu Asn Gln Val Gly Val Lys Lys 215

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Ser Arg Ala Phe Asn Arg Ala Val Ser Ile Leu Gly Val Ser Leu Ile
                                    235
       230
Thr Phe Ala Val Cys Cys Ile Asn Pro Asn Ala Ile Ser Met Ile Tyr
              245
                                250
Ala Ile Ser Gly Pro Leu Ile Ala Met Ile Leu Phe Ile Met Pro Thr
          260
                             265
Leu Ser Thr Tyr Leu Ile Pro Ser Leu Lys Pro Tyr Arg Ser Ile Gly
                          280
Asn Leu Leu Thr Leu Ile Val Gly Val Leu Cys Val Ser Val Met Phe
                     295
Val Gly
305
<210> 9188
<211> 178
<212> PRT
<213> Enterobacter cloacae
<400> 9188
Pro Asp Asn Lys Ser Gln Glu Leu Ile Met Asn His Val Glu His Tyr
             5
                              1.0
His Asp Trp Leu Arg Asp Ala His Ala Met Glu Lys Gln Ala Glu Ser
         20
                         25
Met Leu Glu Ser Met Ala Ser Arg Ile Asp Asn Tyr Pro Asp Leu Arg
35
                      40
Ala Arg Ile Glu Gln His Val Asn Glu Thr Lys His Gln Ile Thr Val
50
               55
Leu Glu Glu Ile Leu Asp Arg Asn Asp Ile Ser Arg Ser Val Ile Lys
                7.0
                                    7.5
                                                       80
Asp Ser Met Ser Lys Met Ala Ala Leu Gly Gln Ser Ile Gly Gly Met
             85
                              90
Phe Pro Ser Asp Glu Ile Val Lys Gly Ser Ile Ser Gly Tyr Val Phe
       100
                            105
                                              110
Glu Gln Phe Glu Ile Ala Cys Tyr Thr Ser Leu Leu Ala Ala Ala Lys
115
                         120
                                    125
Gln Ala Gly Asp Thr Ala Ser Ile Pro Ala Ile Glu Ser Ile Leu Glu
Glu Glu Arg Gln Met Ala Asp Trp Leu Leu Gln His Ile Pro Gln Thr
145 150 155
Thr Glu Gln Phe Leu Leu Arg Ser Asp Ala Asp Gly Val Glu Ala Lys
<210> 9189
<211> 484
<212> PRT
<213> Enterobacter cloacae
<400> 9189
Gly Cys Leu Ala Met Pro Cys Ala Leu Ser Val Pro Glu Val Arg Ser
Met Phe Glu Leu Asp Ala Phe His Leu Ala Arg Ile Gln Phe Ala Phe
          20
                             25
Thr Val Ser Phe His Ile Leu Phe Pro Ala Ile Thr Ile Gly Leu Ala
                         4.0
                                            45
Ser Tyr Leu Val Val Leu Glu Gly Met Trp Leu Arg Thr Lys Asn Asp
                     55
                                      60
Val Trp Arg Ser Leu Tyr His Phe Trp Leu Lys Ile Phe Ala Val Asn
Phe Gly Met Gly Val Val Ser Gly Leu Val Met Ala Tyr Gln Phe Gly
```

```
90
Thr Asn Trp Ser Gly Phe Ser Gln Phe Ala Gly Ser Ile Thr Gly Pro
        100
                   105
                                    110
Leu Leu Thr Tyr Glu Val Leu Thr Ala Phe Phe Leu Glu Ala Glv Phe
   115
                 120
                          125
Leu Gly Val Met Leu Phe Gly Trp Asn Lys Val Gly Pro Gly Leu His
        135
 130
                       140
Phe Phe Ala Thr Cys Met Val Ala Leu Gly Thr Leu Met Ser Thr Phe
            150
                 155 160
Trp Ile Leu Ala Ser Asn Ser Trp Met His Thr Pro Gln Gly Phe Ser
        165 170 175
Ile Gln Asn Gly Gln Val Ile Pro Glu Asp Trp Leu Ala Ile Ile Phe
      180 185 190
Asn Pro Ser Phe Pro Tyr Arg Leu Ile His Met Ser Ile Ala Ala Phe
   195 200 205
Leu Cys Ser Ala Leu Phe Val Gly Ala Ser Gly Ala Trp His Leu Leu
 210 215 220
Arg Gly Asn Asp Thr Pro Ala Ile Arg Lys Met Phe Ser Met Ala Met
225 230 235
Trp Met Ala Leu Met Val Ala Pro Ile Gln Ala Val Val Gly Asp Met
      245 250 255
His Gly Leu Asn Thr Leu Glu His Gln Pro Ala Lys Ile Ala Ala Ile
     260 265 270
Glu Gly His Trp Glu Asn Pro Pro Gly Glu Ala Thr Pro Leu Leu
275 280 285
Phe Gly Val Pro Asp Met Glu Glu Glu Arg Thr Lys Tyr Gly Leu Glu
290 295 300
Ile Pro Ala Leu Gly Ser Leu Ile Leu Thr His Ser Leu Asp Lys Gln
305 310 315
Val Pro Ala Leu Lys Asp Phe Pro Lys Glu Asp Arg Pro Asn Ser Leu
      325 330
Ile Val Phe Trp Ser Phe Arg Ile Met Val Gly Met Gly Leu Leu Met
 340 345 350
Ile Thr Leu Gly Val Leu Ser Val Trp Leu Arg Tyr Arg Arg Arg Leu
355 360 365
Tyr His Ser Arg Pro Phe His Trp Phe Ala Leu Cys Met Gly Pro Ala 370 375 380
Gly Leu Leu Ala Leu Leu Ala Gly Trp Val Thr Thr Glu Val Gly Arg
385 390 395
Gln Pro Trp Val Val Tyr Gly Tyr Leu Arg Thr Ile Asp Ala Val Ser
        405 410 415
Leu His Ser Thr Leu Gln Met Ser Ile Ser Leu Leu Ala Phe Ile Val
     420 425 430
Val Tyr Cys Ser Val Phe Gly Val Gly Tyr Val Tyr Leu Ala Arg Leu
    435 440
                               445
Ile Lys Lys Gly Pro Gln Pro Val Gly Thr Leu Thr Ser Asn Thr Ser
450 455
                              460
Gly Thr Pro Ala Arg Pro Leu Ser Ala Ala Glu Ser Val Pro Glu Glu
            470
                           475
```

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Glu Lys Ile
<210> 9190
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<211> 333

<212> PRT

<213> Enterobacter cloacae

<400> 9190

Ala Ile Gln Asp Ile Thr Met Ala Phe Thr Pro Phe Ser Pro Arg Gln $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Pro Ala Ala Ser Ala Arg Leu Pro Leu Thr Leu Ile Thr Leu Asp Asp

Trp Ala Leu Ala Thr Leu Thr Gly Ala Asp Ser Glu Lys Tyr Leu Gln 4.0 Gly Gln Val Thr Ala Asp Val Ala Gln Leu Thr Glu His Gln His Leu 55 Leu Ala Ala His Cys Asp Pro Lys Gly Lys Met Trp Ser Asn Leu Arg 70 Leu Phe Arg Arg Gln Asp Gly Phe Ala Phe Ile Glu Arg Arg Ser Leu 8.5 90 Arg Asp Ala Gln Leu Lys Glu Leu Lys Lys Tyr Ala Val Phe Ser Lys 100 105 110 Val Thr Ile Ala Leu Asp Asp Glu Tyr Val Leu Leu Gly Val Ala Gly 115 120 125 Phe Gln Ala Arg Ala Ala Leu Lys Asn Leu Phe Ala Glu Leu Pro Asp 130 135 140 Ala Glu Lys Gln Leu Val Ser Glu Gly Ala Thr Ser Ile Leu Trp Phe 150 155 Glu His Pro Ala Glu Arg Phe Leu Leu Val Thr Asp Glu Ala Thr Ala 165 170 175 Glu Arg Val Thr Asp Ala Leu Arg Gly Glu Ala Gln Leu Asn Asn Ser 180 185 190 Gln Gln Trp Leu Ala Leu Asn Ile Glu Ala Gly Leu Pro Val Ile Asp 195 200 205 Ala Ala Asn Ser Ala Gln Phe Ile Pro Gln Ala Thr Asn Ile Gln Ala 210 215 220 Leu Gly Gly Ile Ser Phe Lys Lys Gly Cys Tyr Thr Gly Gln Glu Met 225 230 235 Val Ala Arg Ala Lys Phe Arg Gly Ala Asn Lys Arg Ala Leu Trp Thr 245 250 255 Leu Ala Gly His Ala Ser Arg Val Pro Glu Ala Gly Glu Asp Leu Glu 260 265 270 Met Lys Met Gly Glu Asn Trp Arg Arg Thr Gly Thr Val Leu Ala Ala 275 280 285 Val Gln Leu Asp Asp Gly Arg Leu Leu Val Gln Val Val Met Asn Asn 290 295 300 Asp Met Glu Pro Asp Ser Val Phe Arg Val Arg Asp Asp Ala Asn Thr 305 310 315 Leu Ser Ile Glu Pro Leu Pro Tyr Ser Leu Glu Asp

<210> 9191 <211> 254 <212> PRT

<213> Enterobacter cloacae

<400> 9191

Cys Pro Thr Ala Ser Leu Ala Ile Val Ser Met Phe Ser His Ser Ala 10 Ile Ala Ser Leu Asn Asn Leu Glu Met Met Val Tyr Asn Tyr Val Ile 25 Lys Asn Arg Asp Lys Val Met Tyr Met Thr Ile Arg Glu Leu Ala Asp 4.0 Ala Ala Gly Val Ser Thr Thr Thr Ile Leu Arg Phe Cys Arg Lys Leu 55 Asn Cys Asp Gly Tyr Ser Glu Phe Arg Val Arg Phe Lys Leu Tyr Leu 7.0 75 Glu Gln Asn Glu Pro Gln Gln Ala Asn Phe Gly Ala Ser Glu Ile Ile 90 Ser Phe Phe Lys Ser Val Asn Asn Glu Glu Phe Asp Ala Leu Leu Asp 100 105 Lys Ala Val Asp Ile Ile Leu Ser Ser Glu Arg Ile Ile Phe Val Gly

```
120
Ala Gly Thr Ser Gly Ser Leu Ala Lys Tyr Gly Ala Arg Phe Phe Ser
  130
                    135
                                     140
Asn Ile Gly Lys Phe Ser Asn His Ile Asp Asp Pro Tyr Phe Pro Val
                 150
                                   155
Thr Asn Asp Met Ala Lys Asn Ala Leu Ala Ile Val Leu Ser Val Ser
             165
                      170
Gly Glu Thr Glu Glu Ile Leu Arg Phe Ala Ser Gln Phe Ser Leu His
          180
                           185 190
His Cys Lys Val Leu Ser Val Thr Ser His Glu His Ser Arg Leu Ala
      195
               200
                                         205
Lys Leu Ala Asp Phe Asn Leu Ser Trp His Val Pro Gln Thr Arg Ile
           215
                             220
Gly Gly Val Tyr Asp Ile Thr Thr Gln Ile Pro Val Ile Tyr Ile Leu
            230 235
Glu Ser Leu Gly Arg Lys Leu Ala Lys Lys Leu Thr Glu
             245
<210> 9192
<211> 125
<212> PRT
<213> Enterobacter cloacae
<400> 9192
Ile Phe Glu Ala Asn Met Ile Lys Arg Gln Arg Asn Ala Ile Leu Leu
                              1.0
Val Ala Leu Ala Cys Leu Val Val Leu Ile Cys Thr Ala Gln Arg Met
 20
                           25
Ala Gly Met His Ala Leu Val Met Asn Val Thr Ala Thr Ser Gln Ser
 35
                 40
                                         45
Val Gln Gln Gly Gln Glu Ser Tar Asp Ala Pro Val Thr Pro Cys Glu
 50
                    55
                                60
Leu Ser Ala Lys Ser Leu Met Ser Val Pro Pro Val Leu Phe Glu Gly
65 70
                                7.5
Ala Leu Ile Ala Val Thr Leu Leu Leu Ala Leu Leu Ala Ala Ser Pro
       85 90 95
Pro Arg Arg Glu Arg Gln Trp Pro Pro Arg Val Ile Ser Pro Pro Arg
         100 105
Leu Arg Val His Leu Arg Leu Cys Val Phe Arg Glu
                       120
<210> 9193
<211> 671
<212> PRT
<213> Enterobacter cloacae
<400> 9193
Phe Met Phe Thr Val Phe Arg Arg Leu Leu Val Cys Leu Leu Trp Leu
                            10
Trp Leu Pro Leu Ser Gln Ala Ala Asp Ser Gly Trp Leu Arg Ala Ala
                           25
Asp Asn Gln His Ala Ser Val Arg Leu Arg Ala Gln Pro Glu Ser Thr
                       40
Gly Glu Thr Arg Leu Leu Leu Asp Val Ala Leu Gln Lys Gly Trp Lys
                    5.5
Thr Tyr Trp Arg Ser Pro Gly Glu Gly Gly Val Ala Pro Ala Ile Lys
                7.0
                                  75
                                                    8.0
Trp His Gln Pro Val Glu Ala Lys Trp Arg Trp Pro Val Pro Gln Arg
             85
                              90
Phe Asp Val Ala Gly Ile Thr Thr Gln Gly Tyr His Gly Asp Val Ser
```

Phe Pro Ile Thr Leu Arg Gly Asp Val Pro Lys Ile Leu Ser Gly Val Leu Thr Leu Ser Thr Cys Ser Asn Val Cys Ile Leu Thr Asp Tyr Pro 135 140 Phe Ser Leu Asn Met Thr Ala Ser Ala Gly Ala Gly Phe Asp Tyr Asp 145 150 155 Phe Ser Arg Ala Met Gly Thr Leu Pro Leu Ser Gly Gly Leu Thr Ser 170 175 165 Thr Leu Asn Ala Thr Tyr Ala Pro Gly Lys Leu Thr Val Thr Ala Gln 180 185 190 Arg Asp Ala Gly Trp Gln Ala Pro Ser Leu Phe Ile Asp Gly Met Asp 195 200 205 Asp Val Asp Phe Gly Lys Pro Ala Leu Thr Val Arg Gly Asp Ser Leu 210 215 220 Val Ala Thr Val Pro Val Thr Asp Ser Trp Gly Glu Ala Ala Pro Asn 225 230 235 Leu Ser Gly Lys Thr Leu Ser Leu Val Leu Ala Asp Ser Gly Gln Ala 245 250 255 Gln Glu Ser Ser Leu Ser Ile Glr. Pro Gly Asn Ala Ala Pro Thr Leu 260 265 Ser Leu Gly Trp Val Leu Leu Met Ala Leu Ala Gly Gly Leu Ile Leu 275 280 285 Asn Val Met Pro Cys Val Leu Pro Val Leu Ala Met Lys Leu Gly Thr 290 295 300 Leu Met Gln Thr Glu Arg Gln Ala Arg Gly Gln Val Arg Arg Gln Phe 305 310 315 Leu Ala Ser Val Ala Gly Ile Val Ile Ser Phe Leu Ala Leu Ala Leu 325 330 335 Met Met Thr Val Leu Arg Leu Gly Asn Gln Ala Leu Gly Trp Gly Ile 340 345 350 Gln Phe Gln Asn Pro Trp Phe Ile Gly Ala Met Ala Met Val Met Val 355 360 365 Leu Phe Ser Ala Ser Leu Leu Gly Leu Phe Glu Ile Arg Leu Pro Ser 375 380 Val Ala Ser Thr Phe Leu Ala Thr Arg Gly Gly Asn Gly Leu Ala Gly 390 395 400 His Phe Trp Gln Gly Ala Phe Ala Thr Leu Leu Ala Thr Pro Cys Thr 405 410 415 Ala Pro Phe Leu Gly Thr Ala Val Ser Val Ala Leu Ala Ala Pro Leu 420 425 430 Pro Leu Leu Trp Gly Ile Phe Leu Ala Met Gly Ile Gly Met Ser Leu 435 440 445 Pro Trp Leu Leu Val Ala Val Trp Pro Gly Leu Ala Gln Arg Leu Pro 455 460 Arg Pro Gly Arg Trp Met Asn Val Val Arg Val Val Leu Gly Met Met 465 470 475 Met Leu Gly Ser Ser Leu Trp Leu Leu Ser Leu Leu Thr Val His Ile 485 490 495 Gly Ser Leu Pro Val Ile Thr Leu Gly Val Leu Leu Ile Leu Thr Leu 500 505 Leu Leu Val Thr Ala Trp Arg Tyr Arg Trp Gln Thr Ala Leu Arg Ala 515 520 Gly Val Leu Ala Val Val Val Ala Gly Ala Val Ala Phe Val Ser Gly 530 535 540 Ser Gly Glu Gly Ser Arg Arg Asp Arg Ile His Trp Gln Pro Leu 550 555 Ser Glu Gln Ala Ile Ala Arg Ala Leu Ala Glu Asn Lys Arg Val Phe 565 570 575 Val Asp Val Thr Ala Asp Trp Cys Val Thr Cys Lys Ala Asn Lys Tyr 580 585 Asn Val Leu Leu Arg Asp Asp Val Gln Asp Ala Leu Ser Ala Pro Asp

```
600
Val Val Ala Leu Arg Gly Asp Trp Ser Arg Pro Ser Asp Thr Ile Ser
               615
                          620
Gln Phe Leu Thr Thr Arg Gly Ser Ala Ala Val Pro Phe Asn Gln Ile
             630
                    635
Tyr Gly Pro Gly Leu Pro Gln Gly His Val Leu Pro Ala Leu Leu Ser
         645 650 655
Arg Glu Ala Val Leu Ser Thr Leu Ser Asp Ala Lys Gly Lys
        660 665
<210> 9194
<211> 261
<212> PRT
<213> Enterobacter cloacae
<400> 9194
Ser Glu Ala Ala Thr Arg Leu Phe Tyr Trp Glu Lys Arg Met Ala Ile
                      10
Ala Leu Val Thr Gly Ala Ser Arg Gly Ile Gly Lys Ala Thr Ala Leu
                         25
                                         30
Gln Leu Ala Ser Glu Gly Tyr Thr Val Ala Val Asn Phe His His Asn
35
                      4.0
                                     4.5
Ile Lys Ala Ala Thr Glu Val Ile Asn Gln Ile Val Asp Ala Gly Gly
                  55
                                  60
Lys Ala Phe Ala Val Arg Ala Asp Ile Ser Asp Glu Ala Gln Val Met
               7.0
                                75
Ala Met Phe Ala Ser Leu Asp Arg Glu Gly Glu Pro Leu Ala Ala Leu
           8.5
                          90
Val Asn Asn Ala Gly Ile Leu Phe Glu Gln Ser Thr Ile Glu Asn Leu
       100 105 110
Ser Ala Glu Arg Ile Asn Arg Val Leu Ala Thr Asn Val Thr Gly Tyr
115
                     120
Phe Leu Cys Cys Arg Glu Ala Val Lys Arg Met Ser His Lys His Gly
                  135
                                  140
Gly Lys Gly Gly Ala Ile Val Asn Val Ser Ser Ala Ala Ser Arg Leu
    150
                               155
Gly Ala Pro Gly Glu Tyr Val Asp Tyr Ala Ala Ser Lys Gly Ala Val
           165 170
Asp Ser Leu Thr Thr Gly Leu Ala Leu Glu Val Ala Ala His Gly Ile
        180 185
                                         190
Arg Val Asn Cys Val Arg Pro Gly Leu Ile Tyr Thr Asp Ile His Ala
     195 200
                                    205
Ser Gly Glu Pro Gly Arg Val Asp Arg Val Lys Ser Met Leu Pro
 210
                  215 220
Met Gln Arg Gly Gly Gln Pro Glu Glu Val Ala Gln Ala Ile Ala Trp
                   235 240
               230
Leu Leu Ser Asp Lys Ala Ser Tyr Val Thr Gly Ser Phe Leu Glu Leu
            245
                          250
Ala Gly Gly Lys
         260
<210> 9195
<211> 229
<212> PRT
<213> Enterobacter cloacae
<400> 9195
Ser Ser Phe Val Phe Pro Glu Leu Ser Met Val Ser Arg Pro Leu Ile
                       10
Ala Gln Gly Tyr Ser Leu Ala Glu Glu Val Ala Asn Ser Ile Ser His
         20
                        25
```

```
Gly Ile Gly Leu Val Phe Gly Ile Val Gly Leu Val Leu Leu Val
Gln Ala Val Asp Thr Asn Ala Ser Ala Met Ala Ile Thr Ser Tyr Ser
                5.5
                                60
Leu Tyr Gly Gly Ser Met Ile Leu Leu Phe Leu Ala Ser Thr Leu Tyr
            70
                   75
His Ala Ile Pro His Gln Arg Ala Lys Ile Trp Leu Lys Lys Phe Asp
         8.5
                          90
His Cys Ala Ile Tyr Leu Leu Ile Ala Gly Thr Tyr Thr Pro Phe Leu
    100 105 110
Leu Val Gly Leu Asn Ser Pro Leu Ser Arg Gly Leu Met Ile Val Ile
115 120 125
Trp Ser Leu Ala Leu Leu Gly Ile Leu Phe Lys Leu Thr Ile Ala His
 130 135 140
Arg Phe Lys Val Leu Ser Leu Val Thr Tyr Leu Thr Met Gly Trp Leu
145 150 155
Ser Leu Ile Val Val Tyr Gln Leu Ala Ile Lys Leu Ala Val Gly Gly
165 170 175
Val Thr Leu Leu Ala Val Gly Gly Val Val Tyr Ser Leu Gly Val Ile
 180 185 190
Phe Tyr Val Cys Lys Arg Ile Pro Tyr Asn His Ala Ile Trp His Gly
195 200 205
Phe Val Leu Gly Gly Ser Val Cys His Phe Leu Ala Ile Tyr Leu Tyr
210
                 215
Val Gly Gln Val
```

<210> 9196 <211> 291 <212> PRT

<213> Enterobacter cloacae

<400> 9196 Thr Thr Ala Leu Ile Tyr Ala Trp Cys Arg Cys Cys Leu Asp Thr Ala 10 Ile Phe Gln Arg Arg Lys Tyr Thr Pro Met Ser Arg Arg Asn Ala Cys 25 Gly Ser Tyr Thr Asn Ser Thr Thr Leu Ala Arg Glu Cys Arg Arg Ile 40 4.5 Val Thr Gly Thr Tyr Met Lys Lys Ser Leu Ala Leu Phe Thr Leu Leu 55 Ala Ala Ser Val Ser Gly Phe Ala His Ala Asp Asp Ala Ala Ile Lys 70 75 80 Gln Ser Leu Thr Lys Leu Gly Val Ala Ser Ser Glu Ile Gln Pro Ala 85 90 95 Pro Val Ala Gly Met Lys Thr Val Leu Thr Asn Ser Gly Val Leu Tyr 100 105 Val Thr Glu Asp Gly Lys His Ile Ile Gln Gly Pro Met Tyr Asp Val 115 120 Ser Gly Ala Gln Pro Val Asn Val Thr Asn Gln Leu Leu Met Lys Asn 140 Leu Asn Ala Leu Glu Lys Glu Met Ile Val Tyr Lys Ala Ala Glu 145 150 155 160 Lys His Val Ile Thr Val Phe Thr Asp Ile Thr Cys Gly Tyr Cys His 165 170 175 Arg Tyr Leu Ala Phe Pro Arg Ala Gly Val Gln Ser Gln Pro Glu Gln 195 200 Asp Met Lys Ala Ile Trp Cys Ala Lys Asp Arg Asn Lys Ala Phe Asp

215

Asp Ala Met Asn Gly Lys Gly Val Lys Pro Ala Ser Cys Asp Ile Asp 230 235 Ile Ala Asn His Tyr Ala Leu Gly Val Gln Phe Gly Val Ser Gly Thr 245 250 255 Pro Ala Ile Val Leu Ser Asn Gly Tyr Val Val Pro Gly Tyr Gln Gly 260 265 270 Pro Lys Glu Met Lys Ala Phe Leu Asp Glu His Gln Lys Gln Met Gly 280 285 Gly Lys 290 <210> 9197 <211> 359 <212> PRT <213> Enterobacter cloacae <400> 9197 Lys Thr Ala Phe Arg Tnr Ser Arg Ser Ala Leu Thr Phe Leu Gly Gly 10 Ile Phe Asp Tyr Asp Ala Lys Lys Glu Arg Leu Glu Glu Val Asn Ala 20 Glu Leu Glu Gln Pro Asp Val Trp Asn Glu Pro Glu Arg Ala Gln Ala 4.0 4.5 Leu Gly Lys Glu Arg Ser Ser Leu Glu Ala Ile Val Asp Thr Leu Asp 5.5 Gln Met Ala Gln Gly Leu Glu Asp Val Ser Gly Leu Leu Glu Leu Ala 75 70 Val Glu Ala Asp Asp Glu Glu Thr Phe Asn Glu Ala Val Ala Glu Leu 90 95 Asp Val Leu Glu Glu Lys Leu Ala Gln Leu Glu Phe Arg Arg Met Phe 100 105 110 Ser Gly Glu Tyr Asp Ser Ala Asp Cys Tyr Leu Asp Ile Gln Ala Gly 115 120 125 Ser Gly Gly Thr Glu Ala Gln Asp Trp Ala Ser Met Leu Met Arg Met 130 135 140 Tyr Leu Arg Trp Ala Glu Ala Arg Gly Pne Lys Thr Glu Ile Ile Glu 150 155 160 Glu Ser Glu Gly Glu Val Ala Gly Ile Lys Ser Val Thr Ile Lys Ile 165 170 Ile Gly Asp Tyr Ala Tyr Gly Trp Leu Arg Thr Glu Thr Gly Val His 180 185 190 Arg Leu Val Arg Lys Ser Pro Phe Asp Ser Gly Gly Arg Arg His Thr 200 205 Ser Phe Ser Ser Ala Phe Val Tyr Pro Glu Val Asp Glu Asp Ile Asp 215 220 Ile Asp Ile Asn Pro Ala Asp Leu Arg Ile Asp Val Tyr Arg Ala Ser 225 230 235 Gly Ala Gly Gly Gln His Val Asn Arg Thr Glu Ser Ala Val Arg Ile 245 250 Thr His Ile Pro Thr Gly Leu Val Thr Gln Cys Gln Asn Asp Arg Ser 260 270 Gln His Lys Asn Lys Asp Gln Ala Met Lys Gln Met Lys Ala Lys Leu 275 280 285 Tyr Glu Leu Glu Met Gln Lys Lys Asn Ala Glu Lys Gln Ala Met Glu 295 290 300 Asp Asn Lys Ser Asp Ile Gly Trp Gly Ser Gln Ile Arg Ser Tyr Val 305 310 315 320 Leu Asp Asp Ser Arg Ile Lys Asp Leu Arg Thr Gly Val Glu Thr Arg

330

Asn Thr Gin Ala Val Leu Asp Gly Ser Leu Asp Gln Phe Ile Glu Ala

345

325

Ser Leu Lys Ala Gly Leu 355

<210> 9198

<211> 509 <212> PRT

<213> Enterobacter cloacae

<400> 9198

Gly Thr Asn Met Ser Glu Gln Gln Ala Gln Gly Ala Asp Ala Val Val 1.0 Asp Leu Asn Asn Glu Leu Lys Thr Arg Arg Glu Lys Leu Ala Ala Leu 20 25 Arg Glu Gln Gly Val Pro Phe Pro Asn Asp Phe Arg Arg Asp His Thr 40 Ser Asp Gln Leu His Ala Asp Phe Asp Gly Lys Glu Asn Glu Glu Leu 55 Glu Ala Leu Asn Val Glu Val Ser Val Ala Gly Arg Met Met Thr Arg 65 70 75 Arg Ile Met Gly Lys Ala Ser Phe Val Thr Leu Gln Asp Val Gly Gly 85 90 Arg Ile Gln Leu Tyr Val Ser Arg Asp Asp Leu Pro Glu Gly Ile Tyr 100 105 Asn Glu Gln Phe Lys Lys Trp Asp Leu Gly Asp Ile Leu Gly Ala Lys 115 120 Gly Lys Leu Phe Lys Thr Lys Thr Gly Glu Leu Ser Ile His Cys Thr 130 135 140 Glu Leu Arg Leu Leu Thr Lys Ala Leu Arg Pro Leu Pro Asp Lys Phe 145 150 155 His Gly Leu Gln Asp Gln Glu Ala Arg Tyr Arg Gln Arg Tyr Leu Asp 165 170 Leu Ile Ser Asn Asp Glu Ser Arg Lys Thr Phe Lys Ile Arg Ser Gln 180 185 190 Ile Met Ala Gly Ile Arg Gln Phe Met Val Asn Arg Asp Phe Met Glu 195 200 205 Val Glu Thr Pro Met Met Gln Val Ile Pro Gly Gly Ala Ser Ala Arg 210 215 220 Pro Phe Ile Thr His His Asn Ala Leu Asp Leu Asp Met Tyr Leu Arg 225 230 235 Ile Ala Pro Glu Leu Tyr Leu Lys Arg Leu Val Val Gly Gly Phe Asp 245 250 Arg Val Phe Glu Ile Asn Arg Asn Phe Arg Asn Glu Gly Ile Ser Val 260 265 270 Arg His Asn Pro Glu Phe Thr Met Met Glu Leu Tyr Met Ala Tyr Ala 280 285 Asp Tyr Lys Asp Leu Ile Glu Leu Thr Glu Ser Leu Phe Arg Thr Leu 290 295 300 Ala Gln Asp Ile Leu Gly Thr Thr Gln Val Pro Tyr Gly Glu Glu Val 305 310 315 Phe Asp Phe Gly Lys Pro Pne Glu Lys Leu Thr Met Arg Glu Ala Ile 325 330 Lys Lys Tyr Arg Pro Glu Thr Asn Met Ala Asp Leu Asp Asn Phe Asp 340 345 Ser Ala Lys Ala Ile Ala Glu Ser Ile Gly Ile Lys Val Glu Lys Ser 355 360 Trp Gly Leu Gly Arg Ile Val Thr Glu Ile Phe Glu Glu Val Ala Glu 370 375 Ala His Leu Ile Gln Pro Thr Phe Ile Thr Glu Tyr Pro Ala Glu Val 390 395

Ser Pro Leu Ala Arg Arg Asn Asp Glu Asn Pro Glu Ile Thr Asp Arg

410

```
Phe Glu Phe Phe Ile Gly Gly Arg Glu Ile Gly Asn Gly Phe Ser Glu
     420
                             425
Leu Asn Asp Ala Glu Asp Gln Ala Gln Arg Phe Gln Asp Gln Val Asn
                                 445
      435
                   440
Ala Lys Ala Ala Gly Asp Asp Glu Ala Met Phe Phe Asp Glu Asp Tyr
                  455 460
 450
Val Thr Ala Leu Glu His Gly Leu Pro Pro Thr Ala Gly Leu Gly Ile
       470 475
465
Gly Ile Asp Arg Met Val Met Leu Phe Thr Asn Ser His Thr Ile Arg
        485 490
Asp Val Ile Leu Phe Pro Ala Met Arg Pro Val Lys
           500
                            505
<210> 9199
<211> 212
<212> PRT
<213> Enterobacter cloacae
<400> 9199
Leu Tyr Gln Val Asn Gly Ile Phe Met Lys Lys Thr Val Ile Ala Leu
                                 10
Ile Val Ala Asn Val Phe Thr Ala Thr Ser Ala Phe Ala Ala Asp
                             25
                                               3.0
Ala Gly Thr Trp Tyr Ser Gly Ala Lys Phe Gly Trp Ser His Tyr Phe
                         4.0
                                            45
Asp Thr Asn Met Gly Ser Lys Ala Phe Glu Asn Thr His Ser Asp His
                      55
Phe Asp Phe Asp His Asp Asn Val Ser Gly Gly Val Tyr Thr Gly Tyr
                  70
                                    75
                                                       8.0
Gln Ile Thr Pro Trp Leu Ala Val Glu Gly Gly Tyr Asp Tyr Leu Gly
              85
                                 90
                                                   95
Asn Met Gln Ile Lys Gly Gln His Gly Ala Gly Ala Gln Met Lys Thr
         100
                                                110
Gln Gly Leu Gln Leu Ser Leu Lys Ala Ser Tyr Ala Leu Thr Asn Asp
       115
                         120
                                            125
Trp Asp Ile Tyr Gly Arg Thr Gly Ala Met Gly Tyr Arg Ala Glu Ser
 130
                     135
                                        140
Asp Val Ser Gly His Asn Arg Phe Glu Thr Gly Val Arg Pro Leu Ala
145
                  150
                                    155
                                                      160
Ala Val Gly Thr Glu Tyr Ala Phe Asn Lys Asn Trp Ala Gly Arg Leu
                                 170
              165
Glu Tyr Gln Trp Val Ser Asn Val Gly Asn Val Asn Gln Ile Gly Val
         180
                             185
                                                190
Ser Ser Asp Leu Ser Ser Val Thr Ala Gly Leu Ser Tyr Arg Phe Gly
       195
                         200
Gln Tyr Asp
   210
<210> 9200
<211> 345
<212> PRT
<213> Enterobacter cloacae
<400> 9200
Ser Lys Tyr Ser Pro Ala Gly Ile Thr Ser Glu Thr Arg Gly Lys Ala
Met Ala Val Ile Val Ile Thr Gly Gly Thr Ala Gly Val Gly Lys Ala
         20
                                                30
Thr Ala Leu His Phe Ala Lys Ala Gly Tyr Asp Val Gly Ile Ile Ala
      35
                         40
```

Arg Asp Glu Gln Ser Leu Arg Ser Thr Glu Glu Glu Leu Cys Arg Phe

```
Gly Ile Asn Ala Cys Ala Val Gln Ala Asp Val Ala Asp Ser Lys Ala
         7.0
                          7.5
Val Thr Asp Ala Ala Asn Glu Ile Glu Tyr Arg Leu Gly Ala Ile Asp
        85
                    90
Val Trp Val Asn Asn Ala Met Gly Gly Met Leu Ala Pro Phe Arg Thr
      100 105 110
Met Ser Pro Glu Glu Phe Arg Arg Val Thr Glu Val Thr Tyr Leu Gly
115 120 125
Tyr Val Asn Gly Thr Arg Ala Ala Leu Glu Leu Met Thr Pro Arg Asp
 130 135 140
Arg Gly Thr Ile Ile Gln Val Gly Ser Ala Leu Ala Tyr Arg Ser Ile
145 150 155 160
Pro Leu Gln Ser Ala Tyr Cys Gly Ala Lys Ala Ala Ile Arg Gly Phe
        165 170 175
Thr Asp Ala Val Arg Thr Glu Leu Met His Glu Asn Ser Arg Val Gln
     180 185 190
Ile Ala Met Val Gln Met Pro Gly Leu Asn Thr Pro Gln Phe Glu Trp
195 200 205
Ala Arg Asn Lys Phe Ser Trp Ala Met Arg Pro Val Pro Pro Val Phe
210 215 220
Gln Pro Glu Val Ala Ala Ser Ala Ile Phe Lys Val Ala Gln Lys Pro
225 230 235
Val Arg Glu Leu Trp Val Gly Ser Ser Thr Val Gln Ser Ile Val Gly
       245 250
Gln Phe Leu Phe Pro Gly Phe Leu Asp Arg Leu Met Val Lys Lys Ala
260 265 270
Trp Glu Gly Gln Met Thr Asp Thr Leu Asn Ala Asp Asp Arg Gln Asp
                   280
Tyr Leu Asp Gln Pro Val Asn Asp Leu His Lys Ile His Gly His Phe
290 295 300
Thr Asp Glu Ala Lys Glu Arg Ala Thr Ser Val Thr Ser Gly Met Pro
305 310 315 320
Gly Lys Val Leu Leu Gly Ser Leu Ala Val Thr Gly Ala Ile Val Ala
         325
Arg Leu Met Leu Ser Arg Arg Arg
        340
```

<210> 9201

<211> 99

<212> PRT

<213> Enterobacter cloacae

<400> 9201

<210> 9202 <211> 94 <212> PRT <213> Enterobacter cloacae

<400> 9202

65 70 75 8

Ile Gln Thr Arg Asn Gln Glu Arg Gly Pro Val Ala Ile
85 90

<210> 9203

<211> 257 <212> PRT

<213> Enterobacter cloacae

<400> 9203

Cys Ala Ile His Ala Asp Arg Gly Ala Val Leu Phe Ala Gly Ser Leu 1.0 Thr Arg Asn Pro Ile Ile Ala Val Phe Cys Leu Thr Leu Thr Leu Leu 20 25 30 Val Ala Gly Cys Ser Gly Ser Lys Ser Ser Asp Met Gly Ser Tyr Ser 35 40 4.5 Gly Ala Val Tyr Thr Val Lys Arg Gly Asp Thr Leu Tyr Arg Ile Ser 5.5 60 Arg Ala Thr Gly Thr Ser Val Lys Glu Leu Ala Arg Leu Asn Asn Ile 75 7.0 80 Ser Pro Pro Tyr Thr Ile Glu Val Gly Gln Lys Leu Lys Val Asn Gly 85 90 Gly Ser Ser Ser Gly Lys Lys Ser Ser Thr Arg Lys Thr Ala Lys Val 100 105 110 Thr Pro Ser Tyr Gln Val Pro Lys Ser Ser Trp Pro Pro Val Gly Gln 120 115 125 Arg Cys Trp Ile Trp Pro Ala Ser Gly Lys Val Val Ala Pro Tyr Ser 130 135 140 Leu Ser Glu Gly Gly Asn Lys Gly Ile Asp Ile Ala Ala Ala Arg Gly 150 155 160 Thr Pro Val Tyr Ala Ser Gly Ala Gly Lys Val Val Tyr Val Gly Asn 165 170 Gln Leu Arg Gly Tyr Gly Asn Leu Ile Met Ile Lys His Gly Glu Asp 180 185 190 Tyr Ile Thr Ala Tyr Ala His Asn Asp Thr Met Leu Val Asn Asn Gly 195 200 205 Gln Asn Val Lys Ala Gly Gln Lys Ile Ala Thr Met Gly Ser Thr Gly 210 215 Thr Asp Thr Val Lys Leu His Phe Gln Ile Arg Tyr Lys Ala Thr Ala 230 235 Ile Asp Pro Gln Arg Tyr Leu Pro Ala Gln Gly Ser Lys Pro Lys Cys

250

<210> 9204 <211> 234 <212> PRT

<213> Enterobacter cloacae

```
<400> 9204
Arg Gln Cys Lys Arg Asn His Glu Glu Arg Asn Met Ala Ala Thr Asn
Gly Met Ile Asp Thr Asp Asp Ala Val Ile Leu Leu Ile Asp His Gln
                        25
Ser Gly Leu Phe Asn Thr Val Arg Asp Val Pro Val Pro Asp Leu Arg
      3.5
                   4.0
                                     4.5
Asn Tyr Val Thr Ala Ile Ala Lys Val Ala Thr Leu Leu Asn Ile Pro
                  5.5
                                60
Val Ile Thr Thr Ala Ser Val Pro Asp Gly Pro Asn Gly Pro Leu Ile
            70 75
Pro Glu Ile His Lys Tyr Ala Pro His Ala Val Tyr Val Pro Arg Thr
           8.5
                90
                                           95
Gly Gln Ile Asn Thr Trp Asp Asn Pro Ala Phe Val Lys Glu Val Glu
        100 105 110
Lys Thr Gly Arg Lys Thr Leu Ile Ile Ala Gly Thr Leu Thr Ser Val
   115 120
                                   125
Gys Met Ala Phe Pro Ala Val Ser Ala Val His Glu Gly Tyr Lys Val
       135
Tyr Cys Val Val Asp Ala Ser Gly Asn Trp Ser Lys Ile Ala Thr Asp
   150 155
Thr Thr Ile Ala Arg Val Ala Gln Ala Gly Ala Ile Pro Thr Asp Thr
           165 170
Phe Ala Ile Val Ala Glu Leu Met Arg Thr Trp Asn Arg Glu Glu Gly
        180 185
Ser Arg Phe Ala Glu Ile Leu Ala Glu His Val Cys Pro Glu Tyr Lys
195 200
                                     205
Cys Leu Ile Glu Ser Phe Gly Lys Ala Gln Glu Ile Ala Arg Thr Gly
210 215
Pro Glu Thr Asn Leu Glu His Tyr Lys
```

<210> 9205

<211> 152 <212> PRT

<213> Enterobacter cloacae

<400> 9205

Glu Ser Asn Met Asp Met Val Phe Arg Ala Leu Ala Ile Tyr Leu Phe 1.0 Leu Val Ile Val Phe Lys Val Ala Gly Arg Arg Ala Leu Leu Gln Met 20 25 30 Thr Ser Phe Asp Leu Ile Leu Leu Leu Ile Ile Ser Glu Ala Thr Gln 35 4.0 45 Gln Ala Leu Leu Gly Glu Asp Phe Ser Ile Thr Gly Ala Met Ile Thr Ile Thr Thr Leu Val Val Val Asp Ile Ile Phe Gly Leu Leu Lys Lys 7.0 75 80 Tyr Phe Ser Thr Val Glu Asn Ile Leu Asp Gly Thr Pro Val Ile Leu 85 90 Val Glu Asn Gly Val Pro Leu Ala Asp Lys Leu Lys Lys Val Asp Val 105 100 Ser Cys Asp Asp Ile Leu Val Ser Ala Arg Gln Asn His Gly Ile Thr 120 115 125 Glu Leu Lys Glu Ile Lys Tyr Ala Ile Leu Glu Arg Asn Gly His Ile 130 135 140

Ser Ile Ile Pro Asp Glu Asn 150

<210> 9206 <211> 93 <212> PRT <213> Enterobacter cloacae

<400> 9206 Gly Thr Met Glu Ile Leu Glu Gly His Asn Lys Phe Tyr Val Asn Asp 1.0 Ala Glu Gly Asn Gln Val Ala Glu Ile Val Phe Val Pro Thr Gly Glu . 20 25 His Leu Ser Ile Ile Glu His Thr Asp Val Asp Pro Ser Leu Lys Gly 35 4.0 45 Gln Gly Val Gly Lys Gln Leu Val Ala Lys Val Val Glu Lys Met Arg 50 55 60 Gly Glu Asn Arg Lys Ile Ile Pro Leu Cys Pro Phe Ala Lys His Glu 70 75 Phe Asp Asn Thr Arg Glu Tyr Asp Asp Ile Arg Ala

<211> 986 <212> PRT <213> Enterobacter cloacae

275

<210> 9207

<400> 9207 Ser Leu Gly Cys Ala Ala Ser Gly Gly Leu Arg Glu Gly Arg Gly Arg 10 Asn His Ile His Cys Thr Phe Gln Glu Pro Ser Leu Met Thr Gln Thr 25 3.0 Leu Ser Gln Leu Glu Asn Arg Gly Ala Phe Ile Glu Arg His Ile Gly 40 4.5 Pro Asp Ala Gln Gln Arg Gln Glu Met Leu Lys Thr Val Gly Ala Asp 5.5 Ser Leu Asn Ala Leu Ile Gly Gln Ile Val Pro Lys Asp Ile Gln Leu 70 75 80 Ala Thr Pro Pro Gln Val Gly Glu Ser Thr Thr Glu Phe Ala Ala Leu 8.5 90 Ala Glu Leu Lys Ala Ile Ala Gly Leu Asn Lys Arg Tyr Lys Ser Tyr 100 105 110 Ile Gly Met Gly Tyr Thr Asn Val Gln Leu Pro Pro Val Ile Leu Arg 120 125 115 Asn Met Leu Glu Asn Pro Gly Trp Tyr Thr Ala Tyr Thr Pro Tyr Gln 135 140 Pro Glu Val Ser Gln Gly Arg Leu Glu Ala Leu Leu Asn Phe Gln Gln 150 155 145 Val Thr Leu Asp Leu Thr Gly Met Asp Ile Ala Ser Ala Ser Leu Leu 165 170 Asp Glu Ala Thr Ala Ala Ala Glu Ala Met Ala Met Ala Lys Arg Val 185 180 190 Ser Lys Leu Lys Asn Ala Asn Arg Phe Phe Val Ala Ala Asp Val His 200 195 205 Pro Gln Thr Leu Asp Val Val Arg Thr Arg Ala Glu Thr Phe Gly Phe 215 220 Glu Val Ile Val Asp Asp Ala Glu Lys Val Leu Asp His Gln Asp Val 230 235 Phe Gly Val Leu Leu Gln Gln Val Gly Thr Thr Gly Glu Val His Asp 245 250 Tyr Gly Ala Leu Ile Ala Glu Leu Lys Ser Arg Lys Ile Ile Val Ser 260 265 270 Val Ala Ala Asp Phe Met Ala Leu Val Leu Leu Thr Ala Pro Gly Lys

280

Gln Gly Ala Asp Ile Val Phe Gly Ser Ala Gln Arg Phe Gly Val Pro 290 295 Met Gly Tyr Gly Gly Pro His Ala Ala Phe Phe Gly Ala Lys Asp Glu 305 310 315 Phe Lys Arg Ser Met Pro Gly Arg Ile Ile Gly Val Ser Lys Asp Ala 325 330 335 Ala Gly Asn Thr Ala Leu Arg Met Ala Met Gln Thr Arg Glu Gln His 340 345 350 Ile Arg Arg Glu Lys Ala Asn Ser Asn Ile Cys Thr Ser Gln Val Leu 355 360 365 Leu Ala Asn Ile Ala Ser Leu Tyr Ala Val Phe His Gly Pro Ala Gly 370 375 380 Leu Lys Arg Ile Ala Ser Arg Ile His Arg Leu Ala Asp Ile Leu Ala 390 395 400 Cys Gly Leu Gln Gln Lys Gly Leu Arg Leu Arg His Glu His Tyr Phe 405 410 415 Asp Thr Leu Cys Val Glu Val Ala Asp Lys Ala Ala Val Leu Ala Arg 420 425 Ala Glu Ala Ala Gln Ile Asn Leu Arg Ser Asp Ile His Asn Ala Val 435 440 Gly Ile Thr Leu Asp Glu Ser Thr Thr Arg Asp Asp Ile Leu Thr Leu 450 455 460 Phe Asn Val Leu Leu Gly Asp Ala His Gly Leu Asp Val Asp Thr Leu 465 470 475 Asp Lys Glu Val Ala Leu Asp Ser Arg Ser Ile Gln Glu Ser Met Leu 485 490 Arg Asp Asp Ala Ile Leu Thr His Pro Val Phe Asn Arg Tyr His Ser 500 505 510 Glu Thr Glu Met Met Arg Tyr Met His Ser Leu Glu Arg Lys Asp Leu 515 520 525 Ala Leu Asn Gln Ala Met Ile Pro Leu Gly Ser Cys Thr Met Lys Leu 530 535 540 Asn Ala Ala Ala Glu Met Ile Pro Ile Thr Trp Pro Glu Phe Ser Glu 550 555 Leu His Pro Phe Cys Pro Ala Glu Gln Ala Glu Gly Tyr His Met Met 565 Ile Asn Gln Leu Ser Asp Trp Leu Val Lys Leu Thr Gly Tyr Asp Ala 585 580 590 Leu Cys Met Gln Pro Asn Ser Gly Ala Gln Gly Glu Tyr Ala Gly Leu 595 600 605 Leu Ala Ile Arg His Tyr His Glu Ser Arg Asn Glu Gly His Arg Asp 610 615 620 Ile Cys Leu Ile Pro Ser Ser Ala His Gly Thr Asn Pro Ala Ser Ala 630 635 Gln Met Ala Gly Met Glu Val Val Val Val Ala Cys Asp Lys Asn Gly 645 650 Asn Ile Asp Leu Ala Asp Leu Arg Ala Lys Ala Glu Gln Ala Gly Asp 660 665 670 Lys Leu Ser Cys Ile Met Val Thr Tyr Pro Ser Thr His Gly Val Tyr 675 680 685 Glu Glu Thr Ile Arg Glu Val Cys Glu Val Val His Gln Phe Gly Gly 690 695 700 Gln Val Tyr Leu Asp Gly Ala Asn Met Asn Ala Gln Val Gly Ile Thr 710 705 715 Ser Pro Gly Phe Ile Gly Ala Asp Val Ser His Leu Asn Leu His Lys 735 725 730 Thr Phe Cys Ile Pro His Gly Gly Gly Pro Gly Met Gly Pro Ile 745 740 750 Gly Val Lys Ala His Leu Ala Pro Phe Val Pro Gly His Ser Val Val 760 Gln Ile Glu Gly Met Leu Thr Arg Gln Gly Ala Val Ser Ala Ala Pro

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775
Phe Gly Ser Ala Ser Ile Leu Pro Ile Ser Trp Met Tyr Ile Arg Met
          790
                    795
Met Gly Ala Glu Gly Leu Lys Gln Ala Ser Gln Val Ala Ile Leu Asn
          805 810 815
Ala Asn Tyr Ile Ala Thr Arg Leu Lys Asp Ala Tyr Pro Val Leu Tyr
    820 825 830
Thr Gly Arg Asp Gly Arg Val Ala His Glu Cys Ile Leu Asp Ile Arg
     835 840 845
Pro Leu Lys Glu Glu Thr Gly Ile Ser Glu Leu Asp Ile Ala Lys Arg
 850 855 860
Leu Ile Asp Tyr Gly Phe His Ala Pro Thr Met Ser Phe Pro Val Ala
    870 875
Gly Thr Leu Met Val Glu Pro Thr Glu Ser Glu Ser Lys Val Glu Leu
           885 890
Asp Arg Phe Ile Asp Ala Met Leu Ala Ile Arg Ser Glu Ile Asp Arg
                        905 910
       900
Val Lys Gly Gly Glu Trp Thr Leu Glu Asp Asn Pro Leu Val Asn Ala
 915 920 925
Pro His Thr Gln Asn Glu Leu Val Ala Glu Trp Asn His Gly Tyr Thr
930 935
Arg Glu Leu Ala Val Phe Pro Ala Gly Val Ala Asn Lys Tyr Trp Pro
945 950
                               955
Thr Val Lys Arg Leu Asp Asp Val Tyr Gly Asp Arg Asn Leu Phe Cys
           965 970
Ser Cys Val Pro Met Ser Glu Tyr Gln
         980
<210> 9208
<211> 144
<212> PRT
<213> Enterobacter cloacae
<400> 9208
Phe Lys His Gly Ile Arg Asn Val Val Leu Trp Gln Ser Asp Leu Arg
                            10
Val Ser Trp Arg Ser Gln Trp Met Ser Leu Leu Leu His Gly Leu Val
        20
                         25
                                        30
Ala Ala Met Val Leu Leu Val Pro Trp Pro Leu Ser Tyr Thr Pro Leu
      35
                     40
                               45
Trp Leu Leu Leu Ser Phe Val Val Phe Asp Ser Val Arg Ser Gln
                5.5
                         - 60
Arg Arg Ile Asn Ala Arg Gln Gly Glu Ile Lys Leu Leu Met Asp Ser
                70
                               75
                                               80
Arg Leu Arg Trp Gln Gly Lys Glu Trp Glu Met Met Gly Thr Pro Trp
                            90
            8.5
Met Leu Asn Thr Gly Met Met Leu Arg Leu Arg Arg Val Glu Asp Asn
                         105 110
         100
Arg Arg Gln His Leu Trp Leu Ala Ala Asp Ser Met Asp Pro Ala Glu
                          125
     115
                120
Trp Arg Asp Leu Arg Arg Leu Ile Val Gln Gln Pro Thr Gln Glu
  130
                  135
<210> 9209
<211> 309
<212> PRT
<213> Enterobacter cloacae
<400> 9209
Trp Pro Asp Cys Arg Thr Lys Gly Ala Asp Val Glu Lys Asp Leu Ala
```

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Leu Ile Glu Gln Phe Leu Asp Ala Leu Trp Leu Glu Lys Asn Leu Ala
Glu Asn Thr Leu Ser Ala Tyr Arg Arg Asp Leu Thr Leu Leu Val Glu
                       40
Trp Leu Ala His Arg Gly Leu Thr Leu Glu Ser Ala Gln Ser Asp Asp
                    55
                                     60
Leu Gln Gly Leu Leu Ala Glu Arg Met Glu Gly Gly Tyr Lys Ala Thr
              70
Ser Ser Ala Arg Leu Leu Ser Ala Met Arg Arg Leu Phe Gln His Leu
            85
                             90
Tyr Arg Glu Lys Ile Arg Ala Asp Asp Pro Ser Ala Leu Leu Ala Ser
        100 105 110
Pro Lys Leu Pro Gln Arg Leu Pro Lys Asp Leu Ser Glu Ala Gln Val
    115 120
                            125
Glu Arg Leu Leu Gln Ser Pro Ala Val Asp Leu Pro Leu Glu Leu Arg
 130 135 140
Asp Lys Ala Met Leu Glu Leu Leu Tyr Ala Thr Gly Leu Arg Val Ser
    150 155
Glu Leu Val Gly Leu Thr Met Ser Asp Ile Ser Leu Arg Gln Gly Val
            165
                             170
Val Arg Val Ile Gly Lys Gly Asn Lys Glu Arg Leu Val Pro Leu Gly
         180 185
                                           190
Glu Glu Ala Val Tyr Trp Leu Glu Thr Tyr Leu Glu His Gly Arg Pro
195 200
                               205
Trp Leu Leu Asn Gly Val Ser Ile Asp Val Leu Phe Pro Ser Gln Arg
210
                   215
Ala Gln Gln Met Thr Arg Gln Thr Phe Trp His Arg Ile Lys His Tyr
                               235
225
             230
Ala Thr Leu Ala Gly Ile Asp Ser Glu Lys Leu Ser Pro His Val Leu
            245
                              250 255
Arg His Ala Phe Ala Thr His Leu Leu Asn His Gly Ala Asp Leu Arg
         260
                          265
                                           270
Val Val Gln Met Leu Leu Gly His Ser Asp Leu Ser Thr Thr Gln Ile
275
                       280
Tyr Thr His Val Ala Thr Glu Arg Leu Arg Gln Leu His Gln Gln His
 290
                   295
                                     300
His Pro Arg Ala
305
<210> 9210
<211> 581
<212> PRT
<213> Enterobacter cloacae
<400> 9210
Ile Ile Arg Val Lys Ala Pro Ile Lys Leu Arg Arg Arg Asp Ala Gly
Glu Thr Ala Asp Leu Pro Asp Thr Leu Pro Leu Leu Lys Arg Leu
                          25
                                            30
Tyr Ala Ser Arg Gly Val Arg Thr Ala Ser Asp Leu Glu Arg Ser Val
      35
                       40
                                     4.5
Lys Gly Met Leu Pro Trp Gln Ala Leu Ser Gly Ile Glu Gln Ala Ser
                    55
Glu Met Leu Tyr Asp Ala Phe Arg Glu Gly Thr Arg Ile Val Val Val
                70
Gly Asp Phe Asp Ala Asp Gly Ala Thr Ser Thr Ala Leu Ser Val Leu
            85
                           90
Ser Leu Arg Ala Leu Gly Cys Asp Asn Val Thr Tyr Leu Val Pro Asn
                          105
Arg Phe Glu Asp Gly Tyr Gly Leu Ser Pro Glu Val Val Asp Gln Ala
```

```
His Ala Arg Gly Ala Gln Met Ile Met Thr Val Asp Asn Gly Ile Ser
       135
Ser His Ala Gly Val Asp His Ala His Ala Leu Gly Ile Pro Val Leu
                 155
         150
Val Thr Asp His His Leu Pro Gly Glu Thr Leu Pro Ala Ala Glu Ala
        165 170 175
Ile Ile Asn Pro Asn Leu Arg Asp Cys Asp Phe Pro Ser Lys Ser Leu
      180 185 190
Ala Gly Val Gly Val Ala Phe Tyr Leu Met Leu Ala Leu Arg Thr Leu
 195 200 205
Leu Arg Asp Lys Gly Trp Phe Glu Ser Arg Gly Ile Ala Val Pro Asn
 210 215 220
Leu Ala Glu Tyr Leu Asp Leu Val Ala Leu Gly Thr Val Ala Asp Val
225 230 235
Val Pro Leu Asp Thr Asn Asn Arg Ile Leu Thr Trp Gln Gly Leu Ser
      245 250 255
Arg Ile Arg Ala Gly Lys Cys Arg Pro Gly Ile Lys Ala Leu Leu Glu
        260 265 270
Ile Ala Asn Arg Asp Pro Leu Lys Leu Ala Ala Ser Asp Leu Gly Phe
   275 280 285
Ala Leu Gly Pro Arg Leu Asn Ala Ala Gly Arg Leu Asp Asp Met Ser
 290 295 300
Val Gly Val Ala Leu Leu Cys Asp Asn Ile Gly Glu Ala Arg Val
      310 315
Leu Ala Ser Glu Leu Asp Ala Leu Asn Gln Thr Arg Lys Glu Ile Glu
           325
                         330
Gln Gly Met Gln Ala Glu Ala Leu Thr Leu Cys Glu Lys Leu Glu Arg
        340
                      345
                                     350
Ser Gly Asp Thr Leu Pro Gly Gly Leu Ala Met Tyr His Pro Glu Trp
     355
                   360
                                  365
His Gln Gly Val Val Gly Ile Leu Ala Ser Arg Ile Lys Glu Arg Phe
 370
                375
                               380
His Arg Pro Val Ile Ala Phe Ala Pro Ala Gly Asp Gly Thr Leu Lys
             390
                            395
Gly Ser Gly Arg Ser Ile Gln Gly Leu His Met Arg Asp Ala Leu Glu
          405 410
Arg Leu Asp Thr Leu His Pro Asn Leu Met Ile Lys Phe Gly Gly His
        420 425 430
Ala Met Ala Ala Gly Leu Ser Leu Glu Glu Ala Lys Phe Asp Glu Phe
   435
                   440
                                  445
Gln Arg Leu Phe Gly Glu Leu Val Thr Glu Trp Ile Asp Pro Ala Leu
                 455
                               460
Leu Gln Gly Glu Val Val Ser Asp Gly Glu Leu Ser Pro Ala Glu Met
              470
                            475
Thr Met Glu Val Ala Gln Met Leu Arg Asp Ala Gly Pro Trp Gly Gln
           485
                         490
                                        495
Met Phe Pro Glu Pro Leu Phe Asp Gly Arg Phe Arg Leu Leu Gln Gln
        500
                      505
Arg Ile Val Gly Glu Arg His Leu Lys Val Met Val Glu Ser Val Gly
     515
                    520
                                  525
Gly Gly Pro Leu Leu Asp Gly Ile Ala Phe Asn Val Asp Thr Ser Ile
                 535
                               540
Trp Pro Asp Asn Gly Val Arg Glu Val Glu Leu Ala Tyr Lys Leu Asp
                   555
545 550
Ile Asn Glu Phe Arg Gly Asn Arg Ser Leu Gln Ile Ile Ile Asp Asn
    565
                         570
Ile Arg Pro Ile
```

<210> 9211 <211> 420

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<212> PRT
<213> Enterobacter cloacae
<400> 9211
Phe Lys Ile Lys Pro Ser Phe Phe Leu Arg Asn Gln Ser Pro Leu Leu
                  10
Tyr Leu Ser Ala Asn Phe Leu Phe Pro Gly Pro Gln Met Lys Thr Arg
   20
                        25
                                        3.0
Leu Leu Cys Ala Gly Val Leu Ala Val Ser Ser Ala His Ala Ser
                   4.0
                         4.5
Ala Leu Tyr Phe Tyr Glu Ala Gly Thr Glu Asp Thr Ala Leu Ala Gly
             5.5
                       60
Ala Gly Gln Ala Ala Arg Ala Lys Asp Ala Ser Thr Ile Met Thr Asn
65 70 75
Pro Ala Gly Met Thr Arg Leu Pro Asp His Met Val Thr Gly Gly Leu 85 \hspace{1.5cm} 90 \hspace{1.5cm} 95
Gln Val Met Asp Gly Ser Ile Asp Asn Gln Leu Asp Asn Asp Ala His
        100 105 110
Gln Ser Pro Gly Asp Val Met Lys Thr Ile Pro Asn Ala Ser Ala Phe
115 120 125
Tyr Ser Gln Lys Ile Asn Asp Asp Leu Tyr Ala Gly Ile Gly Leu Tyr
 130 135
                                 140
Gly Asn Tyr Gly Leu Gly Ile Asp Tyr Gly Ser Trp Ala Gly Asp Arg
145 150 155
Leu Ile Lys Lys Ser Thr Met Val Ala Met Thr Leu Ser Pro Ser Leu
            165
                           170
Ala Tyr Lys Leu Asn Asp Arg Leu Ser Ile Gly Ala Ser Ala Asn Val
        180
                        185
                                        190
Asn Tyr Gly Tyr Phe Ser Leu Thr Arg Ser Val Asn Asp Asp Asp Tyr
   195
                    200
                         205
Gln Arg Arg Asp Glu Asp Leu Ala Met Ser Tyr Arg Leu Gly Leu Leu
210
                  215
                                  220
Met Gln Leu Thr Asp Gln Thr Arg Ala Gly Ile Thr Trp Asn Ser Glu
              230
                              235
Thr Asp Tyr Ser Phe Asn Ile Asp Gly Asn Ala Arg Leu Gln Asn Gly
           245
                           250 255
Thr Tyr Asp Leu Pro Leu Ser Ala Gln Ile Ser Ala Pro Gln Gln Ile
         260
                        265 270
Met Leu Ser Leu Val His Asp Ile Asn Pro Arg Trp Ser Val Met Gly
                     280
                                     285
Asp Leu Gly Trp Gln Asp Trp Ser Gln Phe Gly Ala Pro Gln Ile Val
                  295
                                  300
Val Gly Asp Gln Gln Leu Asn Asn Val Ser Arg Leu Lys Asp Thr Trp
               310
                              315
                                           320
His Gly Ala Val Gly Val Gln Tyr Arg Pro Thr Pro Gln Trp Arg Leu
            325
                           330
                                           335
Asn Ala Gly Val Ala Phe Asp Ser Ser Pro Tyr Glu Ser Gln Ser Asp
         340
                         345
                                        350
Val Ala Leu Thr Leu Pro Thr Gly Asp Glu Trp Arg Phe Gly Thr Gly
      355
                     360
                                     365
Ala Gln Tyr Gln Ile Thr Pro Ala Ser Asn Ile Gly Ile Ala Val Ser
  370
                  375
                                  380
Tyr Leu His Met Gln Ser Ser His Val Lys Ser Pro Val Ala Phe Ala
              390 395 400
Gly Ser Tyr Asp His Pro Tyr Leu Trp Phe Ala Ser Val Asn Tyr Ser
           405
                           410
Tyr Gln Phe
         420
```

<210> 9212 <211> 216

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<212> PRT
<213> Enterobacter cloacae
<400> 9212
Met Ser Glu Gly Cys Thr Met His Ile Leu Pro Pro Val Arg Pro Glu
                            1.0
Lys Ser Ile Glu Arg Leu Thr Ala Ile Leu Glu Pro Ile Ala Glu Lys
      20
                        2.5
Val His Val Val Pro Arg Lys Arg Leu Thr Trp Leu Arg Lys Gly Lys
      35
                    40
                                   45
Gln Gln Met Tyr Leu Phe Leu Glu Gly Glu Leu Ser Leu Leu Arg Ala
               5.5
                        60
Ser Asp Gly Leu Val Val Val Thr Val Tyr Glu Pro His Leu Phe Gly
     70 75
Ile Ala Glu Met Ile Gln Pro Thr Gln Gly His Leu Leu Arg Ala Glu
            85
                           90
Arg Glu Ser Thr Ile Leu Arg Leu Asp Ala Asp Lys Ala Ala Glu Leu
         100 105
Phe Arg Ala Glu Gly Val Trp Glu Asp Val Ala Ala Leu Leu Ser Tyr
      115
                     120 125
His Thr Ala Tyr Leu Ile Phe Arg Asp Ala Gln Val Leu Gln Gln Arg
                  135
                                  140
Thr Tyr Ser Val Ile Arg Asn His Leu Gln Glu Met Ile Leu Leu Pro
               150 155 160
Glu Glu Thr Arg Leu Arg Thr Thr Ile Leu Glu Tyr Ile Gln Asp Arg
            165
                            170
Thr Leu Leu Ser Arg Ser Ser Ile Leu Asn Val Leu Ser Ala Leu Lys
        180
                       185 190
Gln Gly Glu Tyr Ile Ser Phe Lys Arg Gly Gly Tyr Leu Leu Glu Val
195 200
Arg His Leu Pro Glu Ser Phe
  210
<210> 9213
<211> 678
```

<212> PRT <213> Enterobacter cloacae

165

<400> 9213 Pro Pro Phe Pro Pro Cys Thr Ala Ser Val Asn Ile Thr Pro Arg Gly 10 Ser Met Lys Phe Lys Thr Leu Val Ser Ala Met Ala Val Ala Gly Leu 20 25 Leu Leu Val Ser Leu Thr Ser Leu Pro Val Leu Ala Gln Lys Glu Gly 35 40 Lys Gly Ala Thr Ala His Thr Lys Glu Met Asn Asp Ala Leu Tyr Gly 5.5 Gln Leu Pro Phe Phe Asp Lys Thr Asp Phe Arg Asn Ala His Lys Gly 70 75 80 Phe Ile Ala Ser Leu Pro Pro Ala Val Ile Lys Asp Glu Lys Gly Ala 85 90 Val Ile Trp Asn Pro Gln Lys Tyr Ala Phe Ile Lys Glu Gly Gln Lys Ala Pro Asp Thr Val Asn Pro Ser Leu Trp Arg Gln Ala Gln Leu Asn Asn Ile Gly Gly Leu Phe Glu Val Thr Glu Gly Ile Tyr Gln Ile Arg 135 140 Asn Leu Asp Leu Ser Asn Met Thr Ile Ile Glu Gly Lys Glu Gly Ile 150 155 Thr Val Ile Asp Pro Leu Leu Ser Ala Glu Thr Ala Lys Ala Gly Met

Asp Leu Tyr Val Gln His Arg Gly Lys Arg Pro Val Val Ala Val Ile 185 180 Tyr Thr His Ser His Val Asp His Tyr Gly Gly Val Arg Gly Val Val 195 200 205 Asp Glu Ala Gly Val Met Thr Gly Lys Val Lys Val Tyr Ala Pro Ala 210 215 220 Gly Phe Met Glu Glu Ala Val Ser Glu Asn Ile Met Ala Gly Asn Ala 225 230 235 Ile Ser Arg Arg Ala Ser Tyr Ile Tyr Gly Asn Leu Leu Lys Ala Asn 245 250 255 Val Lys Gly Gln Ile Gly Ala Gly Leu Gly Thr Thr Thr Ser Ala Gly 260 265 270 Thr Val Thr Leu Ile Ala Pro Thr His Ala Ile Thr Lys Asp Gly Gln 275 280 285 Lys Glu Ile Ile Asp Gly Leu Thr Tyr Asp Phe Met Leu Ala Pro Gly 290 295 300 Ser Glu Ala Pro Ser Glu Met Leu Trp Tyr Val Glu Glu Lys Lys Leu 305 310 315 Ile Gln Ala Ala Glu Asn Val Thr His Thr Leu His Asn Thr Tyr Ser 325 330 335 Leu Arg Arg Ala Lys Ile His Asp Pro Leu Ala Trp Ser Lys Tyr Ile 340 345 350 Asn Asn Ala Leu Asp Arg Trp Gly Asp Lys Ala Glu Ile Ile Ile Ala 355 360 365 Gln His His Trp Pro Thr Trp Gly Asn Lys Lys Val Val Lys Leu Met 370 375 380 Lys Ser Gln Arg Asp Ile Tyr Arg Tyr Ile Asn Asp Gln Thr Leu Arg 385 390 395 Leu Ala Asn Lys Gly Leu Thr Arg Asp Glu Ile Ala Ala Asn Phe Ala 405 410 415 Leu Pro Tyr Gly Leu Ala Lys Ser Trp Ala Gly Arg Gly Tyr Tyr Gly 420 425 430 Ser Val Ser Asn Asn Val Lys Ala Thr Tyr Val Tyr Tyr Leu Gly Trp 440 445 Phe Asp Gly Asn Pro Ala Thr Leu Asp Glu Leu Pro Pro Val Glu Ala 450 455 460 Ala Lys Lys Tyr Val Asp Tyr Met Gly Gly Ala Arg Ala Ile Leu Glu 470 475 Lys Ala Arg Val Asp Tyr Ala Arg Gly Asn Tyr Arg Trp Val Ala Gln 485 490 Val Val Ser Lys Val Val Phe Ala Asp Pro Asn Asn Lys Ala Ala Arg 505 500 Glu Leu Glu Ala Asp Ala Phe Glu Gln Leu Gly Tyr His Ala Glu Ser 515 520 525 Gly Pro Trp Arg Asn Ala Tyr Leu Tar Gly Ala Gla Glu Leu Arg Asn 530 535 540 Gly Val Lys Ile Lys Pro Thr Pro Lys Thr Ala Ser Pro Asp Ala Val 550 555 545 Arg Ala Met Ser Thr Glu Met Ile Phe Asp Tyr Phe Gly Val His Leu 565 570 Asn Gly Val Arg Ala Ala Asn Ala Arg Gly Ile Phe Asn Val Asp Leu 580 590 585 Gly Arg Glu Gly Gly Arg Tyr Lys Leu Glu Leu Glu Asn Gly Val Leu 600 605 595 Asn His Ser Ala Asn Ile Gln Ala Glu Asp Pro Asp Ala Thr Ile Thr 620 610 615 Leu Ser Arg Glu Thr Leu Asn Lys Ile Ile Leu Lys Glu Thr Thr Leu 630 635 Lys Lys Ala Gln Gln Ala Gly Glu Val Thr Ile Val Gly Asn Ala Ala 645 650 Lys Val Asp Glu Met Leu Arg Cys Met Glu Ser Phe Ser Phe Trp Phe

130

```
670
         660
                         665
Pro Val Val Thr Pro
  675
<210> 9214
<211> 195
<212> PRT
<213> Enterobacter cloacae
<400> 9214
Asn Thr Leu Phe Leu Ser Val Met Val Ile Phe Leu Leu Phe Leu Thr
                          1.0
Lys Ile Lys Gly Asn Ala Met Ser Asn Leu Ile His Asp Ser Asn Ser
   20 25
Thr Ile Ser Glu Leu Thr Lys Lys Leu Ala Thr Gln Leu Thr Asp Arg
     35 40
                            4.5
Gly Leu Arg Leu Thr Thr Ala Glu Ser Cys Thr Gly Gly Asn Leu Ala
                55
                                    60
Val Ala Leu Cys Ala Glu Glu Asn Thr Ala Glu Phe Tyr Asp Val Gly
65 70 75
Met Val Val Phe Ser Asp Ala Ala Lys Glu Arg Ile Leu Gly Val Arg
          85 90
His Glu Thr Ile Glu Arg Pne Thr Ala Val Ser Glu Gln Thr Val Thr
         100 105 110
Glu Met Ala Ala Lys Ile Arg Glu Ile Ala Glu Ala Asp Ile Gly Leu
115
                      120 125
Ala Ile Ser Gly Tyr Ala Gly Pro Glu Gly Gly Asp Asp Gly Thr Ala
                   135 140
Ala Gly Thr Val Cys Phe Gly Trp Asn Ile Arg Gly Gln Thr Glu Thr
             150 155
Arg Thr Val Leu Phe Ser Gly Glu Cys Gln Asp Val Val Asp Lys Ala
            165 170 175
Val Arg Tyr Ser Leu Ser Glu Leu Ile Glu Ile Leu Ser Gly Trp Asp
                         185
Asn Val
<210> 9215
<211> 364
<212> PRT
<213> Enterobacter cloacae
<400> 9215
Pro Pro Leu Thr His Arg Ala Arg Leu Leu His Ile Ser Glu Ala Lys
                           10
Leu Pro Cys Ser Phe Phe Thr Ala Thr Asn Ser Leu Gln Ser Ser Pro
         2.0
Leu Pro Ala Asn Asn Asn Gly Asp Leu Met Gly Thr Thr Lys His Ser
                      4.0
                                    4.5
Lys Leu Leu Gle Ser Gly Pro Ala Gly Tyr Thr Ala Ala Val
                                 60
Tyr Ala Ala Arg Ala Asn Leu Gln Pro Val Leu Ile Thr Gly Met Glu
               70
                                75
                                                 8.0
Lys Gly Gly Gln Leu Thr Thr Thr Glu Val Glu Asn Trp Pro Gly
           8.5
                             90
                                              95
Asp Pro Asn Asp Leu Thr Gly Pro Leu Leu Met Glu Arg Met His Glu
                        105 110
        100
His Ala Ala Lys Phe Glu Thr Glu Ile Leu Phe Asp His Ile Asn Lys
   115
                       120
Val Asp Leu Gln Asn Arg Pro Phe Arg Leu Thr Gly Asp Ser Gly Glu
                   135
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```
Tyr Thr Cys Asp Ala Leu Ile Ile Ala Thr Gly Ala Ser Ala Arg Tyr
              150
                             155
Leu Gly Leu Pro Ser Glu Glu Ala Phe Lys Gly Arg Gly Val Ser Ala
           165
                170
Cys Ala Thr Cys Asp Gly Phe Phe Tyr Arg Asn Gln Lys Val Ala Val
        180 185
                                      190
Ile Gly Gly Gly Asn Thr Ala Val Glu Glu Ala Leu Tyr Leu Ala Asn
     195 200 205
Ile Ala Ser Glu Val His Leu Ile His Arg Arg Asp Thr Phe Arg Ala
 210 215 220
Glu Lys Ile Leu Ile Lys Arg Leu Met Asp Lys Val Ala Ser Gly Asn
    230 235
Ile Val Leu His Thr Asn Arg Thr Leu Glu Glu Val Thr Gly Asp Gln
        245 250 255
Met Gly Val Ala Gly Leu Arg Ile Arg Asp Thr Gln Asn Thr Asp Asn
        260 265 270
Val Glu Thr Leu Glu Val Ala Gly Leu Phe Val Ala Ile Gly His Ser
     275 280 285
Pro Asn Thr Ala Ile Phe Glu Gly Gln Leu Glu Leu Glu Asn Gly Tyr
 290 295 300
Ile Lys Val Gln Ser Gly Ile His Gly Asn Ala Thr Gln Thr Ser Val 305 310 315 320
Pro Gly Val Phe Ala Ala Gly Asp Val Met Asp His Ile Tyr Arg Gln
        325 330 335
Ala Ile Thr Ser Ala Gly Thr Gly Cys Val Ala Ala Leu Asp Ala Glu
        340 345 350
Arg Tyr Leu Asp Gly Leu Ala Glu Gln Gly Lys
                    360
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<212> PRT <213> Enterobacter cloacae

<210> 9216

<211> 599

<400> 9216 Phe Leu Ile Thr Ser Pro Ala Lys Tyr Ala Met Glu Lys Thr Arg Gln 10 Gln Glu Leu Thr Arg Trp Leu Lys Gln Gln Ser Val Leu Ser Arg Arg 25 Trp Leu Met Ile Ser Arg Val Leu Gly Phe Ile Ser Gly Leu Leu Ile 3.5 4.0 Val Ala Gln Ala Trp Leu Leu Ala Arg Ile Leu Asn His Met Ile Met 55 60 Glu Asn Ile Pro Arg Glu Ala Leu Leu Leu Pro Phe Ile Val Leu Val 70 75 Leu Val Phe Val Leu Arg Ala Trp Val Val Trp Leu Arg Glu Arg Val 8.5 90 Gly Phe His Ala Gly Gln His Ile Arg Tyr Glu Ile Arg Arg Lys Val 105 110 100 Leu Asp Arg Leu Ser Glu Ala Gly Pro Ala Trp Ile Gln Gly Lys Pro 120 125 115 Ala Gly Ser Trp Ala Thr Leu Ile Leu Glu Gln Ile Asp Asp Met His 135 130 1.40 Asp Tyr Tyr Ala Arg Tyr Leu Pro Gln Met Ala Leu Ala Val Phe Val 150 155 160 145 Pro Leu Met Ile Val Ile Ala Ile Phe Pro Val Asn Trp Val Ala Ala 170 165 Leu Ile Leu Leu Gly Thr Ala Pro Leu Ile Pro Leu Phe Met Ala Met 190 180 185 Val Gly Met Gly Ala Ala Asp Ala Asn Arg Arg Asn Phe Leu Ala Leu 200

```
Gly Arg Leu Ser Gly His Phe Leu Asp Arg Leu Arg Gly Met Glu Thr
 210
                 215
Leu Arg Ile Phe Gly Arg Gly Glu Ala Glu Thr Glu Asn Ile Arg Leu
               230
                             235
Ala Ser Gln Asp Phe Arg Gln Arg Thr Met Glu Val Leu Arg Met Ala
           245 250 255
Phe Leu Ser Ser Gly Val Leu Glu Phe Phe Thr Ser Leu Ser Ile Ala
             265 270
         260
Leu Val Ala Val Tyr Phe Gly Phe Ser Tyr Leu Gly Ala Leu Asp Phe
     275
                     280
                                    285
Gly His Tyr Gly Thr Ala Val Thr Leu Ser Ala Gly Phe Leu Ala Leu
 290 295 300
Ile Leu Ala Pro Glu Phe Phe Gln Pro Leu Arg Asp Leu Gly Thr Phe
305 310 315 320
Tyr His Ala Lys Ala Gln Ala Val Gly Ala Ala Asp Ser Leu Lys Thr
      325 330 335
Phe Met Glu Thr Pro Leu Ala His Pro Glu Arg Gly Glu Val Thr Leu
 340 345 350
Asn Thr Asn Asp Pro Val Thr Ile Glu Ala Gln Asp Phe Ser Val Leu
355
                     360 365
Ser Pro Glu Gly Lys Val Leu Ala Gly Pro Leu Asn Phe Thr Leu Pro 370 375 380
Ala Gly Gln Arg Val Val Leu Val Gly Thr Ser Gly Ser Gly Lys Ser
385 390
                              395
Ser Leu Leu Asn Ala Leu Ser Gly Phe Met Ala Tyr Thr Gly Ser Leu
           405 410
Arg Ile Asn Lys Thr Glu Leu Arg Glu Leu Asp Pro Asp Ala Trp Arg 420 \hspace{1.5cm} 425 \hspace{1.5cm} 430
Lys Gln Leu Ser Trp Val Gly Gln Asn Pro Gln Leu Pro Ala Pro Thr
435 440
                                    445
Leu Arg Glu Asn Val Leu Leu Ala Arg Pro Asp Ala Arg Asp Asp Glu
450 455 460
Leu Gln Ser Val Leu Asp Arg Ala Trp Val Ser Glu Phe Leu Pro Leu
              470 475
Leu Ala Gln Gly Ile Asp Thr Val Ile Gly Asp Gln Ser Ala Gly Leu
            485
                           490 495
Ser Val Gly Gln Ala Gln Arg Val Ala Val Ala Arg Ala Leu Leu Asn
        500 505
                                       510
Pro Ser Ser Leu Met Leu Leu Asp Glu Pro Ala Ala Ser Leu Asp Ala
     515 520 525
His Ser Glu Gln Arg Val Met Asp Ala Leu Asn Ala Ala Ser Arg Gln
 530 535
                                 540
Gln Thr Thr Leu Met Val Thr His Gln Leu Glu Gly Ile Ala Asp Trp
               550
                              555
Asp Gln Ile Trp Val Met Glu Asn Gly His Ile Val Glu Gln Gly Asp
           565 570 575
Tyr Ala Ala Leu Val Ala Ala Gln Gly Pro Phe Ala Thr Leu Leu Ala
        580
                     585
Asn Arg Gln Glu Asp Ile
     595
<210> 9217
<211> 273
<212> PRT
<213> Enterobacter cloacae
<400> 9217
```

Ile Tyr Leu Ser Gly Glu Gly Met Leu Met Val Ser Lys Tyr Trp Leu $1 \\ 5 \\ 10 \\ 15$ Phe Glu Ser Ser Ser Leu Tyr Gly Asp Ile Thr Arg Ala Gln Glu Trp $20 \\ 20 \\ 25 \\ 30$

Ala Arg Thr Phe Ile Ile Glu Val Val Met Phe Arg Lys Leu Ala Ala Glu Cys Phe Gly Thr Phe Trp Leu Val Phe Gly Gly Cys Gly Ser Ala 55 Val Leu Ala Ala Ala Phe Pro Glu Leu Gly Ile Gly Phe Val Gly Val 70 75 80 Ala Leu Ala Phe Gly Leu Thr Val Leu Thr Met Ala Phe Ala Val Gly 85 90 95 His Ile Ser Gly Gly His Phe Asn Pro Ala Val Thr Leu Gly Leu Trp 100 105 Ala Gly Gly Arg Phe Pro Ala Lys Asp Ile Ile Gly Tyr Ile Ile Ala 115 120 125 Gln Val Ile Gly Gly Ile Ile Ala Ala Ala Val Leu Tyr Val Ile Ala 130 135 140 Ser Gly Lys Ala Gly Phe Asp Ala Ala Ala Ser Gly Phe Ala Ser Asn 150 155 160 Gly Phe Gly Glu His Ser Pro Gly Gly Tyr Ser Met Leu Ser Ala Ile 165 170 1**7**5 Val Ile Glu Ile Val Leu Thr Ala Gly Phe Leu Leu Val Ile His Gly 180 185 190 Ala Thr Asp Lys Tyr Ala Pro Ala Gly Phe Ala Pro Ile Ala Ile Gly 195 200 205 Leu Ala Leu Thr Leu Ile His Leu Ile Ser Ile Pro Val Thr Asn Thr 210 215 220 Ser Val Asn Pro Ala Arg Ser Thr Ala Val Ala Ile Phe Gln Gly Gly 230 235 Trp Ala Leu Glu Gln Leu Trp Leu Phe Trp Val Met Pro Ile Ile Gly 245 250 255 Gly Ile Leu Gly Gly Val Leu Tyr Arg Thr Leu Leu Glu Lys Arg Asp 260 265

<210> 9218 <211> 314 <212> PRT

<213> Enterobacter cloacae

<400> 9218

Cys Leu Trp Arg Leu Thr Asp Thr Gln Lys Asp Arg Leu Phe Met Phe 10 Ser Gly Leu Leu Ile Ile Leu Leu Pro Leu Ile Ala Gly Tyr Leu Ile 20 25 30 Pro Leu Arg His Glu Ser Ala Leu Lys Leu Ile Asn Arg Phe Leu Ser 35 4.0 Trp Ile Val Tyr Val Ile Leu Phe Phe Met Gly Ile Ser Leu Ala Phe 5.5 60 Leu Asp Asn Leu Ala Thr Asn Leu Leu Ser Ile Leu His Tyr Ser Ala 70 75 Val Thr Val Val Val Ile Leu Leu Cys Asn Ile Ala Ala Leu Phe Trp 8.5 90 Leu Glu Arg Thr Ile Pro Trp Lys Asn His His His Gln Glu Lys Leu 100 105 Pro Ser Arg Ile Ala Met Ala Leu Glu Ser Leu Lys Leu Cys Gly Val 115 120 Val Val Leu Gly Phe Leu Leu Gly Leu Thr Gly Trp Ala Phe Leu Gln 130 135 140 His Ala Thr Glu Ala Ser Glu Tyr Thr Leu Ile Phe Leu Leu Phe Leu 145 150 155 Ile Gly Ile Gln Leu Arg Asn Asn Gly Met Thr Leu Lys Gln Ile Val

```
Leu Asn Arg Arg Gly Met Met Val Ala Val Ile Val Val Ala Ser Ser
        180
                       185
Leu Ala Gly Gly Val Ile Asn Ala Phe Ile Leu Asp Leu Pro Leu Lys
 195
                  200
Thr Ser Leu Ala Met Ala Ser Gly Phe Gly Trp Tyr Ser Leu Ser Gly
                 215
                              220
Ile Leu Leu Thr Glu Ser Phe Gly Pro Val Ile Gly Ser Ala Ala Phe
   230 235
Phe Asn Asp Leu Ala Arg Glu Leu Leu Ala Ile Met Leu Ile Pro Gly
     245 250 255
Leu Val Ser Arg Ser Arg Ser Thr Ala Leu Gly Leu Cys Gly Ala Thr
   260 265 270
Ser Met Asp Phe Thr Leu Pro Val Leu Gln Arg Ser Gly Gly Leu Glu
275 280 285
Met Val Pro Ala Ala Ile Val His Gly Phe Ile Leu Ser Leu Leu Val
290 295 300
Pro Ile Leu Met Ala Phe Phe Ser Ala
              310
<210> 9219
<211> 559
<212> PRT
<213> Enterobacter cloacae
<400> 9219
Asn Ile Thr Leu Thr Gly Val Ile Met Phe Cys Val Gln Cys Glu Gln
                         10
Thr Ile Arg Thr Pro Ala Gly Asn Gly Cys Ser Tyr Ala Gln Gly Met
                     25
Cys Gly Lys Thr Ala Glu Thr Ser Asp Leu Gln Asp Leu Leu Ile Ala
        40
Ala Leu Gln Gly Leu Ser Ala Trp Ala Phe Lys Ala Arg Glu Tyr Gly
      55 60
Ile Val Asp His Tyr Val Asp Ser Phe Ala Pro Arg Ala Phe Phe Ser
            70 75
Thr Leu Thr Asn Val Asn Phe Asp Ser Pro Arg Ile Val Gly Tyr Ala
         85 90
Arg Glu Ala Ile Ala Leu Arg Glu Ala Leu Lys Ala Gln Cys Leu Asn
      100 105 110
Ala Asp Ala Ser Ala Arg Val Asp Asn Pro Met Ala Glu Leu Gln Leu
    115 120 125
Val Ser Asp Asp Leu Gly Glu Leu Gln Arg Gln Ala Ala Glu Phe Thr
 130 135 140
Pro Asn Lys Asp Lys Ala Ala Ile Gly Glu Asn Ile Leu Gly Leu Arg
            150 155
Leu Leu Cys Leu Tyr Gly Leu Lys Gly Ala Ala Ala Tyr Met Glu His
          165 170 175
Ala His Val Leu Gly Gln Tyr Asp Asn Ala Ile Tyr Ala Gln Tyr His
      180 185 190
Lys Ile Met Ala Trp Leu Gly Thr Trp Pro Ser Asp Met Asn Ala Leu
   195 200
                        205
Leu Glu Cys Ser Met Glu Ile Gly Gln Met Asn Phe Lys Val Met Ser
 210 215 220
Ile Leu Asp Ala Gly Glu Thr Ser Thr Tyr Gly His Pro Thr Pro Thr
225
              230 235
Gln Val Asn Val Lys Ala Thr Glu Gly Lys Cys Ile Leu Ile Ser Gly
           245 250
His Asp Leu Lys Asp Leu Tyr Asn Leu Leu Lys Gln Thr Glu Gly Thr
      260 265
Gly Val Asn Val Tyr Thr His Gly Glu Met Leu Pro Ala His Gly Tyr
```

```
Pro Glu Leu Arg Lys Phe Lys His Leu Ile Gly Asn Tyr Gly Ser Gly
                  295
                                   300
  290
Trp Gln Asn Gln Gln Val Glu Phe Ala Arg Phe Pro Gly Pro Ile Val
305
             310
                                315
Met Thr Ser Asn Cys Ile Ile Asp Pro Thr Val Gly Ala Tyr Asp Asp
            325
                            330
                                             335
Arg Ile Trp Thr Arg Ser Ile Val Gly Trp Pro Gly Val Ser His Leu
                         345
        340
Glu Gly Asp Asp Phe Gly Pro Val Ile Ala Gln Ala Gln Gln Met Ala
      355 360
                                      365
Gly Phe Pro Tyr Ser Glu Ile Pro His Leu Ile Thr Val Gly Phe Gly
 370 375 380
Arg Glu Thr Leu Leu Gly Ala Ala Asp Ser Leu Ile Asp Leu Val Ser
385
    390 395
Arg Glu Lys Leu Arg His Ile Phe Leu Ile Gly Gly Cys Asp Gly Ala
       405 410 415
Arg Gly Glu Arg Asn Tyr Phe Thr Asp Phe Ala Thr Arg Val Pro Glu
       420 425
                                         430
Asp Cys Leu Ile Leu Thr Leu Ala Cys Gly Lys Tyr Arg Phe Asn Lys
 435 440 445
Leu Asp Phe Gly Asn Ile Glu Gly Leu Pro Arg Leu Val Asp Ala Gly
450 455 460
Gln Cys Asn Asp Ala Tyr Ser Ala Ile Ile Leu Ala Val Thr Leu Ala 465 \phantom{\bigg|}470\phantom{\bigg|}470\phantom{\bigg|}475\phantom{\bigg|}475\phantom{\bigg|}
Glu Lys Leu Gly Cys Gly Val Asn Asp Leu Pro Leu Ser Leu Val Leu
     485 490 495
Ser Trp Phe Glu Gln Lys Ala Ile Val Ile Leu Leu Thr Leu Leu Ser
  500 505 510
Leu Gly Val Thr Asn Ile Val Thr Gly Pro Thr Ala Pro Gly Phe Leu
515 520 525
Thr Pro Asp Leu Leu Ala Ile Leu Asn Glu Lys Phe Gly Leu Arg Ser
530 535 540
Val Thr Asn Val Glu Asp Asp Met Lys Gln Leu Leu Ser Ala
               550
```

<210> 9220 <211> 248 <212> PRT

<213> Enterobacter cloacae

<400> 9220

Val Lys Thr Ala Pro Met Ser Ile Lys Leu Asn Gly Ile Asn Trp Phe 10 Tyr Gly Ala His Gln Ala Leu Phe Asp Ile Thr Leu Ser Cys Pro Glu 25 Gly Glu Thr Leu Val Leu Leu Gly Pro Ser Gly Ala Gly Lys Ser Ser 40 Leu Leu Arg Val Leu Asn Leu Leu Glu Met Pro Arg Ser Gly Thr Leu 5.0 5.5 Ala Ile Ala Gly Asn His Phe Asp Phe Ala Lys Thr Pro Ser Asp Lys 70 75 Ala Ile Arg Glu Leu Arg Gln Asn Val Gly Met Val Phe Gln Gln Tyr 85 90 Asn Leu Trp Pro His Leu Thr Val Val Gln Asn Leu Ile Glu Ala Pro 100 Cys Arg Val Leu Gly Leu Ser Lys Asp Gln Ala Met Ala Arg Ala Glu 125 115 120 Lys Leu Leu Glu Arg Leu Arg Leu Lys Pro Tyr Ser Asp Arg Tyr Pro 130 135 140 Leu His Leu Ser Gly Gly Gln Gln Gln Arg Val Ala Ile Ala Arg Ala 150 155

```
Leu Met Met Glu Pro Ala Val Leu Leu Phe Asp Glu Pro Thr Ala Ala
                         170
        165
Leu Asp Pro Glu Ile Thr Ala Gln Ile Val Ser Ile Ile Arg Glu Leu
     180
            185
                                     190
Ala Glu Thr Asn Ile Thr Gln Val Ile Val Thr His Glu Val Glu Val
   195
         200
                        205
Ala Arg Lys Thr Ala Ser Arg Val Val Tyr Met Glu Asn Gly Tyr Ile
 210 215 220
Val Glu Gln Gly Asp Ala Ser Cys Phe Thr Asn Pro Gln Thr Asp Ala
225 230 235
Phe Lys Asn Tyr Leu Ser His
          245
<210> 9221
<211> 250
<212> PRT
<213> Enterobacter cloacae
<400> 9221
Cys Val Arg Glu Ile Ile Met Lys Lys Val Leu Ile Ala Ala Leu Leu
                     10
Ala Ser Val Ser Leu Ser Ala Thr Ala Ala Gln Thr Ile Arg Phe Ala
20 25
Thr Glu Ala Ser Tyr Pro Pro Phe Glu Ser Ile Asp Ala Asn Asn Lys
35 40
                                4.5
Ile Val Gly Phe Asp Val Asp Leu Ala Asn Ala Leu Cys Lys Glu Ile
      55 60
Asp Ala Thr Cys Thr Phe Ser Asn Gln Ala Phe Asp Ser Leu Ile Pro
65 70 75
Ser Leu Lys Phe Arg Arg Ile Asp Ala Val Met Ala Gly Met Asp Ile
                         90
Thr Pro Glu Arg Glu Lys Gln Val Leu Phe Thr Thr Pro Tyr Tyr Asp
 100 105 110
Asn Ser Ala Leu Phe Ile Gly Gln Lys Gly Lys Tyr Ala Ser Val Asp
115 120 125
Leu Leu Lys Gly Lys Lys Val Gly Val Gln Asn Gly Thr Thr His Gln
               135 140
Lys Phe Ile Met Asp Lys His Pro Glu Ile Thr Thr Val Pro Tyr Asp
145 150 155
                                           160
Ser Tyr Gln Asn Ala Lys Leu Asp Leu Gln Asn Gly Arg Ile Asp Ala
         165 170
                                        175
Val Phe Gly Asp Thr Ala Val Val Thr Glu Trp Leu Lys Ala Asn Asp
       180 185 190
Lys Leu Ala Ala Val Gly Asp Lys Val Thr Asp Lys Asp Tyr Phe Gly
                   200 205
   195
Thr Gly Leu Gly Ile Ala Val Arg Gln Gly Asn Thr Glu Leu Gln Gln
210
                 215
                               220
Lys Phe Asn Ala Ala Leu Glu Lys Val Lys Lys Asp Gly Thr Tyr Glu
225 230
                            235
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<210> 9222

<211> 228

<212> PRT

<213> Enterobacter cloacae

Thr Ile Tyr Lys Lys Trp Phe Gln Lys 245

<220> <221>UNSURE <222>(5)

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<221>UNSURE
<222>(23)
<220>
<221>UNSURE
<222>(73)
<400> 9222
Thr Glu Thr Arg Xaa Met Trp Asp Tyr Leu Pro Glu Leu Met Lys Gly
                                  1.0
Leu His Thr Ser Leu Thr Xaa Thr Val Ala Ser Ile Ile Val Ala Leu
          20
                            25
Ile Leu Ala Leu Ile Phe Thr Phe Val Leu Thr Leu Lys Thr Pro Val
                          40
                                              45
Leu Val Trp Ile Val Arg Gly Tyr Ile Thr Leu Phe Thr Gly Thr Pro
Leu Leu Val Gln Ile Phe Leu Ile Xaa Tyr Gly Pro Gly Gln Phe Pro
                   70
                                      75
Ser Leu Gln Glu Tyr Pro Val Ile Trp His Leu Leu Ser Glu Pro Trp
               85
                                  90
Leu Cys Ala Leu Ile Ala Leu Ser Met Asn Ser Ala Ala Tyr Thr Thr
          100
                              105
                                                 110
Gln Leu Phe Tyr Gly Ala Ile Arg Ala Ile Pro Glu Gly Gln Trp Gln
     115
                          120
                                              125
Ser Cys Gly Ala Leu Gly Met Ser Lys Lys Asp Thr Leu Ala Ile Leu
 130
                       135
                                          140
Leu Pro Tyr Ala Phe Lys Arg Ala Leu Ser Ser Tyr Ser Asn Glu Val
                   150
                                      155
                                                          160
Val Leu Val Phe Lys Ser Thr Ser Leu Ala Tyr Thr Ile Thr Leu Met
               165
                                   170
Glu Val Met Gly His Gly Gln Leu Leu Tyr Gly Arg Thr Tyr Asp Val
          180
                              185
                                                190
Met Val Phe Gly Ala Ala Gly Leu Val Tyr Leu Val Val Asn Gly Leu
                           200
                                              205
Leu Thr Leu Met Met Arg Leu Ile Glu Arg Lys Ala Leu Ala Phe Glu
                       215
                                          220
Arg Arg Asn
225
<210> 9223
<211> 73
<212> PRT
<213> Enterobacter cloacae
<400> 9223
Met Ala Lys Glu Asp Asn Ile Glu Met Gln Gly Thr Val Leu Asp Thr
                                  10
Leu Pro Asn Thr Met Phe Arg Val Glu Leu Glu Asn Glv His Val Val
           20
                               25
Thr Ala His Ile Ser Gly Lys Met Arg Lys Asn Tyr Ile Arg Ile Leu
       35
                          40
Thr Gly Asp Lys Val Thr Val Glu Leu Thr Pro Tyr Asp Leu Ser Lys
                    5.5
Gly Arg Ile Val Phe Arg Ser Arg
                   7.0
<210> 9224
<211> 96
<212> PRT
<213> Enterobacter cloacae
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<400> 9224 Thr Ala Pro Thr Pro Pro Pro Val His Ser Ile Leu Ile Tyr Lys Ile Tyr Glu Gly Cys Arg Ser Met Glu Met Gly Thr Val Lys Trp Phe Asn 20 25 Asn Ala Lys Gly Phe Gly Pne Ile Cys Pro Glu Gly Gly Glu Asp 35 40 Ile Phe Ala His Tyr Ser Thr Ile Gln Met Asp Gly Tyr Arg Thr Leu 55 60 Lys Ala Gly Gln Ser Val Arg Phe Asp Val His Gln Gly Pro Lys Gly 65 70 75 Asn His Ala Ser Leu Ile Val Pro Val Glu Ala Glu Thr Val Ala 8.5 90

<210> 9225 <211> 330 <212> PRT <213> Enterobacter cloacae

<400> 9225 Asn Ser Asp Ile Pro Pro Glu Ala Gly Ser Asn Met Ser Ser Ile Val 10 Asp Thr Pro Tyr Ser Thr Leu Pro Gln Pro Lys Ser Gly Trp Gln Leu 20 25 Phe Lys Ser Leu Thr Ser Gly Ser Leu Thr Pro Gly Leu Ala Trp Gln Asn Pro Ala Tyr Arg Arg Lys Phe Met Leu Arg Ser Leu Ala Thr Pro 55 Phe Thr Thr Ala Arg Leu Leu Gly Asn Leu Ala Lys Gln Pro Arg Leu 70 7.5 Met Gln Ile Leu Arg Val Gln Pro Gly Leu Pro Cys Arg Leu His Arg 8.5 90 Pro Trp Leu Thr Val Asn Met Gly Arg Gln Asn Thr Leu Asp Ala Leu 100 105 110 Asn Asp His Tyr Gln Met Met Ser Arg His Leu Pro Ala Ser Leu Leu 115 120 125 Asn Gly Tyr Leu Ser Ser Gln Gly Ile Thr Leu Val Thr Leu Thr Gly 135 140 Lys Glu Glu Gln Gln Phe Ser Val Arg Leu Ser Ala Asp Ala Phe Leu 150 155 Asp Lys Glu Gly Glu Ala Thr Leu Thr Phe Cys Asp His Gln Asn Thr 165 170 Val Leu Ala Glu Leu Thr Phe Thr Leu Cys Lys Tyr Gln Gly Lys Ser 180 185 190 Thr Leu Phe Ile Gly Gly Met Gln Gly Ala Lys Ala His Val Pro His 195 200 205 Glu His Ile Gln Leu Ala Thr Lys Ala Cys His Gly Leu Phe Pro Lys 215 220 210 Arg Leu Leu Val Glu Ala Val Met Thr Leu Ala Gly Ala Phe Pro Val 225 230 235 Glu Gln Ile Leu Ala Val Ser Asn Ala Thr His Ile Tyr Arg Ser Trp 250 245 Arg Tyr Arg Lys Lys Glu Gly Lys Leu Leu Ala Asp Tyr Asp Ser 265 270 260 Phe Trp Arg Ser Leu Gly Gly Gln Gln Gln Asp Asn Gly Asn Phe Ala 275 280 Leu Pro Leu Thr Met Pro Arg Lys Pro Met Glu Glu Ile Ala Ser Lys 295 300 Lys Arg Ser Glu Tyr Arg Arg Tyr Thr Leu Leu Asp Ser Leu Ile 315 310

Gln Gln Val Ser Gln Ala Thr Asp Arg 325

<210> 9226 <211> 324 <212> PRT

<213> Enterobacter cloacae

<400> 9226 Leu Met Thr Met Pro Thr Ser Gln Cys Pro Trp Arg Met Gln Val His 10 His Ile His Gln Glu Thr Pro Asp Val Trp Thr Leu Ser Leu Leu Cys 20 2.5 3.0 His Asp Tyr Tyr Pro Tyr Arg Pro Gly Gln Tyr Ala Leu Val Ser Val 35 40 4.5 Arg Asn Ser Ala Asn Thr Leu Arg Ala Tyr Thr Leu Ser Ser Thr Pro 50 55 60 Gly Val Ser Glu Tyr Ile Thr Leu Thr Val Arg Arg Ile Asp Asp Gly 65 70 75 Ala Gly Ser Glu Trp Leu Thr Arg Asp Val Lys Arg Gly Asp Tyr Ile 85 90 Trp Leu Ser Asp Ala Gln Gly Glu Phe Thr Cys Asp Asp Lys Thr Glu 100 105 110 Asp Lys Phe Leu Leu Leu Ala Ala Gly Cys Gly Val Thr Pro Ile Met 115 120 125 Ser Met Arg Arg Trp Leu Ala Lys Tyr Arg Pro Gln Ala Asp Val Gln 130 135 140 Val Ile Phe Ser Val Arg Ser Pro Glu Asp Val Ile Phe Ala Glu Glu 145 150 155 160 Trp Arg Asn Tyr Pro Val Thr Leu Val Ala Glu His Asn Ala Thr His " 165 170 175 Gly Phe Val Ala Gly Arg Leu Ser Arg Glu Leu Leu Gln Ser Val Pro 180 185 190 Asp Ile Ala Asn Arg Thr Val Met Thr Cys Gly Pro Ala Pro Tyr Met 195 200 205 Glu Ile Val Glu Lys Glu Val Lys Ala Leu Gly Val Thr Arg Phe Phe 210 215 220 Lys Glu Gln Phe Phe Thr Pro Val Ala Ala Ala Ala Thr Ser Gly Met 225 230 235 Lys Phe Thr Lys Leu Gln Pro Ala Gln Thr Phe Phe Gly Arg Val Gly 245 250 Thr Thr Leu Leu Glu Ala Leu Glu Ser Asn Asn Val Pro Val Ala Ala 260 265 270 Ala Cys Arg Ala Gly Val Cys Gly Cys Cys Lys Thr Lys Val Val Ser 280 285 Gly Glu Tyr Thr Val Thr Ser Thr Met Thr Leu Thr Asp Ala Glu Ile 295 300

305

Val Leu Ala

<400> 9227

Ala Glu Gly Tyr Val Leu Ala Cys Ser Cys His Pro Gln Gly Asp Leu

315

<210> 9227

<211> 337 <212> PRT

<213> Enterobacter cloacae

Gly His Ala Met Ile Asp Leu Arg Ser Asp Thr Val Thr Arg Pro Ser 10 Arg Ala Met Leu Glu Glu Met Met Ala Ala Pro Val Gly Asp Asp Val

Tyr Gly Asp Asp Pro Thr Val Asn Glu Leu Gln Arg Tyr Ala Ala Glu 40 Leu Ser Gly Lys Glu Ala Ala Leu Phe Leu Pro Thr Gly Thr Gln Ala 55 Asn Leu Val Ala Leu Leu Ser His Cys Glu Arg Gly Glu Glu Tyr Ile 70 7.5 Val Gly Gln Gly Ala His Asn Tyr Leu Tyr Glu Ala Gly Gly Ala Ala 85 90 Val Leu Gly Ser Ile Gln Pro Gln Pro Ile Asp Ala Ala Pro Asp Gly 100 105 110 Thr Leu Pro Leu Asp Lys Val Ala Ala Lys Ile Lys Ala Asp Asp Ile 115 120 125 His Phe Ala Arg Thr Lys Leu Leu Ser Leu Glu Asn Thr His Asn Gly 130 135 140 Lys Val Leu Pro Arg Glu Tyr Leu Lys Ala Ala Trp Asp Phe Thr Arg 150 155 160 Glu Arg Lys Leu Gly Leu His Val Asp Gly Ala Arg Ile Phe Asn Ala 165 170 175 Val Val Glu Tyr Gly Cys Glu Leu Lys Ala Ile Thr Gln Tyr Cys Asp 180 185 190 Ser Phe Thr Ile Cys Leu Ser Lys Gly Leu Gly Thr Pro Val Gly Ser 195 200 Leu Leu Val Gly Ser Ala Asp Tyr Ile Arg Arg Ala Asn Arg Trp Arg 210 215 220 Lys Met Thr Gly Gly Gly Met Arg Gln Ala Gly Ile Leu Ala Ala Ala 225 230 235 Gly Leu Tyr Ala Leu Lys Asn Asn Val Ser Arg Leu Lys Asp Asp His 245 250 Asp Asn Ala Ala Trp Met Ala Ala Gln Leu Arg Glu Ile Gly Ala Asp 260 265 Val Met Arg His Asp Thr Asn Met Leu Phe Val Arg Val Gly Asp Glu 275 280 285 His Ala Ala Ala Leu Gly Asp Phe Met Lys Ala Arg Gly Val Leu Ile 290 295 300 Asn Ala Ser Pro Val Val Arg Leu Val Met His Leu Asp Val Asn Arg 305 310 315 320 Glu Gln Leu Thr Glu Val Val Lys His Trp Gln Ala Phe Leu Gln Arg

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<210> 9228
<211> 370
<212> PRT
<213> Enterobacter cloacae
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```
105
         100
Gly Thr Gln Glu Ala Phe Asp Leu Ala Asn Val Arg Ala Thr Arg Arg
     115
                     120
Leu Gly Glu Trp Ala Val Ala Trp Gly Val Arg Asn Phe Ile His Ile
                 135
  130
                                 140
Ser Ser Pro Ser Leu Tyr Phe Asp Tyr His His His Arg Asp Ile Gln
            150
Glu Asp Phe Arg Pro Ala Arg Phe Ala Cys Glu Phe Ala Arg Ser Lys
           165
                    170
Ala Ala Gly Glu Glu Val Ile Asp Leu Leu Ala Gln Ser Asn Pro His
        180
               185
                                       190
Thr Arg Phe Thr Val Leu Arg Pro Gln Ser Leu Phe Gly Pro His Asp
         200
     195
                                  205
Lys Val Phe Ile Pro Arg Leu Ala Gln Met Met His His Tyr Gly Ser
 210 215
                                 220
Val Leu Leu Pro Arg Gly Gly Asp Ala Leu Val Asp Met Thr Tyr Tyr
225
   230 235
Glu Asn Ala Val His Ala Met Trp Leu Ala Ser Gln Pro Glu Cys Asp
         245 250
Lys Leu Val Ser Gly Arg Ala Tyr Asn Ile Thr Asn Gly Glu Pro Cys
     260 265 270
Thr Leu Arg Ser Ile Val Gln Arg Leu Ile Asp Glu Leu Lys Ile Asp
275 280 285
Cys Arg Ile Arg Ser Val Pro Tyr Pro Met Leu Asp Met Ile Ala Arg
290 295 300
Ser Met Glu Arg Phe Gly Ser Lys Ser Ala Lys Glu Pro Ala Leu Thr
305 310 315 320
His Tyr Gly Val Ser Lys Leu Asn Phe Asp Phe Thr Leu Asp Ile Ser
           325 330
Arg Ala Glu Asn Glu Leu Gly Tyr Lys Pro Ile Val Ser Leu Asp Glu
        340 345
Gly Ile Val Arg Thr Ala Ala Trp Leu Arg Asp His Gly Lys Leu His
                     360
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370

<210> 9229 <211> 232

<212> PRT

<213> Enterobacter cloacae

<400> 9229 Gln Ala Pro Pro Gly Met Asn Val Gly Leu Ala Val Cys Ala Leu Ile 10 Ile Gly Leu Val Leu Ala Met Phe Phe Ala Val Trp Glu Ser Val Lys 2.0 2.5 3.0 Trp Arg Pro Val Ala Trp Leu Gly Ser Ala Leu Val Thr Val Leu Arg 40 4.5 Gly Leu Pro Glu Ile Leu Val Phe Leu Phe Ile Tyr Phe Gly Ser Ser 55 60 Gln Leu Leu Thr Leu Ser Asp Gly Phe Thr Ile Asn Leu Gly Phe 70 75 Ala Gln Ile Pro Val Gln Met Gln Ile Glu Asn Phe Asp Val Ser Pro 85 90 Phe Leu Cys Gly Val Ile Ala Leu Ser Leu Leu Tyr Ser Ala Tyr Ala 100 105 Ser Gln Thr Leu Arg Gly Ala Leu Lys Ala Val Pro Gln Gly Gln Trp 115 120 125 Glu Ser Gly Gln Ala Leu Gly Leu Ser Lys Ala Ala Ile Phe Phe Arg 135 130

Leu Val Met Pro Gln Met Trp Arg His Ala Leu Pro Gly Leu Gly Asn

4878 Gln Trp Leu Val Leu Leu Lys Asp Thr Ala Leu Val Ser Leu Ile Ser 170 165 Val Asn Asp Leu Met Leu Gln Thr Lys Ser Ile Ala Thr Arg Thr Gln 180 185 190 Glu Pro Phe Thr Trp Tyr Ile Val Ala Ala Ala Ile Tyr Leu Val Ile 195 200 205 Thr Leu Leu Ser Gln Tyr Val Leu Lys Arg Ile Asp Leu Arg Ala Thr 210 215 Arg Phe Glu Arg Arg Pro Gly 225 <210> 9230 <211> 592 <212> PRT <213> Enterobacter cloacae <400> 9230 Ala Arg Arg Leu Arg Arg Ala Cys Cys Arg Ala Gly Ala Val Cys Asp 10 Pro Ala Gly Glu Pro Ser Gly Gly Tyr Leu Met Arg Ala Leu Leu Pro 25 Tyr Leu Ala Leu Tyr Lys Arg His Lys Trp Met Leu Thr Leu Gly Ile 35 4.0 4.5 Val Leu Ala Ile Val Thr Leu Leu Ala Ser Ile Gly Leu Leu Thr Leu 5.5 60 Ser Gly Trp Phe Leu Ser Ala Ser Ala Ala Ala Gly Phe Ala Gly Leu 70 75 Tyr Ser Phe Asn Tyr Met Leu Pro Ala Ala Gly Val Arg Gly Thr Ala 85 90 95 Ile Thr Arg Thr Ala Gly Arg Tyr Phe Glu Arg Leu Val Ser His Asp 100 105 110 Ala Thr Phe Arg Val Leu Gln His Leu Arg Ile Tyr Thr Phe Ser Lys 120 125 Leu Leu Pro Leu Ser Pro Ala Gly Leu Ala Arg Phe Arg Gln Gly Glu 130 135 140 Leu Leu Asn Arg Val Val Ala Asp Val Asp Thr Leu Asp His Leu Tyr 145 150 155 160 Leu Arg Val Ile Ser Pro Met Val Gly Ala Phe Val Val Ile Val Val 165 170 Val Thr Leu Gly Leu Ser Phe Leu Asp Val Pro Ile Ala Leu Thr Leu 180 185 190 Gly Gly Ile Met Leu Met Thr Leu Ile Ile Leu Pro Pro Leu Phe Tyr 195 200 Arg Ala Gly Lys Thr Thr Gly Glu Asn Leu Thr Arg Leu Arg Gly Glu 210 215 220 Tyr Arg Gln Gln Leu Thr Ala Trp Leu Gln Gly Gln Ala Glu Leu Thr 230 235 240 Leu Phe Gly Ala Ser Lys Arg Tyr Arg Ala Arg Met Glu Asn Thr Glu 245 250 Leu Asn Trp His Glu Ala Gln Arg Arg Gln Ser Glu Leu Thr Ala Phe 260 265 270 Ser Gln Ala Leu Met Met Leu Ile Gly Gly Ile Ala Val Ile Ala Met 275 280 285 Leu Trp Met Ala Ser Gly Gly Val Gly Asp Asn Ala Gln Pro Gly Pro 295 300 Leu Ile Ala Leu Phe Val Phe Cys Ala Leu Ala Ala Phe Glu Ala Leu 315 310 Ala Pro Val Thr Gly Ala Phe Gln His Leu Gly Gln Val Ile Ala Ser

330

Ala Leu Arg Ile Thr Asp Ile Ala Glu Glu Glu Pro Glu Val Lys Phe

```
340
                       345
Ser Ala Gly Gln Thr Ala Val Pro Glu Gln Val Ala Leu Thr Leu Ser
                   360
                                  365
     355
Asn Val Thr Phe Ala Tyr Asp Lys Pro Ala Gln Asn Ala Leu Glu Asp
                 375
                                380
Ile Thr Leu Ser Val Asp Ala Gly Gln Arg Ile Ala Ile Leu Gly Arg
      390
                            395
Thr Gly Cys Gly Lys Ser Thr Leu Leu Gln Leu Leu Thr Arg Ala Trp
         4.05
                 410
Asp Pro Gln Gln Gly Glu Ile Arg Phe Asn Asp Val Pro Leu Ser Gly
   420
            425 430
Phe Ser Glu Ala Ala Leu Arg Lys Thr Val Ser Val Val Pro Gln Arg
                        445
 435 440
Val His Leu Phe Ser Ala Thr Leu Arg Asp Asn Leu Leu Leu Ala Ala
 450 455 460
Pro Asp Ala Ser Asp Asp Thr Leu Arg Ala Met Leu Glu His Val Gly
    470 475
Leu His Lys Leu Leu Glu Asp Asp Gly Leu Asn Ser Trp Leu Gly Glu
       485 490 495
Gly Gly Arg Gln Leu Ser Gly Gly Glu Leu Arg Arg Leu Ala Ile Ala
       500 505 510
Arg Ala Leu Leu His Asp Ala Pro Leu Met Leu Leu Asp Glu Pro Thr
515 520 525
Glu Gly Leu Asp Ala Thr Thr Glu Ser Gln Ile Leu Asp Leu Leu Ala
 530 535 540
Asn Val Met Lys Gly Lys Thr Val Leu Met Val Thr His Arg Leu Arg
545 550 555 560
Gly Leu Val Asn Phe Asp Gln Ile Ile Val Met Asp Asn Gly His Ile
        565 570
Ile Glu Gln Gly Ile Lys Gln Glu Leu Leu Ala Lys Gln Gly Arg
                       585
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<211> 250 <212> PRT <213> Enterobacter cloacae

<210> 9231

<400> 9231 Thr Ile Phe Val Ala Ser Ser Leu Ala Tyr Trp Ser Ser Val Val Met 10 Arg Leu Val Gln Leu Ser Arg His Asn Ile Ala Phe Pro Ser Pro Glu 20 25 Gly Ala Leu Arg Glu Pro Asn Gly Leu Leu Ala Leu Gly Gly Asp Leu 35 40 Ser Pro Ala Arg Leu Leu Met Ala Tyr Gln Arg Gly Ile Phe Pro Trp 5.5 Phe Ser Pro Gly Asp Pro Ile Leu Trp Trp Ser Pro Asp Pro Arg Ala 70 75 Val Leu Trp Pro Gly Gln Phe His Leu Ser Arg Ser Met Lys Arg Phe 8.5 90 His Ala Lys Ser Pro Phe Arg Val Thr Leu Asn His Ala Phe Gly Gln 100 105 110 Val Ile Glu Gly Cys Ala Glu Asp Arg His Glu Gly Thr Trp Ile Thr 120 125 115 Arg Asp Ile Ile Ile Ala Tyr His Gln Leu His Glu Leu Gly Tyr Ala 135 140 130 His Ser Ile Glu Val Trp Lys Glu Asp Asn Leu Val Gly Gly Met Tyr 150 155 Gly Val Ala Gln Gly Thr Leu Phe Cys Gly Glu Ser Met Phe Ser Arg 165 170 Ala Thr Asn Ala Ser Lys Thr Ala Leu Leu Val Phe Ser Glu Glu Phe

185 Ala Arg Arg Gly Gly Arg Leu Met Asp Cys Gln Val Leu Asn Glu His 200 195 205 Thr Ala Ser Leu Gly Ala Val Glu Ile Ser Arg Arg His Tyr Ile Glu 210 215 220 His Leu Glu Gln Cys Arg Lys Glu Thr Leu Pro Arg Asp Phe Trp Val 230 235 Pro Arg Ala Leu Phe Met Pro Asn Ala 245

<210> 9232 <211> 578 <212> PRT

<400> 9232

<213> Enterobacter cloacae Arg Arg Arg Thr Thr Met Lys Gln Thr Val Ala Ala Tyr Ile Ala Lys 10 Thr Leu Glu Gln Ala Gly Val Lys Arg Ile Trp Gly Val Thr Gly Asp 25 Ser Leu Asn Gly Leu Ser Asp Ser Leu Asn Lys Met Lys Thr Ile Glu 4.0 - 45 Trp Met Pro Thr Arg His Glu Glu Val Ala Ala Phe Ala Ala Gly Ala 5.5 Glu Ala Gln Leu Thr Gly Glu Leu Ala Val Cys Ala Gly Ser Cys Gly 7.5 7.0 Pro Gly Asn Leu His Leu Ile Asn Gly Leu Phe Asp Cys His Arg Asn 85 90 His Val Pro Val Leu Ala Ile Ala Ala His Ile Pro Ser Ser Glu Ile 100 105 110 Gly Ser Gly Tyr Phe Gln Glu Thr His Pro Gln Glu Leu Phe Arg Glu 115 120 125 Cys Ser His Tyr Cys Glu Leu Val Ser Ser Pro Glu Gln Ile Pro Gln 130 135 140 Val Leu Ala Ile Ala Met Arg Lys Ala Ile Leu Asn Arg Gly Val Ser 145 150 155 Val Val Val Leu Pro Gly Asp Val Ala Leu Lys Ala Ala Pro Glu Thr 165 170 175 Ala Thr Thr His Trp Tyr Ser Ala Pro Gln Pro Thr Ile Thr Pro Ala 185 190 Glu Glu Glu Leu Lys Lys Leu Ala Gln Leu Leu Arg Tyr Ser Ser Asn 195 200 205 Ile Ala Leu Met Cys Gly Ser Gly Cys Ala Gly Ala His Lys Glu Leu 215 220 Val Glu Phe Ala Gly Lys Leu Lys Ala Pro Val Val His Ala Leu Arg 230 235 Gly Lys Glu His Val Glu Tyr Asp Asn Pro Tyr Asp Val Gly Met Thr 245 250 Gly Leu Ile Gly Phe Ser Ser Gly Phe His Thr Met Met Asn Ala Asp 260 265 270 Thr Leu Ile Leu Leu Gly Thr Gln Phe Pro Tyr Arg Ala Phe Tyr Pro 275 280 285 Thr Asp Ala Lys Ile Ile Gln Ile Asp Ile Asn Pro Gly Ser Ile Gly 295 300 Ala His Ser Lys Val Asp Met Ala Leu Ile Gly Asp Ile Lys Ser Thr 310 315 Leu Ala Ala Leu Leu Pro Leu Leu Glu Glu Lys Thr Asp Arg Lys Phe 325 330 Leu Asp Lys Ala Leu Ser Asp Tyr Arg Asp Ala Arg Lys Gly Leu Asp 340 345 350

Asp Leu Ala Lys Pro Ser Glu Lys Ala Ile His Pro Gln Tyr Leu Ala

360 Gln Gln Ile Ser His Phe Ala Asp Gly Asp Ala Ile Phe Thr Cys Asp 375 380 Val Gly Thr Pro Thr Val Trp Ala Ala Arg Tyr Leu Lys Met Asn Gly 390 395 Lys Arg Arg Leu Leu Gly Ser Phe Asn His Gly Ser Met Ala Asn Ala 405 410 Met Pro Gln Ala Leu Gly Ala Lys Ala Thr Ala Pro Glu Arg Gln Val 425 4.30 Val Ala Met Cys Gly Asp Gly Gly Phe Ser Met Leu Met Gly Asp Phe 435 440 445 Leu Ser Val Ala Gln Met Lys Leu Pro Leu Lys Ile Val Val Phe Asn 455 460 Asn Ser Val Leu Gly Phe Val Ala Met Glu Met Lys Ala Gly Gly Tyr 465 470 475 Leu Thr Asp Gly Thr Glu Leu His Asp Tor Asn Phe Ala Arg Ile Ala 485 490 495 Glu Ala Cys Gly Ile Thr Gly Ile Arg Val Glu Lys Ala Ser Glu Val 500 505 510 Asp Asp Ala Leu Gln Arg Ala Phe Ala Ile Asp Gly Pro Val Leu Val 515 520 525 Asp Val Val Val Ala Lys Glu Glu Leu Ala Ile Pro Pro Gln Ile Lys 530 535 540 Leu Glu Gln Ala Lys Gly Phe Ser Leu Tyr Met Leu Arg Ala Ile Ile 545 550 555 560 Ser Gly Arg Gly Asp Glu Val Ile Glu Leu Ala Lys Thr Asn Trp Leu 565 570

<210> 9233 <211> 492 <212> PRT

<213> Enterobacter cloacae

<400> 9233 Asn Thr Gly Arg Arg Phe Tyr Ser Val Lys Glu His Thr Val Pro Gln Arg Ile Leu Val Leu Gly Ala Ser Gly Tyr Ile Gly Gln His Leu Thr 25 Thr Ala Leu Ser Gln Gln Gly His Gln Val Leu Ala Ala Ala Arg Asn 4.0 Thr Glu Arg Leu Gln Lys Leu His Leu Pro Gly Val Thr Cys His Asn 5.5 Val Asp Leu Asn Trp Pro Lys Ala Leu Pro Ala Leu Leu Glu Gly Val 70 75 Asp Thr Leu Tyr Tyr Leu Val His Ser Met Gly Glu Gly Gly Asp Phe 90 Ile Ala His Glu Arg Gln Val Ala Met Asn Val Arg Asp Ala Leu Arg 100 105 Gin Thr Pro Val Lys Gin Val Ile Phe Leu Ser Ser Leu Gin Ala Pro 115 120 125 Glu Asn Glu Gln Ser Asp His Leu Arg Ala Arg Gln Leu Thr Ala Glu 130 135 140 Thr Leu Arg Ser Ala Arg Ile Pro Val Thr Glu Leu Arg Ala Gly Ile 150 155 Ile Val Gly Ala Gly Ser Ala Ala Phe Glu Val Met Arg Asp Met Val 165 170 175 Tyr Asn Leu Pro Val Leu Thr Pro Pro Arg Trp Val Arg Ser Arg Thr 1.85 180 190

Thr Pro Ile Ala Leu Glu Asn Leu Leu His Tyr Leu Val Ala Leu Leu

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Asp His Pro Ala Glu Gln His Arg Val Leu Glu Ala Ala Gly Pro Glu
              215
                                220
Val Leu Ser Tyr Gln Ala Gln Phe Glu His Phe Met Arg Val Ser Gly
         230
                     235
Arg Arg Arg Trp Leu Ile Pro Ile Pro Phe Pro Thr Arg Trp Ile Ser
          245
                250
Val Trp Phe Leu Asn Val Ile Thr Ser Val Pro Pro Thr Thr Ala Lys
      260 265 270
Ala Leu Ile Gln Gly Leu Lys His Asp Leu Leu Ala Asp Asp Arg Ala
    275 280
                        285
Leu Arg Ala Leu Ile Pro Gln Glu Leu Ile Arg Phe Asp Asp Ala Val
 290 295 300
Arg Asn Thr Leu Lys Glu Glu Glu Lys Leu Val Asn Ser Ser Asp Trp
305 310 315
Gly Tyr Asp Ala Gln Ala Phe Ala Arg Trp Arg Pro Glu Tyr Gly Tyr
       325 330 335
Tyr Pro Lys Gln Ala Gly Cys Thr Val Lys Thr Thr Ala Ser Leu Ala
  340 345 350
Ala Leu Trp Glu Val Val Asn Glr Ile Gly Gly Lys Glu Arg Tyr Phe
 355 360
Phe Gly Asn Ile Leu Trp Gln Thr Arg Gly Ala Leu Asp Leu Leu Val
370 375 380
Gly His Arg Leu Ala Lys Gly Arg Pro Ala His Pro Trp Leu Lys Val
385 390 395 400
Gly Asp Thr Val Asp Ser Trp Lys Val Ile Ile Val Glu Pro Glu Lys
          405 410
Gln Leu Ala Leu Leu Phe Gly Met Lys Ala Pro Gly Leu Gly Arg Leu
       420 425 430
Cys Phe Thr Leu Lys Asp Lys Gly Asp His Arg Glu Leu Asp Val Arg
                  440
Ala Trp Trp His Pro His Gly Met Pro Gly Leu Phe Tyr Trp Leu Leu
450 455 460
Met Ile Pro Ala His Leu Phe Ile Phe Arg Gly Met Ala Lys Arg Ile
465 470
Ala Leu Leu Ala Glu Glu Lys Arg Glu Asn Asn
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<210> 9234
```

<400> 9234 Pro Leu Arq Gly Ile Thr Leu Leu Ser Ala Ala Val Ala Ile Pro Asn 1.0 Gln Arg Arg Ser Val Val Met Tyr Gln Ser His Phe Asn Phe Lys Asn 25 Pro Pro Phe Arg Thr Ile Thr Arg Leu Ser Gly Asp Phe Leu Val Pro 40 Tyr His Gln Asp Val Phe Asn Leu Leu Lys Glu Lys Thr Gln Leu Ala 55 60 Gly Ile Ile Gly Leu Phe Cys Asp Asp Ala Pro Leu Leu Ser His Phe 75 7.0 Ile Asp Ala Leu Lys Ala Ser Ser Asn Thr Val Ile Ala Ile Asn Ala 8.5 90 Phe Pro Lys Leu Ser Ala Ser Ser Leu Leu Tyr Lys Leu Asn Pro Gly 100 105 110 Thr Lys Ala Ile Lys Asp Arg Met Gln Ala Val Asp Ala Val Leu Arg 120 Gln Trp Gln Glu Gly Lys Ala Lys Ser Arg Val Leu Thr Ile Ala His

<211> 606 <212> PRT

<213> Enterobacter cloacae

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130
                135
Ser Glu Ala Met Lys Glu Ser Cys Arg Glu Val Leu Gly Thr Leu Leu
      150 155
Thr Arg Ala Gln Glu Leu Asn Phe Arg Leu Ala Val Val Leu Thr Gly
      165 170 175
Ala Ala Glu Gln Glu Arg Leu Leu Lys Gln Pro Glu Leu Arg Glu Tyr
   180 185 190
Thr His Thr His His Val Leu Arg Pro Leu Thr Cys Arg Glu Tyr Leu
195 200 205
Ser Tyr Val Gln Ala Gln Cys Glu Glu His Asp Cys Glu His Ser Pro
210 215 220
Leu Pro Pro Ala Arg Val Arg Lys Met His Thr Leu Thr Lys Gly Asn
225 230 235 240
Ile Ser Lys Leu Asn Ala Leu Ala His Leu Ser Met Leu Ala Ala Trp
       245 250 255
Thr Glu Arg Ala Ala Gln Val Ser Pro Arg His Leu Arg Leu Ala Ala
       260 265 270
Gly Glu Ile Leu Pro Ala Lys Lys His Gly Lys Arg Leu Ala Thr Val
275 280 285
Gly Leu Phe Ala Ser Val Leu Phe Ala Ala Cys Gly Trp Tyr Phe Thr
290 295 300
Ser Ser Ile Gly Ala Arg Leu Pro Ile Gln Leu Pro Val Pro Val Ser
305 310 315
Trp Lys Gln Gln Thr Pro Lys Pro Glu Ala Ala Val Val Pro Val Ile
          325 330
Asp Asn Glu Ile Val Asn Gln Pro Asp Ala Met His Gln Leu Tyr Leu
      340 345 350
Met Trp Gly Tyr Asp Ala Ser Ala Asp Asp Ala Leu Cys Gln Asn Ala
355 360 365
Ala Lys Val Asn Leu Met Cys Lys Gln Gly Asn Ala Ser Pro Glu Thr
370
      375 380
Leu Ala Gln Glu Gly Tyr Pro Trp Val Ser Glu Leu Lys Thr Ser Gly
385 390 395
His Leu Asn Tyr Ala Val Val Ala Arg Val Gly Asp Thr Ser Ile Asp
         405 410 415
Leu Leu Met Asn Asn Arg Thr Trp Gln Val Ser Arg Ser Trp Phe Asn
      420 425 430
Arg His Ala Thr Gly Asn Phe Thr Gln Leu His Arg Leu Thr Pro Glu
     435 440
Gly Lys Asp Ala Ile Gly Thr Ala Ser Asp Ser Lys Asp Met Ala Trp
 450 455 460
Leu Asp Gln Gln Leu Ser Ile Ala Leu Ser Gln Pro Glu Thr His Ala
   470 475 480
465
Arg Ile Trp Thr Ala Glu Met Met Lys Arg Thr Arg Glu Phe Gln Gln
               490
           485
Lys Met His Leu His Val Asp Gly Ile Pro Gly Glu Glu Thr Leu Met
  500
           505 510
Gln Leu Met Arg Val Thr Asn Ser Thr Pro Gly Val Leu Ile Gln Ala
515 520
                                 525
Thr Arg Thr Thr Pro Asp Ala Lys Met Gln Glu Glu Asp Ser Leu Met
                535 540
Ser Thr Ile Cys Leu Ala Ala Gln Arg Ser Tyr Thr Thr Gly Glu Ser
   545
Val Trp Phe Ser Tyr Arg Leu Pro Ser Leu Glu Lys Arg Ile Arg Gln
           565 570
                            575
Asn Ser Val Met Ala Gly Arg Pro Leu Arg His Ala Gly Cys Arg Pro
                          590
      580 585
Val Tyr Ala Arg Leu Leu Glu Pro Ala Pro Pro Gly Thr
                   600
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<211> 180
<212> PRT
<213> Enterobacter cloacae
<400> 9235
Leu Ile Asn Lys Glu Ile Asn Met Arg Tyr Ser Ala Leu Thr Leu Leu
Val Pro Cys Ala Leu Val Leu Ser Ala Cys Thr Thr Pro Val Thr Pro
        20
                       25
Ala Phe Lys Asp Ile Gly Thr Arg Ser Gly Pro Cys Ile Glu Gly Gly
     35
                     40
Pro Asp Ala Val Ala Gln Gln Phe Tyr Asp Tyr Arg Ile Gln His Arg
 5.0
                 55
                                   60
Gly Asn Asp Leu Thr Ala Leu Arg Pro Tyr Leu Ser Asp Asn Leu Ala
        70
                               75
Lys Leu Leu Thr Asp Ala Ser Arg Asp Pro Gln His Asn Ala Leu Leu
                 90
          85
Ser Ser Asp Pro Phe Ser Ser Arg Ala Thr Leu Pro Asp Ser Ala Asp
        100 105 110
Val Ala Ser Ala Ser Thr Ile Pro Asn Thr Asp Ala Arg Asn Ile Pro
     115 120 125
Leu Arg Val Lys Leu Thr Gln Gly Thr Gln Thr Trp Gln Asp Glu Val
130 135 140
Leu Met Ile Arg Glu Gly Gln Cys Trp Ala Val Asp Asp Val Arg Tyr
145 150 155 160
Ile Gly Gly Ser Val His Ala Pro Ala Gly Thr Leu Arg Gln Ser Ile
                             170
Glu Asn Arg
<210> 9236
<211> 225
<212> PRT
<213> Enterobacter cloacae
<400> 9236
Met Pro Arg Pro Ser Tyr Phe Lys Lys Ser His Leu Lys Ser Gly Ile
                             10
Thr Met Leu Ser Ile Tyr Gly Lys Lys Leu Arg Pro Gln Tyr Glu Met
                          25
Glu Arg Ile Ile Ser Ala Thr Ala Gly Val Glu Glu Lys Thr Leu Lys
                       40
Lys Trp Gln Lys Ile Ser Thr Thr Asp Ser Gly Tyr Ile His Val Ile
 50
                    55
Val Ser Gly Glu Val Glu Phe Arg Arg Glu Ser Asp Glu Leu Cys Met
                7.0
                               7.5
Phe Thr Val Thr Gly Gln Cys Leu Phe Gly Leu Ser Ser Met Tyr Tyr
                  90
Asn Ala Thr His Met Tyr Gly Leu Val Arg Thr Asn Thr Val Val Arg
          100
                          105
                                           110
Ser Ile Lys Lys Glu Val Phe Ala Gln Leu Met Thr Glu Lys Asn Leu
      115
                                        125
Trp Pro Asp Leu Thr Lys Val Leu Ser Trp Tyr Ile Cys Val Met Ser
                   135
                                    140
   130
Lys Arg Asp Asp Val Leu Val Ala Arg Ser Ala Tyr Ser Val Val Arg
145
                 150 155
Glu Phe Leu Tyr Glu Ile Asn Asp Leu Thr Val His Gln Gln Arg Asp
            165 170
Ile Asn Val Tyr Asp Tyr Ile Gln Glu Tyr Thr Asn Leu Ala Arg Ser
                    185
          180
Thr Ile Ile Lys Ile Leu Ser Asp Leu Lys Lys Gly Gln Tyr Ile Val
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200 Val Glu Lys Gly Arg Leu Leu Asn Leu Thr Ala Leu Pro Glu Lys Tyr 215 <210> 9237 <211> 431 <212> PRT <213> Enterobacter cloacae <400> 9237 Lys Arg Ala Ala Glu Gly Asp Arg Arg Arg Asp Val Ser Gly Arg Ser 10 His Ala Arg His Arg Arg Ala Trp Gly Gly Cys Ile Met Ala Phe Tyr 20 25 30 Ala Trp Thr Ala Thr Asp Ala Ala Gly Lys Thr Gln Arg Gly Thr Leu 40 4.5 Gln Ala Glu Gly Gln Lys Gln Val Arg Gln Trp Leu Arg Glu Gln Lys 55 60 Leu Met Pro Val Ser Ile Thr Glu Thr Arg Glu Thr Ala Ala Gly Gly 70 75 Lys Ala Lys Thr Gly Val Lys Leu Ser Thr Pro Val Leu Ser Met Phe 85 90 95 Thr Arg Gln Leu Ser Thr Leu Val Asn Ala Ala Leu Pro Leu Glu Ser 105 100 Ala Leu Lys Ala Ile Ser Lys Gln Thr Glu Asp Lys Lys Leu Ala Ala 120 125 115 Met Val Val Glu Ile Arg Glu Lys Val Val Glu Gly His Thr Leu Phe 135 140 130 Asp Ala Phe Ser Gln Phe Pro Arg Thr Phe Asp Lys Leu Tyr Cys Thr 150 155 145 Leu Val Met Ala Gly Glu Lys Thr Gly His Leu Gly Asp Val Leu Glu 165 170 175 Lys Leu Ala Glu Tyr Asn Glu Gln Arg Gln Lys Met Lys Ser Lys Leu 185 190 180 Thr Gln Ala Met Val Tyr Pro Ile Thr Leu Thr Val Val Ala Ile Ala 195 200 205 Val Ile Ser Ile Leu Leu Val Ala Val Val Pro Gln Val Ile Glu Gln 210 215 220 Phe Thr His Met Lys Gln Gln Leu Pro Ile Thr Thr Arg Thr Leu Ile 230 235 Ala Val Ser Asp Phe Leu Gln Ala Trp Gly Ile Tyr Ile Val Gly Ile 245 250 255 Leu Gly Gly Gly Phe Ile Gly Phe Lys Thr Trp Leu Arg Asn Ala Lys 265 270 260 Asn Arg Phe Arg Trp His Ser Trp Leu Val Asn Gly Ser Pro Ile Lys 280 Lys Leu Val Cys Ala Ile Asn Ser Ala Arg Tyr Ile Arg Thr Leu Ser 290 295 300 Ile Leu Gln Ala Ser Ser Val Pro Leu Leu Glu Gly Met Tyr Ile Ala 315 310 Met Asp Gly Ile Glu Asn Arg Tyr Ala Arg Gln Val Leu Glu Gln Ala 330 335 325 Ala Asp Thr Val Arg Gln Gly Ala Ser Leu Tyr Ala Ala Leu Glu Gln 345 350 340 Ala Lys Leu Phe Pro Pro Thr Met Leu Tyr Met Ile Ala Ser Gly Glu 360 365 355 Glu Ser Gly Glu Leu Gly Asn Leu Met Asp Arg Ala Ala Glu Asn Gln

375

Glu Ser Ala Leu Gln His Arg Ile Thr Leu Thr Leu Ser Val Phe Glu

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390
                                 395
Pro Ala Leu Val Val Ser Met Ala Thr Ile Val Leu Phe Ile Val Leu
         405
                        410
Ser Ile Leu Gln Pro Leu Leu Gln Leu Asn Asn Met Val Gly
<210> 9238
<211> 151
<212> PRT
<213> Enterobacter cloacae
<400> 9238
Ile Met Ala Leu Lys Arg Lys Asn Leu Ala Arg Gln Ala Gly Phe Thr
1 5
                           10
Leu Leu Glu Leu Met Val Val Ile Val Ile Leu Gly Val Leu Ala Ser
20
                           25
Met Val Val Pro Asn Leu Met Gly Asn Lys Glu Lys Ala Asp Thr Gln
                     4.0
                                        4.5
Lys Ala Thr Ser Asp Ile Val Ala Leu Glu Gly Ser Leu Asp Met Tyr
50 55
                                    60
Lys Leu Asp Asn His Arg Tyr Pro Thr Thr Glu Gln Gly Leu Gln Ala
                     75
65 70
Leu Val Thr Lys Pro Glu Ile Ala Pro Ile Pro Asn Gly Tyr Arg Thr
            85
                             90
Asp Gly Tyr Ile Arg Arg Leu Pro Gln Asp Pro Trp Gly Asn Asp Tyr
         100 105 110
Leu Leu Val Ser Pro Gly Glu His Gly Ala Val Asp Val Phe Ser Ala
    115 120 125
Gly Pro Asp Gly Glu Ala Asn Thr Ala Asp Asp Ile Thr Asn Trp Ser
130 135
Leu Asp Lys Lys Glu Lys
<210> 9239
<211> 129
<212> PRT
<213> Enterobacter cloacae
<400> 9239
Lys Thr Met Ala Asn Gly Asn Lys Lys Gln Lys Gly Met Thr Leu Leu
1 5
                           1.0
Glu Val Met Val Ala Leu Val Ile Phe Ser Thr Ala Ala Leu Ala Leu
         20
                          25
                                           30
Met Asn Ser Val Ser Leu Asn Val Arg Phe Thr His Gly Leu Ala Asp
     35
                    4.0
                                       4.5
Thr Leu Gln Ala Ser Trp Val Ala Glu Asn Gln Leu Ala Glu Ala Gln
                    55
                                   60
Leu Thr Lys Thr Asp Phe Pro Asp Ala Glu Gln Gln Gly Thr Glu Ile
65 70
                               75
                                                  8.0
Met Gly Gly Arg Arg Trp Asn Trp Arg Lys Gln Arg Val Lys Thr Ala
            8.5
                              90
Asp Asn Val Trp Ala Asn Thr Ile Arg Val Tyr Ala Glu Gly Asp Glu
                          105
         100
Ser Gln Pro Val Ile Ser Leu His Ile Ile Pro Pro Gly Glu Ser Lys
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120

125

<210> 9240 <211> 162 <212> PRT

<213> Enterobacter cloacae

<400> 9240 Met Lys Glu Arg Ile Ala Gln Leu Lys Ala Arg Tyr Gln Asn Tyr Ser 10 Ala Arg Glu Lys Ile Ile Leu Lys Ile Cys Ala Val Ala Ile Val Gly 20 25 3.0 Ala Ala Val Tyr Tyr Thr Gly Val Ile Pro Leu Asp Asn Met Ile Lys 35 4.0 4.5 Asn Ser Lys Ser Thr Leu Lys Arg Gln Lys Glu Thr Leu Asn Trp Met 5.5 60 Arg Ser Glu Ile Asp Lys Asn His Leu Gln Ile Gln Leu Val Lys Thr 70 75 Asp Asn Pro Arg Thr Val Val Glu Asn Ser Ala His Glu Ile Asn Leu 85 90 Ser Leu Thr Asp Val Arg Gln Glu Gly Gln Thr Leu Ser Phe Val Val 100 105 110 Asn Arg Val Asn Val Tyr Glu Leu Lys Ser Trp Leu Arg Glu Ile Asn 120 Gln Thr Thr Gly Val Arg Leu Gln Lys Ile Asn Leu Thr Pro Val Asp 130 135 140 His Leu Ser Asp Val Lys Ala Gln Val Gln Leu Thr Trp Ala Lys Asn Ala

<210> 9241 <211> 907 <212> PRT <213> Enterobacter cloacae

<400> 9241 Ile Tyr Gln Glu Ile Lys Met Lys Phe Met Lys Pro Lys Tyr Leu Ala 10 Leu Phe Ile Ala Ala Ala Thr Ser Ser Ala Phe Ala Ala Ala Pro Gly 20 25 Ala Pro Thr Ile Gly Tyr Gly Asn Asp Lys Phe Ala Leu Val Glu Val 4.0 45 Asp Gln Ala Ala Gln Asp Tyr Asn Asn Leu Val Lys Val His Asn Asp 5.5 60 Gly Val Asp Val Lys Val Glu Trp Asn Val Trp Ser Gly Asp Ala Pro 70 Thr Ser Ala Lys Val Leu Leu Asp Gly Gln Thr Val Trp Thr Gly Ala 90 85 Ala Gly Ala Thr Gly Ser Ala Thr Phe Lys Val Lys Lys Gly Gly Arg 100 105 110 Tyr Gln Glu Gln Val Glu Val Cys Asn Ala Ser Gly Cys Ala Lys Ser 115 120 125 Ala Ser Lys Leu Ile Ile Val Ala Asp Thr Asp Gly Ser His Leu Leu 135 140 130 Pro Leu Asn Thr Ser Leu Gln Glu Asn Asn Lys Ala Phe Ala Lys His 150 155 160 Thr Asp Lys Val Val Ala Ala Tyr Phe Pro Glu Trp Gly Val Tyr Asp 165 170 Arg Asn Phe Pro Val Asp Lys Ile Pro Ala Ala Asn Leu Asn His Ile 185 180 190 Leu Tyr Gly Phe Ile Pro Ile Cys Gly Gly Asp Gly Ile Asn Asp Gly 195 200 205 Leu Lys Thr Ile Glu Gly Gly Asn Ser Phe Arg Val Leu Gln Asn Asp 210 215 220 Cys Lys Gly Arg Pro Asp Phe Thr Val Ala Ile His Asp Pro Trp Ala

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230
                            235
Ala Leu Gln Lys Pro Gln Ala Gly Val Ser Asn Trp Asp Asp Pro Tyr
          245
                  250 255
Lys Gly Asn Phe Gly Gln Leu Met Ala Leu Lys Lys Ala His Pro Gly
        260
            265 270
Leu Lys Val Leu Pro Ser Ile Gly Gly Trp Thr Leu Ser Asp Pro Phe
     275
         280 285
Phe His Met Gly Asp Pro Ala Ile Arg Ala Arg Phe Val Ser Ser Val
 290 295 300
Lys Asp Phe Leu Gln Thr Trp Lys Phe Phe Asp Gly Val Asp Ile Asp
   310 315 320
Trp Glu Phe Pro Gly Gly Gly Gly Val Thr Glu Asn Leu Gly Asn Pro
      325 330 335
Gln Gln Asp Lys Ala Thr Tyr Thr Ala Leu Met His Asp Leu Arg Thr
       340 345 350
Met Leu Asn Glu Leu Ser Ala Gln Thr Gly Arg Thr Tyr Glu Leu Thr
355 360 365
Ser Ala Ile Gly Ala Gly Arg Asp Lys Ile Glu Asp Val Asp Tyr Thr
370 375
                     380
Thr Ala Gln Gln Tyr Leu Asp His Ile Phe Leu Met Ser Tyr Asp Phe
385 390 395
Tyr Gly Gly Trp Ser Asn Thr Val Leu Gly His Gln Ala Ala Leu Arg
         405 410 415
Ala Pro Ala Trp Arg Pro Asp Thr Asp Tyr Thr Thr Glu Asn Gly Val
 420 425
Asn Ala Leu Leu Ala Gln Gly Val Gln Pro Gly Lys Ile Val Val Gly
435 440
                                 445
Ala Gly Met Tyr Gly Arg Gly Trp Thr Gly Val His Gly Tyr Thr Gly
450 455 460
Asp Asn Pro Phe Thr Gly Thr Ala Thr Gly Met Val Lys Gly Thr Trp
465 470
                            475
Glu Pro Gly Val Val Asp Tyr Arg Gln Ile Val Asn Glu Tyr Lys Gly
         485 490
                                       495
Lys Pro Gly Trp Glu Tyr Gly Tyr Asp Thr Thr Ala Glu Ala Pro Tyr
 500 510
Val Phe Asn Lys Ser Thr Gly Asp Leu Ile Ser Tyr Glu Asp Ala Arg
515 520
                                 525
Ser Thr Thr Ala Lys Gly Lys Tyr Val Leu Ala Asn Lys Leu Gly Gly
530 535
                              540
Leu Phe Ala Trp Ser Ile Asp Ser Asp Thr Gly Asp Ile Leu Asn Ala
545 550 555 560
Met Asn Glu Ser Leu Leu Gly Gly Asp Ser Thr Pro Val Asp Pro Val
         565 570
Val Thr Asn His Ala Pro Ile Ala Ser Ser Ala Asp Gln Asn Val Ser
     580
                     585
                                    590
Gly Pro Ala Thr Val Thr Leu Asp Gly Ser Ala Ser Ser Asp Pro Asp
     595 600
                                 605
Gly Asp Ala Ile Thr Tyr Lys Trp Thr Gln Val Ser Gly Pro Ser Val
610 615
                              620
Thr Ile Asn Asn Ser Thr Lys Ala Lys Ala Thr Phe Asn Val Ala Ala
625 630 635
Ala Thr Thr Asp Gln Thr Met Thr Phe Arg Leu Thr Val Thr Asp Ala
              650
          645
Lys Gly Leu Ser Asn Ala Ile Asp Val Gln Val Val Asn Lys Ala Pro
       660
                     665
Lys Ala Asn Gln Ala Pro Val Leu Asn Pro Met Glu Ala Ile Thr Leu
     675 680 685
Glu Ser Gly Glu Thr Tyr Ala Leu His Ala Gln Ala Ala Asp Pro Asp
 690 695
Gly Asp Ala Leu Thr Tyr Ala Trp Ser Val Pro Ala Asp Met His Ala
              710
                            715
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Thr Gly Thr Asp Ser Ala Asn Val Asn Ile Thr Ala Pro Glu Val Ser 730 Ser Thr Ser Thr Tyr Thr Leu Ser Val Val Val Ser Asp Gly Lys Thr 740 745 Ser Val Gln Ser Asn Val Gln Val Thr Val Asn Pro Lys Ala Ala Pro 755 760 Ala Pro Val Pro Ala Asp Glu Asp Thr Asn Pro Val Asp Asp Val Thr 775 780 Pro Pro Ala Asp Asp Val Thr Pro Pro Ser Asp Lys Gly Ser Cys Asp 785 790 795 Ala Pro Val Asp Ala Asn Ala Ser Lys Tyr Ala Ala Trp Glu Ser Ser 805 810 815 Lys Ile Tyr Asn Gly Gly Asp Thr Val Ser Phe Asp His Leu Val Trp 820 825 830 Lys Ala Lys Tyr Trp Thr Gln Gly Asn Gln Pro Gly Phe Gly Val Asp 835 840 845 Ala Trp Glu Leu Val Ser Asn Val Lys Met Asn Trp Arg Ser Asp Leu 850 855 860 Val Tyr Asn Gly Gly Asp Thr Thr Thr Tyr Glu Gly Asn Val Tyr Arg 865 870 875 Ala Lys Trp Trp Thr Arg Gly Asp Asn Pro Ala Asn Ser Asp Val Trp 885 890 895 Val Lys Glu Gly Ala Ser Thr Asp Cys Lys 900

<210> 9242 <211> 563 <212> PRT

<213> Enterobacter cloacae

<400> 9242 Arg Lys Lys Trp Pro Asn Cys Gly Gly Cys Met Leu Leu Glu Arg Val 10 Glu Ile Val Gly Phe Arg Gly Ile Asn Arg Leu Ser Leu Gln Leu Glu 20 25 Gln Asn Asn Val Leu Ile Gly Glu Asn Ala Trp Gly Lys Ser Ser Leu 40 35 Leu Asp Ala Leu Thr Leu Leu Leu Ser Pro Glu Glu Asn Leu Tyr His 55 60 Phe Val His Asp Asp Phe Trp Phe Pro Pro Gly Asp Val Asn Gly Arg 7.0 75 Glu Lys His Leu His Ile Ile Leu Thr Phe Arg Glu Ser Glu Pro Gly Arg His Arg Val Arg Arg Phe Arg Pro Met Ser Ala Cys Trp Val Pro 100 105 110 Cys Glu Asp Gly Phe Gln Arg Ile Phe Tyr Arg Leu Glu Gly Glu Met 125 115 120 Ala Gln Asn Asp Gly Val Leu Thr Leu Arg Glu Phe Leu Asp Glu Lys 135 140 Gly Asn Pro Ile Pro Leu Asp Asn Ile Asp Glu Leu Ala Arg His Leu 150 155 145 Ile Arg Leu Ser Pro Val Leu Arg Leu Arg Asp Ala Arg Phe Met Arg 165 170 Arg Ile Arg Asn Gly Thr Val Pro Asn Met Pro Glu Val Glu Val Thr 185 190 180 Ala Arg Glu Leu Asp Phe Leu Ala Arg Glu Leu Val Ser Arg Pro Gln 195 200 205 Asn Leu Thr Asp Gly Gln Ile Arg Gln Gly Leu Ser Ala Met Val Gln 215 220 Leu Leu Glu His Tyr Phe Ser Glu Gln Gly Thr Gly Gln Ala Arg His 230 235

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Arg Leu Met Arg Arg Arg Ser His Asp Glu Gln Arg Ser Trp Arg Tyr
          245
                   250
Leu Asp Ile Ile Asn Arg Met Ile Asp Arg Pro Gly Gly Arg Thr His
        260
                    265
Arg Val Ile Leu Leu Gly Leu Phe Ser Thr Leu Leu Gln Ala Lys Gly
     275 280 285
Thr Val Arg Leu Asp Arg Asp Ala Arg Pro Leu Leu Leu Val Glu Asp
      295 300
Pro Glu Thr Arg Leu His Pro Ile Met Leu Ser Val Ala Trp His Leu
      310 315
Leu Asn Leu Leu Pro Leu Gln Arg Val Thr Thr Thr Asn Ser Gly Glu
    325 330 335
Leu Leu Ser Leu Thr Pro Val Glu Tyr Val Cys Arg Leu Val Arg Glu
   340 345 350
Ser Ser Arg Val Thr Ala Tyr Arg Leu Gly Pro Gly Gly Leu Asn Ala
 355 360 365
Glu Asp Gly Arg Arg Ile Ala Phe His Ile Arg Phe Asn Arg Ala Ser
370 375 380
Ser Leu Phe Ala Arg Cys Trp Leu Leu Val Glu Gly Glu Thr Glu Thr
385 390 395 400
Trp Val Ile Asn Glu Leu Ala Arg Gln Cys Gly His His Phe Asp Ala
     405 410 415
Glu Gly Ile Lys Val Ile Glu Phe Ala Gln Ser Gly Leu Lys Pro Leu
       420 425 430
Ile Lys Phe Ala Arg Arg Met Gly Ile Glu Trp His Val Leu Val Asp
435 440 445
Gly Asp Glu Ala Gly Lys Lys Tyr Ala Ala Thr Val Arg Ser Leu Leu
              455 460
Asn Asn Asp Arg Glu Glu Glu Arg Glu His Leu Thr Ala Leu Pro Ala
465 470
                           475 480
Met Asp Met Glu His Phe Met Tyr Arg Gln Gly Phe Asp Asp Val Phe
   485 490 495
His Arg Val Ala Met Ile Pro Val Asp Val Pro Met Asn Met Arg Arg
500 505 510
Val Ile Ala Lys Ala Ile His Arg Ser Ser Lys Pro Asp Leu Ala Ile
                  520
                               525
Glu Val Ala Thr Glu Ala Gly Arg Arg Gly Val Glu Ser Val Pro Thr
530 535 540
Leu Leu Arg Lys Met Phe Ser Arg Val Leu Trp Leu Ala Arg Gly Arg
545
             550
                           555
                                         560
Ala Asp
```

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<210> 9243
<211> 70
<212> PRT
<213> Enterobacter cloacae
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```
<211> 303
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<212> PRT

<213> Enterobacter cloacae

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<400> 9244
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Tyr Arg Leu Arg Asn Gly Arg Glu Arg Cys Gln His Ala Asp Gly Glu Arg Lys Arg Tyr Gly Gly Glu Asn Pro Ser Met Lys Arg Ser Leu Ser 20 25 3.0 Thr Leu Leu Leu Ala Ile Leu Leu Ala Gly Cys Ala Ser Glu Glu Gly 35 40 4.5 Ile Val Asp Lys Gly Ala Tyr Glu Leu Asp Thr Arg His Gln Ala Gln 55 60 Ala Ala Tyr Pro Arg Ile Lys Val Leu Val Ile His Tyr Thr Ala Asp 70 7.5 Asp Phe Asp Thr Ser Leu Ala Thr Leu Thr Asp Lys Asn Val Ser Ser 95 8.5 90 His Tyr Leu Ile Pro Ala Lys Pro Pro Ala Pro Gln Gly Lys Pro Arg 100 105 Ile Trp Gln Leu Val Pro Glu Ser Glu Leu Ala Trp His Ala Gly Ile 120 125 Ser Phe Trp Arg Gly Thr Asn Arg Ile Asn Asp Thr Ser Val Gly Ile 135 140 Glu Leu Glu Asn Arg Gly Trp Arg Gln Thr Asp Gly Val Lys Thr Phe 150 155 Thr Pro Phe Glu Pro Gly Gln Ile Ala Ala Leu Ile Pro Leu Ala Arg 165 170 Asp Ile Ile Ala Arg Tyr Asp Ile Lys Pro Gln Asn Val Val Ala His 180 185 190 Ser Asp Ile Ala Pro Gln Arg Lys Asp Asp Pro Gly Pro Met Phe Pro 200 205 Trp Arg Glu Leu Ala Gln Gln Gly Ile Gly Ala Trp Pro Asp Pro Ala 215 220 Arg Val Asn Phe Tyr Ile Asn Gly Arg Pro His Tyr Gln Gln Val Asp 230 235 Thr Ala Ala Leu Leu Asp Leu Leu Ala Arg Tyr Gly Tyr Glu Val Pro 245 250 Glu Asn Ser Thr Pro Ala Gln Gln Lys Arg Ile Ile Ile Val Phe Gln 260 265 270 Met His Phe Arg Pro Gln Leu Trp Asn Gly Val Ala Asp Val Glu Thr 280

<400> 9245

Lys Met Arg Phe Ser Phe Leu Ser Arg Trp Ile Thr Pro Cys Ile Met 1.0 Phe Val Leu Leu Ile Phe Ser Gly Gln Gln Gly Tyr Leu Thr Leu Lys 20 25 3.0 Asp Tyr Lys Lys Val Thr Asn Lys Leu Ala Lys Ala Asp Leu Gln Pro 4.5 35 40 Pro Lys Lys Thr Arg Glu Asp Lys Pro Phe Thr Leu Phe Thr Ala Ala 50 55 60 Val Arg Gln Glu Asn Leu Ala Asp Ala Ala Lys Ala Pro Leu Ala Ala Glu Ile Glu Gly Ile Val Arg Ser Asp Asp Ala Trp Leu Ser Phe Ala

Met Ala Ile Ala Glu Ala Leu Leu Glu Lys Tyr Gly Gln Gly 295

<210> 9245

<211> 259 <212> PRT

<213> Enterobacter cloacae

Val Ile Lys Thr Pro Gly Gly Gln Arg Ser Tyr Arg Glu Gly Glu Pro 100 105 Leu Ala Gly Phe Asn Asp Ala Phe Ile Gln Glu Ile Asn Lys Asp Asn 115 120 125 Val Val Val Asn Tyr Glu Gly Ala Thr Gln Val Leu Ala Leu Asn Lys 130 135 140 Pro Asp Tyr Phe Lys Gly Gly Val Asp Ser Gly Pro Val Thr Gln Ser 145 150 155 Thr Lys Asp Ala Gly Ala Glu Ser Leu His Leu Asp Asp Tyr Leu Val 170 175 165 Leu Lys Pro Ile Ile Glu Lys Gly Arg Leu Glu Gly Tyr Arg Ile Asn 180 185 190 Pro Arg Asn Ala Ser Ala Phe Tyr Ser Gln Ser Gly Leu Glu Lys Gly 195 200 205 Asp Val Ala Val Gln Val Asn Ser Val Asp Met Thr Asp Glu Ala Lys 210 215 220 Ala Lys Ser Ile Ile Ala Asn Trp Ser Lys Met Lys Glu Ala Asp Val 225 230 235 240 Val Val Arg Arg His Ala His Leu Glu Asn Ile Arg Val Asn Val Leu Asn Asn

<210> 9246 <211> 500 <212> PRT

<213> Enterobacter cloacae

<400> 9246 Arg Val Arg Arg Arg Asp Thr Val Asp Glu Leu Ser Lys Ser Leu Cys 10 Ser Ser Asn Tyr Ala Lys Asp Asn Gly Val Leu Leu Tyr Asn Asn Asp 25 Val Tyr Ile Arg Glu Asp Thr Pro Ala Leu Ala Leu Leu Glu Val Arg 40 Arg Val Leu Gly Arg Ala Phe Val Pro Ile Thr Leu Ala Pro Glu Ala 5.5 Phe Asp Glu Met Leu Ala Lys Ile Trp Gln Gln Ser Ser Gly Val Ser 70 75 Gln Gln Leu Val Asp Asp Met Asp Ala Asp Ile Asp Leu Met Ala Leu 8.5 90 Thr Glu Glu Ile Pro Asp Asn Glu Asp Leu Leu Asp Asn Asp Glu Asn 100 105 110 Ser Pro Val Ile Arg Leu Ile Asn Ala Ile Leu Gly Glu Ala Val Lys 115 120 125 Asp Gly Ala Ser Asp Ile His Ile Glu Thr Phe Glu Arg Thr Leu Ser 130 135 140 Ile Arg Phe Arg Val Asp Gly Val Leu Arg Pro Val Leu Gln Pro Ala 150 155 145 Arg Lys Leu Ala Pro Leu Leu Val Ser Arg Ile Lys Val Met Ser Lys 165 170 Leu Asp Ile Ala Glu Lys Arg Leu Pro Gln Asp Gly Arg Ile Ser Leu 185 190 180 Arg Ile Gly Arg Lys Ala Ile Asp Val Arg Val Ser Thr Ile Pro Ser 195 200 Gln Tyr Gly Glu Arg Val Val Met Arg Leu Leu Asp Lys Ser Asn Leu 210 215 220 Lys Pro Asp Ile Asn Lys Leu Gly Leu Ile Asp Glu Glu Leu Glu Lys 235 230 Leu Lys Gly Leu Ile Asp Arg Pro His Gly Ile Ile Leu Val Thr Gly

```
250
Pro Thr Gly Ser Gly Lys Ser Thr Thr Leu Tyr Ala Ile Leu Ser Ala
        260
                      265
Leu Asn Gly His Glu Arg Asn Ile Leu Thr Val Glu Asp Pro Ile Glu
   275
         280
                            285
Tyr Glu Leu Glu Gly Val Gly Gln Thr Gln Val Asn Pro Arg Val Asp
 290 295 300
Met Thr Phe Ala Arg Gly Leu Arg Ala Ile Leu Arg Gln Asp Pro Asp
   310 315
Val Val Met Ile Gly Glu Ile Arg Asp Gly Glu Thr Ala Gln Ile Ala
         325 330 335
Val Gln Ala Ser Leu Thr Gly His Leu Val Met Ser Thr Leu His Thr
       340 345 350
Asn Ser Ala Ala Gly Ala Ile Thr Arg Leu Arg Asp Met Gly Leu Glu
 355 360
Ser Phe Leu Ile Gly Ser Ser Leu Leu Gly Val Ile Ala Gln Arg Leu
 370 375 380
Val Arg Arg Leu Cys Thr His Cys Arg Thr Thr Ser Pro Leu Asp Ala
    390 395
Asn Glu Lys Ala Leu Phe Ser Phe Met Asp Ala Pro Pro Glu Ala Ile
          405 410 415
Tyr Arg Ala Val Gly Cys Glu His Cys Arg Gln Ser Gly Tyr Gln Gly
           425 430
       420
Arg Ala Gly Ile His Glu Phe Leu Val Val Asp Ser Ala Met Arg Arg
    435 440 445
Ala Ile His Glu Asp Lys Asp Glu Met Ser Leu Glu Thr Gln Leu Phe
              455 460
Lys Gln Ala Tyr Ser Leu Arg Glu Asn Gly Leu Leu Lys Val Ile Gly
465 470 475
Gly Val Thr Ser Leu Glu Glu Val Met Arg Val Thr Ala Glu Arg Gly
Gly Asp Ala
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50

<210> 9247 <211> 372

<212> PRT <213> Enterobacter cloacae

<400> 9247 Tyr Ala Gly Gly Gly Arg Cys Arg Gly Ala Arg Glu Ser Arg Arg Arg 1.0 Ala Trp Asp Ala Pro Gly Cys Ser Pro Cys Ala Cys Pro Phe Ala Gly 20 25 3.0 Asp Gln Thr Met Lys Arg Ile Arg Gln Gln Gln Gly Val Ala Leu Leu 40 45 Val Val Leu Ile Leu Leu Val Met Met Ser Ala Leu Ala Ala Lys Ile 55 60 Ser Gln Gln Phe Cys Arg Asn Leu Gln Lys Thr His Tyr Gln Val Ser 7.0 7.5 Gln Gln Gln Leu Arg Trp Ala Met Gln Ala Gln Glu Lys Val Val Lys 90 85 Asp Arg Leu Gln Thr Asp Ala Ser Gly Glu Ser Lys Pro Leu Ala Leu 100 105 Asp Gly Asp Trp His Gln Pro Leu Glu Thr Gln Gly Glu Asp Tyr Thr 120 125 115 Val Val Ser Gln Val Glu Asp Ala Gln Asp Cys Phe Asn Val Asn Asn 140 135 Leu Leu Thr Ala Asp Ile Ala Pro Gln Gly Gln Ser Ala Pro Ala Val Ala Glu Thr Pro Arg Lys Ala Arg Ile Val Glu Gln Leu Leu Thr Glu

170 Ser Gly Leu Ser Pro Gly Thr Ala Glu Ala Val Tyr Phe Gln Leu Val 180 185 Asp Tyr Leu Asp Gly Asp Ser Thr Thr Ala Lys Glu Gly Ala Glu Ser 200 205 Asp Ala Trp Ala Gly Val Val Pro Ala Arg Gln Pro Ala Asn Gln Met 215 220 Met Arg Ser Ile Ala Glu Ile Lys Leu Leu Pro Ala Phe Pro Val Thr 230 235 Ala Tyr Pro Lys Val Ser Lys Leu Leu Cys Ala Leu Pro Asp Ala Ala 245 250 255 Ser Lys Val Asp Val Asn Thr Leu Gln Pro Glu Gln Ala Ala Val Leu 260 265 270 Ala Ala Met Phe Pro Gly Lys Leu Thr Gln Asp Asp Ala Val Arg Leu 275 280 285 Leu Asp Ser Arg Pro Glu Ser Gly Trp Glu Asn Met Glu Ala Phe Ser 290 295 300 Lys Ala Leu Glu Gln Ala Phe Pro Gln Leu Lys Asp Asp Leu Gln Gln 305 310 315 Val Val Asp Gln Phe Ser Ile Asn Ser Arg Tyr Phe Arg Val Asn Tyr 325 330 Thr Gly Asn Thr Asp Glu Leu Thr Leu Arg Val Val Ser Gln Leu Gln 340 345 350 Val Asn Asn Glu Ala Gly Glu Ile Val Thr Trp Gln Arg Arg Tyr Arg Met Ile Glu 370 <210> 9248 <211> 380 <212> PRT <213> Enterobacter cloacae <400> 9248 Asn Val Met Lys Gln Val Leu Phe Val Arg Pro Asp Ser Arg Glu Gly Gly Lys Ile Met Trp Cys Glu Ser Gly Ser Glu Arg Val Glu Val Val 20 25 Asp Ser Leu Glu Met Leu Ser Glu His Pro Leu Ala Thr Arg Val Cys 40 Leu Leu Pro Ala Ser Asp Met Ile Phe Arg His Phe Arg Leu Pro 55 60

Lys Lys Val Ala Ser Gln Gly Met Ala Phe Ser Trp Met Ala Glu Glu 70 7.5 Thr Leu Ile Gly Asp Val Asp Asn Leu His Trp Thr Val Leu His Lys 85 90 Lys Gly Ala Asp Val Asp Ala Val Ala Ile Asp Ala Asp Arg Leu Arg 100 105 Ala Thr Leu Thr Arg Cys Gln Glu Ala Gly Leu Asn Val Ile Gln Ala 115 120 125 Leu Pro Asp Ala Trp Leu Leu Pro Val Thr Ala Gly Gly Ser Thr Leu 130 135 140 Val Ala Gln Asp Asp Gly Tyr Trp Leu Arg Leu Ser Pro His Val Ala 150 155 Gly Glu Met Glu Ala Thr Leu Leu Pro Leu Leu Met Gln Lys Ala Gly 165 170 Val Gly Glu Val Trp Cys Tyr Gly Asp Ala Pro Ala Lys Val His Val 185 180 190 Asp Val Gln His Ala Trp Gln His Pro Leu Ala Leu Ile Gln Pro Gln 200 Trp Gln Thr Cys Arg Val Asn Leu Leu His Gly Glu Phe Ser Leu Lys

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215
Ala Gly His Gly Arg Ala Ala Lys Arg Met Lys Ala Ala Met Val Ala
              230
                               235
Ala Gly Val Leu Ser Val Gly Leu Leu Leu Gly Pro Arg Ile Ala Met
            245
                 250
Ala Trp Met Leu Val Gln Gln Glu Asn Arg Val Gln Gln Glu Ile Val
        260
             265 270
Gln Val Tyr Gln His His Phe Pro Ser Met Arg Gln Gln Thr Asn Ile
   275 280 285
Lys Tyr His Phe Gly Gln Ser Leu Lys Lys Gln Ser Lys Gly Phe Phe
 290 295 300
Leu Gln Leu Glu Leu Glu Lys Ala Arg Gln Ser Val Pro Ala Met
305 310 315 320
Glu Ile Asp Leu Leu Glu Tyr Asp Ala Gln Gln Asn Thr Leu Thr Leu
         325 330 335
Ser Val Ser Ala Gln Asn Gln Pro Ala Leu Gln Ala Phe Val Asn Gln
        340 345 350
Thr Ser Glu Asn Phe Asp Phe Thr Leu Gln Pro Val Ser Thr Thr Glu
 355 360 365
Pro Tyr Thr Ala Met Ile Ala Gly Lys His Lys
  370
                  375
<210> 9249
<211> 615
<212> PRT
<213> Enterobacter cloacae
<400> 9249
Phe Glu Thr Asn Arg Lys Thr Glu Met Asn Lys Arg Thr Leu Leu Ser
                           10
Val Leu Ile Ala Gly Ala Cys Val Ala Pro Phe Met Ala Gln Ala Ala
                         25
Asn Leu Lys Glu Thr Ser Ser Glu Pro Tyr Thr Ile Lys Ala Ser Asp
                     40
Leu Ala Lys Lys Glu Lys Glu Leu Thr Asp Phe Pro Leu Met Ala Ser
Val Lys Glu Thr Ile Gln Thr Leu Asp Asn Ala Gln Val Glu Leu Ile
              7.0
                      75
Glu Pro Gly Arg Ala Ala Asn Pro Asp Asn Val Lys Arg Val Glu Gly
           85 90
Ile Val Lys Ala Ser Asp Trp Glu Tyr Leu Phe Pro Leu Arg Ala Gln
100 105 110
Ala Tyr Thr Tyr Ser Asn Phe Leu Lys Ala Val Gly Lys Phe Pro Ala
     115 120 125
Leu Cys Lys Thr Tyr Asn Asp Gly Arg Asp Ser Asp Ala Ile Cys Arg
  130 135 140
Lys Glu Leu Ala Thr Met Phe Ala His Phe Ala Gln Glu Thr Gly Gly
              150
                             155
His Glu Ser Trp Arg Pro Glu Ala Glu Trp Arg Gln Ala Leu Val His
                            170 175
            165
Val Arg Glu Met Gly Trp Ser Glu Gly Gln Lys Gly Gly Tyr Asn Gly
         180
                         185
                                        190
Glu Cys Asn Pro Asp Val Trp Gln Gly Gln Thr Trp Pro Cys Gly Lys
                                      205
                     200
Asp Lys Asp Gly Asp Phe Leu Ser Tyr Phe Gly Arg Gly Ala Lys Gln
  210
                  215
                                  220
Leu Ser Tyr Asn Tyr Asn Tyr Gly Pro Phe Ser Glu Ala Met Tyr Gly
               230 235
Asp Val Arg Thr Leu Leu Asp Lys Pro Glu Leu Val Ala Asp Thr Trp
                           250
            245
```

Leu Asn Leu Ala Ser Ala Ile Phe Phe Phe Ala Tyr Pro Gln Pro Pro

```
260
                        265
Lys Pro Ser Met Leu Gln Val Ile Asp Gly Thr Trp Gln Pro Asn Asp
     275
                    280
                                   285
His Asp Lys Ala Asn Gly Leu Val Pro Gly Phe Gly Val Thr Thr Gln
                 295
                        300
Ile Ile Asn Gly Gly Val Glu Cys Gly Gly Pro Thr Glu Ile Ala Gln
     310
                           315
Ser Gln Asn Arg Ile Lys Tyr Tyr Lys Glu Phe Ala Asn Tyr Leu Lys
          325 330 335
Val Pro Val Pro Ala Asn Glu Val Leu Gly Cys Ala Asn Met Lys Gln
       340
            345 350
Phe Asp Glu Gly Gly Ala Gly Ala Leu Lys Ile Tyr Trp Glu Gln Asp
     355 360 365
Trp Gly Trp Ser Ala Asp Thr Pro Asp Gly Lys Thr Tyr Ser Cys Gln
 370 375 380
Leu Val Gly Tyr Gln Thr Pro Phe Ser Ala Phe Lys Glu Gly Asp Tyr
385 390 395
Ser Lys Cys Val Gln Lys Phe Phe Asn Val Lys Ile Val Asn Asp Asp
         405 410 415
Gly Ser Ser Val Thr Pro Asp Glu Thr Pro Val Thr Pro Thr Pro Thr
        420 425 430
Pro Ser Gly Asp Glu Thr Pro Ala Pro Thr Pro Thr Pro Asp Glu Thr
435 440 445
Pro Val Glu Pro Val Val Val Asn His Ala Pro Val Ala Gln Ile Ala
450 455 460
Gly Pro Ile Gly Ala Val Glu Ala Gly Ala Gln Val Ser Leu Ser Ala
465 470 475
Glu Gly Ser Thr Asp Pro Asp Gly Asn Lys Leu Thr Tyr Thr Trp Arg
           485 490 495
Ser Gln Asp Gly Gln Thr Val Thr Gly Gln Asp Lys Ala Val Val Thr
        500 505 510
Phe Thr Ala Pro Glu Ser Ala Thr Ala Gln Gln Tyr Glu Val Ser Leu
515 520 525
Thr Val Ser Asp Gly Glu Leu Ser Ser Thr Thr Ser Tyr Leu Leu Asn
530 535
                                540
Val Lys Ala Lys Ala Ala Thr Pro Ser Gly Glu Asp Thr Ser Tyr Pro
545 550 555
Ala Trp Ser Ala Asn Ser Lys Tyr Asn Ala Gly Asp Ile Val Asn Asn
           565
               570 575
His Gly Lys Leu Phe Gln Cys Lys Pro Phe Pro Tyr Ser Gly Trp Cys
        580
                       585 590
Asn Asn Ser Pro Thr Tyr Tyr Glu Pro Gly Ala Gly Leu Ala Trp Ala
     595
                    600
Glu Ala Trp Thr Ala Leu
  610
<210> 9250
<211> 660
<212> PRT
<213> Enterobacter cloacae
<400> 9250
Arg Ser Gly His Gln Arg Asn Pro Ala Arg Ser Arg Ala Met Thr Ala
                          10
Leu Leu Glu Leu Asn Asp Ile Arg Arg Ser Tyr Pro Ser Gly Asp Gly
         20
                       25
                                       30
Pro Val Glu Val Leu Lys Gly Ile Ser Leu Arg Val Glu Ala Gly Glu
    35
                    40
Met Val Ala Ile Val Gly Ala Ser Gly Ser Gly Lys Ser Thr Leu Met
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Asn Ile Leu Gly Cys Leu Asp Lys Pro Thr Ser Gly Thr Tyr Arg Val

ALPERTATION OF STREET OF STREET, STREE

Ala Gly Thr Asp Val Ser Thr Leu Asp Gly Asp Ala Leu Ala Lys Leu 90 8.5 Arg Arg Glu His Phe Gly Phe Ile Phe Gln Arg Tyr His Leu Leu Ser 100 105 His Leu Ser Ala Ala Gln Asn Val Glu Val Pro Ala Val Tyr Ala Gly 115 120 Val Glu Arg Lys Lys Arg Leu Glu Arg Ala Lys Ala Leu Leu Thr Arg 130 135 140 Leu Gly Leu Ala Glu Arg Val Asp Tyr Gln Pro Ser Gln Leu Ser Gly 145 150 155 Gly Gln Gln Gln Arg Val Ser Ile Ala Arg Ala Leu Met Asn Gly Gly 165 170 175 Gln Val Ile Leu Ala Asp Glu Pro Thr Gly Ala Leu Asp Ser His Ser 180 185 190 Gly Glu Glu Val Met Ala Ile Leu His Gln Leu Arg Asp Gln Gly His 195 200 205 Thr Val Ile Ile Val Thr His Asp Pro Gln Val Ala Ala Gln Ala Glu 210 215 220 Arg Ile Ile Glu Ile His Asp Gly Glu Leu Val Ser Asn Pro Pro Pro 225 230 235 240 Arg Gln Ser Arg Ala Ala Ala Ala Lys Glu Ala Leu Pro Val Ser Thr 245 250 255 Gly Trp Gly Gln Phe Ser Ser Gly Phe Arg Glu Ala Leu Thr Met Ala 260 265 270 Trp Leu Ala Met Ala Ala Asn Lys Met Arg Thr Leu Leu Thr Met Leu 275 280 285 Gly Ile Ile Ile Gly Ile Ala Ser Val Val Ser Ile Val Val Val Gly 295 Asp Ala Ala Lys Gln Leu Val Leu Ala Asp Ile Arg Ala Ile Gly Thr 305 310 315 Asn Thr Ile Asp Val Tyr Pro Gly Lys Asp Phe Gly Asp Asp Glu Pro 325 330 335 Gln Tyr Gln Gln Ala Leu Lys Tyr Asp Asp Leu Ala Ala Ile Gln Lys 340 345 350 Gln Pro Trp Val Asn Ser Ala Thr Pro Ala Val Ser Gln Asn Leu Arg 360 Leu Arg Tyr Gly Asn Ile Asp Val Ala Ala Ser Ala Asn Gly Val Ser 370 375 380 Gly Asp Tyr Phe Asn Val Tyr Gly Met Thr Phe Ser Glu Gly Ala Thr 390 395 Phe Asn Ala Glu Gln Leu Ala Gly Arg Ala Gln Val Val Leu Asp 410 405 Ala Asn Ser Arg Arg Gln Leu Phe Pro Asn Lys Thr Arg Val Val Gly 425 430 420 Glu Val Ile Leu Val Gly Asn Met Pro Ala Thr Val Ile Gly Val Ala 440 445 Glu Glu Lys Gln Ser Met Phe Gly Ser Ser Lys Ile Leu Arg Val Trp 455 460 Leu Pro Tyr Ser Thr Ile Ser Gly Arg Ile Met Gly Gln Ser Tro Leu 470 475 Asn Ser Ile Thr Val Arg Val Lys Glu Gly Tyr Asp Ser Ala Leu Ala 490 485 Glu Gln Gln Leu Glu Arg Leu Leu Thr Leu Arg His Gly Lys Lys Asp 510 500 505 Phe Phe Thr Trp Asn Met Asp Gly Leu Leu Lys Thr Ala Glu Lys Thr 515 520 Thr Arg Thr Leu Gln Leu Phe Leu Thr Leu Val Ala Val Ile Ser Leu 535 540 Val Val Gly Gly Ile Gly Val Met Asn Ile Met Leu Val Ser Val Thr 555

Glu Arg Thr Arg Glu Ile Gly Ile Arg Met Ala Val Gly Ala Arg Ala 565 570 Ser Asp Val Leu Gin Gin Phe Leu Ile Glu Ala Val Leu Val Cys Leu 580 585 590 Val Gly Gly Ala Met Gly Ile Ala Leu Ser Met Met Ile Ala Phe Ala 595 600 605 Leu Gln Leu Phe Leu Pro Gly Trp Glu Ile Gly Phe Ser Pro Met Ala 610 615 620 Ile Leu Thr Ala Phe Leu Cys Ser Thr Phe Thr Gly Ile Leu Phe Gly 625 630 635 640 Trp Leu Pro Ala Arg Asn Ala Ala Arg Leu Asp Pro Val Asp Ala Leu 645 650 Ala Arg Glu

660

<210> 9251

<211> 113 <212> PRT

<213> Enterobacter cloacae

<400> 9251

Ile Arg Arg Glu Ser Met Gln Phe Ser Thr Thr Pro Thr Leu Glu Gly 5 10 Gln Pro Ile Thr Glu Tyr Cys Gly Val Val Thr Gly Glu Ala Ile Leu 20 25 Gly Ala Asn Ile Phe Arg Asp Phe Phe Ala Gly Ile Arg Asp Ile Val 35 40 4.5 Gly Gly Arg Ser Gly Ala Tyr Glu Lys Glu Leu Arg Lys Ala Arg Asp Ile Ala Phe Lys Glu Leu Gly Glu Gln Ala Lys Ala Leu Gly Ala Asp 70 75

Ala Val Val Gly Ile Asp Ile Asp Tyr Glu Thr Val Gly Lys Asp Ala 90 Ser Met Leu Met Val Ser Val Ser Gly Thr Ala Val Lys Thr Arg Arg

<210> 9252

<211> 648 <212> PRT

<213> Enterobacter cloacae

<400> 9252

Thr Ile Asn Lys Cys Ala Asp Met Lys Lys Phe Pro Trp Ala Cys Val Ala Leu Thr Ala Leu Ser Leu Tyr Ser Ser Ser Leu Leu Ala Ala Asn 2.5 30 Phe Ser Ala Ser Phe Lys Asn Thr Asp Ile Arg Glu Phe Ile Asp Thr 3.5 40 45 Val Gly Arg Asn Leu Asn Lys Thr Ile Leu Val Asp Pro Ser Val Gln 55 50 Gly Thr Val Ser Val Arg Thr Tyr Asn Val Leu Thr Glu Asp Glu Tyr 75 70 Tyr Gln Phe Phe Leu Ser Val Leu Asp Leu Tyr Gly Leu Ser Val Ile 90 8.5 Pro Leu Asp Asn Gly Met Val Lys Val Val Arg Ser Ser Val Ala Arg 100 105 Thr Ala Gly Ala Pro Leu Ala Asp Ser Lys Asn Pro Gly Lys Gly Asp 115 120

Glu Ile Ile Thr Arg Val Val Arg Met Glu Asn Val Pro Val Arg Glu

```
Leu Ala Pro Leu Leu Arg Gln Leu Asn Asp Ala Thr Gly Ile Gly Asn
                   155
        150
Val Val His Phe Glu Pro Ser Asn Val Leu Leu Leu Thr Gly Lys Ala
                 170
        165
Ser Val Val Asn Arg Leu Val Asp Leu Val Gln Arg Val Asp Lys Asp
       180
           185 190
Gly Ile Gln Arg Arg Glu Ile Ile Pro Leu Arg Phe Ala Ser Ala Lys
195 200 205
Glu Leu Ser Asp Met Leu Asn Asn Leu Asn Asn Glu Glu Gln Lys Gly
210 215 220
Gln Asn Ala Pro Gln Leu Ala Thr Lys Val Val Ala Asp Asp Glu Thr
225 230 235
Asn Ser Leu Val Ile Ser Gly Ser Glu Asp Ala Arg Ala Arg Thr Arg
      245 250 255
Ser Leu Ile His Gln Leu Asp Arg Glu Gln Asn Asn Glu Gly Asn Thr
   260 265 270
Arg Val Phe Tyr Leu Lys Tyr Ala Ser Ala Thr Lys Val Val Pro Val
275 280 285
Leu Thr Gly Ile Gly Glu Gln Leu Lys Asp Lys Pro Gly Ala Ala Lys
290 295 300
Ala Lys Thr Ala Ser Ala Ser Thr Asp Leu Asn Ile Thr Ala Asp Glu
305 310 315 320
Ser Thr Asn Ser Leu Val Ile Thr Ala Gln Pro Asn Val Met Asn Ser
     325 330 335
Leu Glu Lys Val Ile Asp Lys Leu Asp Ile Arg Arg Pro Gln Val Leu
      340 345 350
Val Glu Ala Ile Ile Ala Glu Val Gin Asp Gly Asn Gly Leu Asp Leu
    355 360 365
Gly Val Gln Trp Thr Ser Lys His Gly Gly Val Gln Phe Gly Ser Thr
 370 375 380
Gly Leu Pro Ile Ser Gln Ile Lys Asn Gly Thr Met Lys Gly Ala Ser
   390 395 400
Phe Thr Gly Leu Ala Thr Gly Phe Phe Asn Gly Asp Phe Gly Ala Leu 405 415
Val Thr Ala Leu Ser Thr Asn Gly Lys Asn Asp Ile Leu Ser Thr Pro
      420 425 430
Ser Val Val Thr Leu Asp Asn Lys Glu Ala Ser Phe Asn Val Gly Gln
435 440 445
Asp Val Pro Val Leu Ser Gly Ser Gln Thr Thr Ser Gly Asp Asn Val
450 455 460
Phe Asn Ser Val Glu Arg Lys Thr Val Gly Thr Lys Leu Lys Ile Val
465 470 475
Pro Gln Ile Asn Asp Gly Asp Met Ile His Leu Lys Ile Glu Gln Glu
        485 490
Val Ser Ser Val Asp Asn Ser Ala Thr Glu Asp Ser Ser Leu Gly Pro
     500 505 510
Thr Phe Asn Thr Arg Thr Ile Asn Asn Glu Val Met Val His Ser Gly
515 520
                                 525
Gln Thr Val Val Leu Gly Gly Leu Met Glu Asn Val Thr Lys Gln Ser
     535 540
Val Ser Lys Val Pro Leu Leu Gly Asp Ile Pro Leu Val Gly Gln Leu
545 550
Phe Arg Tyr Thr Ser Gln Asp Thr Ser Lys Arg Asn Leu Met Val Phe
          565 570 575
Ile His Thr Thr Val Leu Arg Asp Asp Asp Asn Tyr Ser Ala Ala Ser
        580 585 590
Lys Glu Lys Tyr Asp Gln Ile Arg Val Arg Gln Met Gln Arg Val Glu
    595
                      605
                   600
Glu Lys Lys Leu Gly Ile Val Glu Pro Ser Asp Asn Ala Val Leu Pro
  610
                615
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Ala Phe Pro Ser Ala Ser Pro His Val Ala Pro Val Lys Thr Ser Ala 625 630 635 640 Ala Arg Asn Pro Phe Lys Glu 645

<210> 9253 <211> 166 <212> PRT

<213> Enterobacter cloacae

<400> 9253

Glu Arg Glu Ile Met Lys Asn Gln Arg Gly Phe Thr Leu Leu Glu Ile 15 10 15 Ile Leu Ala Leu Val Ile Phe Ala Ser Cys Ala Met Met Val Val Ser

The Leu Ald Leu val lie Pile Ald Ser Cys Ald Met Met val val val val val 25 30

Thr Ile Pro Ser Arg Ser Gly Ala Asp Ile Phe Gly Gln Gln Leu Lys 35 40 45 Ala Leu Val Asp Tyr Gly Ser Asp Arg Ala Val Met Asp Gly Asn Ile

50 55 60 Val Gly Leu Val Ile Ala Thr Asp Lys Tyr Gln Leu Val Thr Ile Ala

65 70 75 80 Asp Glu Asn Gly Glu Arg His Trp Val Pro Leu Ser Ala Gly Arg Ile

85 90 95 Ser Thr Lys Gly Asp Phe Pro Glu Glu Met His Val Ser Leu Ser Pro

100 105 110 Gln Arg Leu Ala Ala Thr Val Thr Ser Glu Pro Gln Val Ile Phe Leu

115 120 125 Pro Asp Gly Glu Ile Ser Arg Phe Thr Leu Thr Leu Gln Ser Tyr Asp

130 135 140 Lys Gln His His Phe Arg Val Val Ser Gln Gly Ala Ala Pro Val Ser 145 150 160

Val Glu Asn Asp Gly 165

165

<210> 9254 <211> 236

<212> PRT

<213> Enterobacter cloacae

<400> 9254

Glu Pro Ala Gly Tyr Phe Pro Ala Tyr His Ser Ala Gly Arg Glu Gln
1 5 10 15

Val Lys Lys Met Arg Arg Gln Arg Gly Phe Thr Leu Leu Glu Ile Met
20 25 30

Ile Ala Leu Thr Ile Phe Ala Val Ile Ser Thr Leu Ala Trp Gln Ile 35 40 45

Leu Asp Gly Ala Met Arg Thr Ser Ser Ala Thr Asp Ala Ser Ala Ala 50 55 60

Lys Leu Asn Gln Leu Gin Arg Ala Trp Ser Leu Met Glu Arg Asp Phe 65 70 75 80
Phe Gln Leu Gln Ala Arg Ala Pro Arg Asn Glu Pro Glu Leu Phe Arg 85 90 95

85 95 Gln Ala Gly Asp Ala Leu Glu Leu Thr Thr Leu Asn Gly Val Ser Gly 100 105 110

Thr Val Gln Leu Glu Arg Glu Arg Trp Arg Leu Glu Glu Gly Arg Leu 115 120 125

Tyr Arg Asp Val Trp Pro Val Ile Asp Gly Pro Ala Glu Val Lys Pro 130 135 Asp Glu Val Pro Ile Val Ser Gly Val Lys Ser Leu Gln Trp Arg Phe

145 150 155 160 Tyr Arg Gln Gly Trp Leu Lys Ser Trp Ser Asp Ala Ala His Leu Pro

```
170
            165
Asp Gly Val Glu Val Thr Leu Thr Met Glu Asn Gly Asp Thr Trp Arg
       180
                185
                                        190
Trp Val Phe Thr Thr Pro Gly Asp Met Pro Glu Val Ala Ala Ala Ala
    195 200 205
Ala Pro Glu Lys Ala Ala Asp Ala Pro Gly Thr Pro Pro Asp Ala Ala
210 215 220
Pro Ala Pro Ala Pro Ser Pro Glu Thr Arg Pro
            230
<210> 9255
<211> 283
<212> PRT
<213> Enterobacter cloacae
<400> 9255
Pro Pro Gln Arg Cys Glu Ser Ala Gly Ala Thr His Leu Gly Lys Lys
                      10
Arg Met Asn Thr Phe Ala Leu Met Arg Asp Ala Phe Pro Val Gly Phe
                  25
                                  30
Pro Ile Met Ser Ala Ile Leu Gly Gly Ile Val Gly Ser Phe Leu Gly
35 40
Val Val Ala Glu Arg Val Pro Gly Met Val Met Asp Glu Glu Gly Ser
                  55
                                 60
Gly Asn Leu Leu Ile Pro Ala Ser His Cys Pro Val Cys Gln His Ala
               7.0
                            7.5
Leu Ala Ala Trp Glu Asn Ile Pro Leu Leu Ser Trp Leu Leu Leu Arg
          85
Gly Arg Cys His Gln Cys Gly Ser Ala Ile Pro Leu Arg Leu Phe Leu
      100
                      105
Val Glu Leu Ile Ser Ala Leu Phe Phe Gly Ile Thr Ala Trp Cys Met
115
                    120 125
Pro Asp Val Gln Ala Leu Phe Ser Leu Trp Leu Leu Ala Ala Phe Leu
                135
130
                                 140
Leu Pro Leu Ala Met Ile Asp Trp Gln His Gln Leu Leu Pro Asp Cys
145 150
                              155 160
Leu Thr Gln Pro Leu Leu Trp Ala Gly Leu Leu His Val Phe Asp
          165 170 175
His Thr Leu Pro Leu Arg Asp Ala Leu Phe Gly Ala Val Ala Gly Tyr
         180 185
Leu Ser Leu Trp Leu Leu Tyr Trp Ala Phe Arg Leu Ile Thr Gly Arg
     195
                    200 205
Glu Gly Leu Gly Tyr Gly Asp Phe Lys Leu Leu Ala Ala Leu Gly Ala
 210
                  215
                                 220
Trp Cys Gly Trp Gln Ala Leu Pro Ser Ile Glu Leu Ala Ala Ala Leu
225
               230
                              235
Ser Gly Ile Val Gly Tyr Phe Ala Val Asn Asn Leu Asn Lys Asn Asn
            245
                           250 255
Leu Ser Ile Ser Phe Gly Pro Tyr Leu Ala Phe Ala Gly Ile Gly Val
        260 265
Phe Ile Ser Gln Gln Ile Ala Phe Thr Phe
                     280
<210> 9256
<211> 179
<212> PRT
<213> Enterobacter cloacae
<400> 9256
Pro Ile Asn His Ser Pro Phe Arg Gly Gly Val Ile Gln Asn Ser Phe
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Tyr Arg Met Leu Val Arg Arg Asn Asn Arg Asn Cys Gln Gln Val Lys Met Lys Lys Leu Ile Leu Leu Leu Leu Ile Ile Ser Gln Ser Ala Leu Ala Asn Cys Trp Asp Lys Ala Ala His Tyr Tyr His Val Asp Pro Tyr 55 Leu Leu Tyr Ala Ile Ala Asn Val Glu Ser Gly Met Asn Pro Tyr Ala 75 70 Val Gly Gln Asn Arg Asp Gly Thr Arg Asp Val Gly Leu Met Gln Ile 85 90 Asn Ser Ser His Phe Thr Ala Leu Glu Ser Arg Gly Ile Asp Glu Tyr 100 105 110 Arg Leu Ile Thr Glu Pro Cys Thr Ser Ile Met Val Gly Ala Ser Ile 115 120 125 Leu Ser Gly Met Ile Arg Val Tyr Gly Tyr Asn Trp Glu Ala Val Gly 130 135 140 Ala Tyr Asn Ala Gly Leu Lys Lys Glu Asn Tyr Pro Gln Arg Met Lys 150 155 160 Tyr Ala His Lys Val Trp Ala Lys Tyr Gln Gln Leu Lys Leu Ala Ala 165 Arg Tyr

<210> 9257 <211> 380 <212> PRT

<213> Enterobacter cloacae

<400> 9257 Pro Glu Gln Leu Phe Gly Ile Phe Met Asn Leu Lys Gly Lys Arg Arg 1.0 Lys Leu Phe Leu Leu Ala Val Val Leu Ala Gly Gly Phe Trp 20 25 Leu Trp Lys Val Leu Asn Ala Pro Val Pro Gln Tyr Gln Thr Leu Ile 35 40 Val Arg Pro Gly Glu Leu Gln Gln Asn Val Leu Ala Thr Gly Lys Leu 55 60 Asp Ala Leu Arg Lys Val Asp Val Gly Ala Gln Val Ser Gly Gln Leu 70 75 Lys Thr Leu Ser Val Glu Ile Gly Asp Lys Val Lys Lys Gly Gln Leu 8.5 90 Leu Gly Val Ile Asp Pro Glu Gln Ala Gln Asn Gln Ile Arg Glu Val 100 105 110 Glu Ala Thr Leu Met Glu Leu Arg Ala Gln Arg Ala Gln Ala Gln Ala 120 115 125 Glu Arg Asn Leu Ala Gln Val Thr Leu Thr Arg Gln Gln Ala Leu Ala 130 135 140 Lys Thr Gln Ala Ile Ser Lys Gln Asp Leu Asp Thr Ala Ala Thr Glu 145 155 150 Leu Ala Val Lys Gln Ala Gln Ile Gly Thr Ile Asp Ala Gln Ile Lys 170 175 165 Arg Asn Gln Ala Ser Leu Asp Thr Ala Lys Thr Asn Leu Asp Tyr Thr 180 185 190 Gln Ile Val Ala Pro Met Ala Gly Glu Val Thr Gln Ile Thr Thr Leu 195 200 205 Gln Gly Gln Thr Val Ile Ala Ala Gln Gln Ala Pro Asn Ile Leu Thr 215 220 Leu Ala Asp Met Ser Thr Met Leu Val Lys Ala Gln Val Ser Glu Ala 230 235 Asp Val Ile His Leu Lys Pro Gly Gln Lys Ala Trp Phe Thr Val Leu 245 250

```
Gly Asp Pro Gln Thr Arg Tyr Glu Gly Val Leu Lys Asp Ile Leu Pro
          260
                           265
Thr Pro Glu Lys Val Asn Asp Ala Ile Phe Tyr Tyr Ala Arg Phe Glu
    275
                          280
                                             285
Val Pro Asn Pro Gln Gly Val Leu Arg Leu Asp Met Thr Ala Gln Val
 290
        295
                                        300
His Ile Gln Leu Thr Gly Val Lys Asn Val Leu Thr Val Pro Leu Ser
305 310
                                    315
Ala Leu Gly Glu Ser Ala Gly Asp Asn Arg Tyr Lys Val Lys Val Leu
           325 330
Arg Asn Gly Glu Thr Arg Glu Arg Glu Val Val Ile Gly Ala Arg Asn
          340
                            345
                                   350
Asp Thr Asp Val Val Val Lys Gly Leu Glu Glu Gly Glu Glu Val
     355
            360
Val Thr Ser Glu Thr Leu Pro Gly Ala Ala Gln
                      375
                                         380
<210> 9258
<211> 131
<212> PRT
<213> Enterobacter cloacae
<400> 9258
Gln Thr Ser Arg Met Thr Val Ile Asp Asp Cys Tyr Leu Thr Ser Glu
                               10
Val Asp Ser Lys Trp Leu Cys Ile Met Gly Lys Thr Asn Asp Trp Leu
                                                3.0
Asp Phe Asp Gln Leu Ala Glu Asp Lys Val Arg Asp Ala Leu Lys Pro
       35
                          4.0
Pro Ser Met Tyr Lys Val Met Leu Met Asn Asp Asp Tyr Thr Pro Met
                      55
                                        60
Glu Phe Val Ile Asp Val Leu Gln Lys Phe Phe Ser Tyr Asp Val Glu
                  7.0
                                   75
Arg Ala Thr Gln Leu Met Leu Thr Val His Tyr Arg Gly Lys Ala Ile
              8.5
                                 90
Cys Gly Ile Phe Thr Ala Glu Val Ala Glu Thr Lys Val Ala Met Val
                             105
           100
Asn Asp Tyr Ala Arg Glu Asn Glu His Pro Leu Leu Cys Thr Leu Glu
                          120
       115
Lys Ala
   130
<210> 9259
<211> 768
<212> PRT
<213> Enterobacter cloacae
<400> 9259
Gly Ile Lys Leu Gly Glu Val Pro Met Leu Asn Gln Glu Leu Glu Leu
Ser Leu Asn Met Ala Phe Ala Arg Ala Arg Glu His Arg His Glu Phe
                              25
                                                 3.0
Met Thr Val Glu His Leu Leu Leu Ala Leu Leu Ser Asn Pro Ser Ala
        35
                                             45
                          40
Arg Glu Ala Leu Glu Ala Cys Ser Val Asp Leu Val Ala Leu Arg Gln
                      55
                                         60
Glu Leu Glu Ala Phe Ile Glu Gln Thr Thr Pro Val Leu Pro Ala Ser
                                      75
Glu Glu Glu Arg Asp Thr Gln Pro Thr Leu Ser Phe Gln Arg Val Leu
```

90

Gln Arg Ala Val Phe His Val Gln Ser Ser Gly Arg Ser Glu Val Thr

```
100
                       105
Gly Ala Asn Val Leu Val Ala Ile Phe Ser Glu Gln Glu Ser Gln Ala
     115
                    120
                           125
Ala Tyr Leu Leu Arg Lys His Glu Val Ser Arg Leu Asp Val Val Asn
         135
                      140
Phe Ile Ser His Gly Thr Arg Lys Asp Glu Pro Asn Gln Ala Ser Asp
       150 155 160
Pro Ser Gly Gln Ile Asn Ser Asn Glu Glu Gln Ala Gly Gly Glu Asp
       165 170 175
Arg Met Glu Asn Phe Thr Thr Asn Leu Asn Gln Leu Ala Arg Val Gly
      180 185 190
Gly Ile Asp Pro Leu Ile Gly Arg Asp Lys Glu Leu Glu Arg Ala Ile
 195 200 205
Gln Val Leu Cys Arg Arg Arg Lys Asn Asn Pro Leu Leu Val Gly Glu
 210 215 220
Ser Gly Val Gly Lys Thr Ala Ile Ala Glu Gly Leu Ala Trp Arg Ile
225 230 235
Val Gln Gly Asp Val Pro Glu Val Ile Ala Asp Cys Thr Ile Tyr Ser
        245 250 255
Leu Asp Ile Gly Ser Leu Leu Ala Gly Thr Lys Tyr Arg Gly Asp Phe
 260 265 270
Glu Lys Arg Phe Lys Ala Leu Leu Lys Gln Leu Glu Gln Asp Thr Asn
275 280
                        285
Ser Ile Leu Phe Ile Asp Glu Ile His Thr Ile Ile Gly Ala Gly Ala
                295 300
Ala Ser Gly Gly Gln Val Asp Ala Ala Asn Leu Ile Lys Pro Leu Leu
      310 315
Ser Ser Gly Lys Ile Arg Val Met Gly Ser Thr Thr Tyr Gln Glu Phe
           325 330
Ser Asn Ile Phe Glu Lys Asp Arg Ala Leu Ala Arg Arg Phe Gln Lys
                      345
                                      350
Ile Asp Val Thr Glu Pro Ser Val Asp Glu Thr Val Gln Ile Ile Asn
355 360
                        365
Gly Leu Lys Thr Lys Tyr Glu Ala His His Asp Val Arg Tyr Thr Ala
              375
                               380
Lys Ala Val Arg Ala Ala Val Glu Leu Ala Val Lys Tyr Ile Asn Asp
385 390 395
Arg His Leu Pro Asp Lys Ala Ile Asp Val Ile Asp Glu Ala Gly Ala
         405 410
                                        415
Arg Ala Arg Leu Met Pro Ala Ser Lys Arg Lys Lys Thr Val Asn Val
      420 425
Ala Asp Ile Glu Ser Val Val Ala Arg Ile Ala Arg Ile Pro Glu Lys
435 440
                                   445
Ser Val Ser Gln Ser Asp Arg Asp Thr Leu Arg Thr Leu Gly Asn Arg
                4.55
                                460
Leu Lys Met Leu Val Phe Gly Gln Asp Lys Ala Ile Glu Ala Leu Thr
   470
                             475
Glu Ala Ile Lys Met Ala Arg Ala Gly Leu Gly His Asp His Lys Pro
           485 490
Val Gly Ser Phe Leu Phe Ala Gly Pro Thr Gly Val Gly Lys Thr Glu
        500
                       505
Val Thr Val Gln Leu Ser Lys Ala Leu Gly Ile Glu Leu Leu Arg Phe
     515 520 525
Asp Met Ser Glu Tyr Met Glu Arg His Thr Val Ser Arg Leu Ile Gly
 530 535
Ala Pro Pro Gly Tyr Val Gly Phe Asp Gln Gly Gly Leu Leu Thr Asp
545 550
                    555 560
Ala Val Ile Lys His Pro His Ala Val Leu Leu Asp Glu Ile Glu
           565 570
Lys Ala His Pro Asp Val Phe Asn Ile Leu Leu Gln Val Met Asp Asn
                       585
                                      590
```

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Gly Thr Leu Thr Asp Asn Asn Gly Arg Lys Ala Asp Phe Arg Asn Val
             600
                                    605
Val Leu Val Met Thr Thr Asn Ala Gly Val Arg Glu Thr Glu Arg Lys
            615
Ser Ile Gly Leu Ile His Gln Asp Asn Ser Thr Asp Ala Met Glu Glu
                   635
625 630
Ile Lys Lys Ile Phe Thr Pro Glu Phe Arg Asn Arg Leu Asp Asn Ile
        645
                           650
Ile Trp Phe Asp His Leu Ser Thr Glu Val Ile His Gln Val Val Asp
    660 665
Lys Phe Ile Val Glu Leu Gln Val Gln Leu Asp Gln Lys Gly Val Ser
 675 680 685
Leu Glu Val Ser Gln Glu Ala Arg Asn Trp Leu Ala Glu Lys Gly Tyr
690 695 700
Asp Arg Ala Met Gly Ala Arg Pro Met Ala Arg Val Ile Gln Asp Asn
     710 715
705
Leu Lys Lys Pro Leu Ala Asn Glu Leu Leu Phe Gly Ser Leu Val Asp
       725 730 735
Gly Gly Gln Val Thr Val Gly Leu Asp Gln Ala Lys Asn Glu Leu Thr
   740 745 750
Tyr Asp Phe Gln Ser Ala Ala Lys His Lys Pro Glu Ala Ala His
            760
<210> 9260
<211> 206
<212> PRT
<213> Enterobacter cloacae
<400> 9260
Gln Ser Phe Pro Glu Met Lys Lys Pro Thr Arg Ala Pro Ala Gly Gln
                      10
Ile Arg Ile Ile Gly Gly Gln Trp Arg Gly Arg Lys Leu Pro Val Pro
                        25
Asp Ser Pro Gly Leu Arg Pro Thr Thr Asp Arg Val Arg Glu Thr Leu
35
                   4.0
                               4.5
Phe Asn Trp Leu Ala Pro Ser Met Val Asp Ala Asn Cys Leu Asp Cys
                 55
Phe Ala Gly Ser Gly Ala Leu Gly Leu Glu Ala Leu Ser Arg Tyr Ala
               70 75
Ala Ser Ala Thr Leu Leu Glu Met Glu Arg Gly Val Ala Gln Thr Leu
           8.5
                          90
Gln Gln Asn Leu Ala Thr Leu Lys Ala Thr Asn Ala Lys Val Val Asn
       100
                      105
Thr Asn Thr Leu Ser Phe Leu Ala Gln Gln Gly Thr Pro Tyr Asn Val
   115 120
Val Phe Val Asp Pro Pro Phe Arg Lys Gly Leu Leu Glu Glu Thr Leu
               135 140
Ser Leu Leu Glu Gln Asn Gly Trp Leu Ala Asp Asp Ala Leu Ile Tyr
145 150 155
Val Glu Ser Glu Val Glu Asn Gly Leu Pro Pro Val Pro Val His Trp
           165 170 175
Asp Leu His Arg Glu Lys Val Ala Gly Gln Val Ala Tyr Arg Leu Tyr
         180
                        185
His Arg Gln Ala Gln Gly Gly Ser Asp Ala Ser Thr Asp
                     200
      195
<210> 9261
```

<210> 926 <211> 227

<211> 227 <212> PRT

<213> Enterobacter cloacae

<400> 9261 Ser Lys Arg Tyr Asn Met Asn Ser Phe Thr Gln Ser Gln Arg Val Lys Ala Leu Phe Trp Leu Ser Leu Phe His Leu Leu Val Ile Ile Ser Ser 20 25 Asn Tyr Leu Val Gln Leu Pro Ile Ser Ile Phe Gly Phe His Thr Thr 35 40 Trp Gly Ala Phe Ser Phe Pro Phe Ile Phe Leu Ala Thr Asp Leu Thr 50 55 Val Arg Ile Phe Gly Ala Pro Leu Ala Arg Arg Ile Ile Phe Ala Val 70 75 Met Ile Pro Ala Leu Phe Val Ser Tyr Ala Ile Ser Ser Leu Phe Tyr 85 90 Met Gly Ser Trp Gln Gly Phe Glu Ala Leu Thr His Phe Asn Leu Phe 100 105 Val Ala Arg Ile Ala Thr Ala Ser Phe Met Ala Tyr Ala Leu Gly Gln 115 120 Ile Leu Asp Val His Val Phe Asn Arg Leu Arg Gln Asn His Arg Trp 135 140 Trp Met Ala Pro Thr Ala Ser Thr Leu Phe Gly Asn Val Ser Asp Thr 145 150 155 Leu Ala Phe Phe Phe Ile Ala Phe Trp Arg Ser Pro Asp Ala Phe Met 165 170 175 Ala Glu His Trp Met Glu Ile Ala Leu Val Asp Tyr Ala Phe Lys Val 180 185 190 Leu Ile Ser Leu Val Phe Phe Leu Pro Met Tyr Gly Val Leu Leu Asn 195 200 205 Met Leu Leu Lys Arg Leu Ala Asp Lys Ser Glu Ile Ser Ala Leu Gln 210 Ala Gly 225

<211> 200 <212> PRT <213> Enterobacter cloacae

<210> 9262

<400> 9262 Thr Asn Glu Pro Leu Trp Pro Phe Ile Glu Arg Lys Lys Ser Met Arg 10 Asn Leu Val Lys Tyr Val Gly Ile Gly Leu Leu Val Val Gly Leu Ala 25 20 Ala Cys Asp Asn Ser Asp Thr Lys Thr Pro Ala Gln Gly Ala Ser Ala 3.5 40 Glu Ser Asn Ala Thr Gly Gln Pro Val Ser Leu Met Asp Gly Lys Leu 5.5 Ser Phe Ser Leu Pro Ala Asp Met Thr Asp Gln Ser Gly Lys Leu Gly 70 75 Thr Gln Ala Asn Asn Met His Val Tyr Ser Asp Ala Thr Gly Gln Lys 8.5 90 Ala Val Ile Val Ile Val Gly Asp Asp Thr Ser Glu Asp Leu Gly Val 100 105 Leu Ala Lys Arg Leu Glu Asp Gln Gln Arg Ser Arg Asp Pro Gln Leu 120 125 Gln Val Val Thr Asn Lys Ser Val Glu Leu Lys Gly His Thr Leu Gln 130 135 140 Gln Leu Asp Ser Ile Ile Ser Ala Lys Gly Gln Thr Ala Tyr Ser Ser 150 155 Val Val Leu Gly Lys Val Asp Asn Lys Leu Leu Thr Met Gln Ile Thr 165 170 Leu Pro Ala Asp Asn Gln Gln Lys Ala Gln Thr Ala Ala Glu Asn Ile

<211> 452

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190
                      185
        180
Ile Asn Thr Leu Val Ile Gln
   195
<210> 9263
<211> 371
<212> PRT
<213> Enterobacter cloacae
<400> 9263
Arg Ser Arg Arg Ser Pro Ser Gly Ala Leu Gln Leu Thr Arg Pro Pro
                    10
Glu Lys Gly Ile Leu Met Thr Ala Ser Pro Pro Asp Lys Ala Gly Leu
     20
                    25
                                     30
His Ile Leu Leu Lys Leu Ala Cys Leu Val Val Ile Leu Ala Gly Ile
         40
                                  45
His Ala Ala Ala Asp Ile Ile Val Gln Leu Leu Leu Ala Leu Phe Phe
      55
Ala Ile Val Leu Asn Pro Leu Val Thr Trp Phe Leu Arg Arg Gly Ile
65 70 75
Ser Arg Pro Val Ala Ile Thr Ile Val Val Met Val Met Leu Val Val
       85 90 95
Leu Thr Ala Leu Phe Gly Val Leu Ala Ala Ser Leu Ser Glu Phe Ser
        100 105 110
Thr Met Leu Pro Gln Tyr Asn Lys Glu Leu Thr Arg Lys Leu Val Asp
115 120 125
Leu Gln Arg Met Leu Pro Phe Val Asn Leu His Ile Ser Pro Glu Arg
130 135 140
Met Leu Arg Arg Met Asp Ser Glu Lys Val Met Thr Tyr Ala Thr Thr
145 150 155 160
Leu Met Thr Gly Leu Ser Gly Ala Met Ala Ser Ile Leu Leu Val
           165 170 175
Met Thr Val Val Phe Met Leu Phe Glu Val Arg His Val Pro Tyr Lys
      180 185 190
Leu Arg Phe Ala Leu Asn Asn Pro Gln Ile His Ile Ala Gly Leu His
195 200 205
Arg Ala Leu Lys Gly Val Ser Lys Tyr Leu Ala Leu Lys Thr Leu Leu
 210 215 220
Ser Leu Trp Thr Gly Val Ile Val Trp Leu Gly Leu Val Leu Leu Asp
            230 235 240
Val Gln Phe Ala Leu Met Trp Gly Val Leu Ala Phe Leu Leu Asn Tyr
           245 250 255
Val Pro Asn Ile Gly Ala Val Leu Ser Ala Val Pro Pro Met Ile Gln
        260 265 270
Ala Phe Leu Phe Asn Gly Phe Tyr Glu Cys Met Leu Val Gly Ala Leu
 275 280 285
Phe Leu Ile Val His Met Val Leu Gly Asn Ile Leu Glu Pro Arg Met
      295
                               300
Met Gly His Arg Leu Gly Met Ser Thr Met Val Val Phe Leu Ser Leu
             310 315
Leu Ile Trp Gly Trp Leu Leu Gly Pro Val Gly Met Leu Leu Ser Val
325 330 335
Pro Leu Thr Ser Val Cys Lys Ile Trp Met Glu Thr Thr Lys Gly Gly
            345 350
        340
Ser Lys Leu Ala Ile Leu Leu Gly Pro Gly Arg Pro Lys Ser Arg Leu
                    360
Pro Gly
  370
<210> 9264
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Glu Asp Pro

<212> PRT <213> Enterobacter cloacae

<400> 9264 Arq Lys Thr Met Leu Asn Pro Leu Pro Leu Ser Gln Trp Leu Ser Ala 10 Pro Arg Pro Asp Asp Thr Pro Val Ala Trp Gln Asp Asp His Leu Trp 25 Thr Leu Gly Asp Leu Arg His Asp Val Thr Gln Leu Val Asp Thr Leu 35 4.0 Arg Arg Glu Asp Gly Glu Arg Trp Ala Leu Cys Ile Glu Asn Gly Tyr 55 60 Leu Phe Ile Val Ala Leu Leu Ala Thr Leu His Ala Gly Lys Thr Pro 7.5 70 Val Leu Pro Gly His Ser Arg Ala Ala Gln Leu Asn Glu Gln Arg Ala 85 90 Leu Phe Ser Gly Val Leu Ser Asp Thr Thr Leu Asp Phe Gln Gly Gln 100 105 110 Gln Leu Arg Val Ala Ser Ala Gln Arg Ala Gly His Pro Phe Ser Pro 115 120 125 Leu Pro Ala Ile Gly Glu Met Arg Thr Ile Glu Leu Tyr Thr Ser Gly 130 135 140 Ser Thr Gly Thr Pro Gln Arg Val Ser Lys Pro Val Val Ser Leu Asp 155 150 Arg Glu Ala Arg Leu Leu Ala Ala His Phe Gly Glu Arg Leu Ala Gly 165 170 175 Cys His Val Val Ala Ser Val Val Leu His His Leu Tyr Gly Leu Thr 180 185 Phe Arg Val Val Leu Pro Leu Ala Leu Gly Leu Pro Leu His Ala Ser 195 200 205 Leu Leu Asn Tyr Ala Glu Gln Leu Ser Ala Leu Pro Asp Asp Lys Arg 210 215 220 Tyr Leu Phe Ile Ser Ser Pro Ala Phe Leu Lys Arg Leu Asp Ala Ser 230 235 225 Leu Thr Pro Pro Pro Val Asn Leu Leu Phe Ser Ala Gly Gly Ala Leu 245 250 255 Pro Trp Gln Glu Val Ala Ala Val Gln Ala Trp Leu Asn Val Trp Pro 260 265 270 Asp Glu Ile Tyr Gly Ser Thr Glu Thr Gly Val Met Ala Trp Arg Tyr 275 280 285 Arg Gln Glu Glu Ser Thr Arg Trp Gln Pro Phe Pro Gly Val Thr Phe 295 300 290 His Gly Asp Arg Val Met Ser Pro Leu Ile Pro Glu Val Glu Gly Val 310 305 315 Val Leu Asp Asp Ile Leu His Phe Thr Ala Asp Gly Gln Phe Ser Leu 325 330 335 Val Gly Arg Arg Gly Arg Val Val Lys Ile Glu Asp Lys Arg Ile Ser 340 345 350 Leu Asp Asp Ile Glu Arg Arg Leu Leu Ala Leu Asp Gly Ile Arg Glu 355 360 365 Ala Ala Ala Leu Thr Val Thr Arg Gly Gly Arg Gln Gly Ile Gly Val 375 380 Leu Leu Val Leu Asn Glu Ala Val Arg Gln Gln His Glu Gln Gly Lys 390 395 400 Lys Ala Gln Glu Leu Ala Trp Arg Arg Ala Leu Arg Pro Trp Leu Glu 405 410 415 Pro Val Ala Val Pro Arg Tyr Trp Arg Ile Val Asp Glu Ile Pro Val 430 420 425 Asn Ser Met Asn Lys Arg Val Thr Ala Gln Leu Gln Glu Leu Phe His 435 440 445

<210> 9265 <211> 576 <212> PRT <213> Enterobacter cloacae

<400> 9265 Arg Ala Pro His Arg Gln Gln Arg Glu Asp Ser Leu Met Ser Val Thr 10 Phe Arg Pro Cys Val Leu Ile Pro Cys Tyr Asn His Gly Ala Met Met 25 20 30 Ala Ser Val Leu Ala Arg Leu Ala Pro Phe Asp Leu Pro Cys Leu Val 35 40 45 Val Asp Asp Gly Ser Asp Glu Thr Thr Arg Arg Thr Leu Glu Ala Leu 5.5 60 Ala Ala Asp Arg Pro Gln Val Thr Leu Leu Arg Leu Ala Glu Asn Ser 65 70 75 80 65 70 Gly Lys Gly Ala Ala Val Met Gln Gly Leu Lys Asp Cys Ala Asp Arg 85 90 95 Gly Phe Thr His Ala Val Gln Val Asp Ala Asp Gly Gln His Ala Ile 100 105 110 Glu Asp Ile Pro Lys Leu Leu Ala Leu Ala Glu Arg His Pro Asp Ala 115 120 125 Leu Ile Ser Gly Gln Pro Val Tyr Asp Asp Ser Ile Pro Arg Ser Arg 130 135 Leu Tyr Gly Arg Trp Ile Thr His Val Trp Val Trp Ile Glu Thr Leu 145 150 155 160 Ser Leu Gln Leu Lys Asp Ser Met Cys Gly Phe Arg Val Tyr Pro Ile 165 170 175 Ala Pro Val Leu Arg Leu Ala Ala Thr Thr Pro Leu Gly Arg Arg Met 180 185 190 Asp Phe Asp Thr Glu Val Met Val Arg Leu Tyr Trp Gln Gly Asn Asn 195 200 205 Ser Tyr Phe Leu Pro Thr Arg Val Thr Tyr Pro Pro Asp Gly Val Ser 215 220 210 His Phe Asp Ala Leu Lys Asp Asr Val Arg Ile Ser Leu Met His Thr 225 230 235 240 Arg Leu Phe Leu Ser Met Leu Pro Arg Ile Pro Ser Leu Leu Met Arg 245 250 255Arg Arg Ser Gln His Trp Ala Gln Gln Gln Glu Val Lys Gly Leu Trp 265 260 Gly Met Arg Leu Met Leu Arg Val Cys Gln Leu Leu Gly Arg Lys Ala 280 285 275 Phe Thr Ala Leu Leu Trp Pro Val Thr Ala Val Tyr Trp Leu Thr Ala 295 300 Arg Ala Ala Arg Gln Ala Ser Gln Gln Trp Leu Thr Arg Val Lys Thr 305 310 315 Val Met Ala Gln Arg Gln Met Pro Gln Pro Ala Arg Leu Asn Ser Phe 325 330 335 Ser His Phe Leu Arg Phe Gly His Ala Met Leu Asn Lys Val Ala Ser 345 350 340 Trp Arg Gly Glu Met Lys Leu His Arg Asp Leu Val Phe Ala Pro Gly 355 360 365 Ala Gln Glu Ala Leu Gly Leu Asp Asp Pro Gln Gly Lys Leu Leu 375 380 370 Ala Ser His Leu Gly Asp Val Glu Ala Cys Arg Ala Leu Ala Gln Arg 395 390 Glu Gly Ala Lys Thr Ile Asn Ala Leu Val Phe Ser Asp Asn Ala Arg 410

Arg Phe Lys Gln Val Met Glu Glu Met Ala Pro Gln Ala Gly Ile His

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4910
                          425
Leu Met Pro Val Thr Asp Ile Gly Pro Glu Thr Ala Ile Leu Ile Lys
  435
                      440
                                      445
Glu Lys Leu Asp Arg Gly Glu Trp Val Ala Ile Val Gly Asp Arg Ile
 450
            455
                                   460
Ala Val Thr Pro Gln Arg Gly Gly Ser Trp Arg Val Ile Trp Ser Glu
       470
                               475
Phe Met Gly Gln Pro Ala Pro Phe Pro Gln Gly Pro Phe Ile Leu Ala
          485 490 495
Ser Ile Leu Arg Cys Pro Val Val Leu Ile Phe Ala Leu Cys Gln Gln
        500 505
                              510
Gly Lys Leu Thr Leu His Cys Glu Pro Phe Ala Asp Pro Leu Leu Leu
      515 520 525
Pro Arg Gly Glu Arg Gln Gln Ala Leu Gln Gln Thr Val Asp Arg Tyr
530 535 540
Ala Glu Arg Leu Glu His Tyr Ala Leu Leu Ser Pro Leu Asp Trp Phe
545 550 555
Asn Phe Phe Asp Phe Trp Gln Leu Pro Glu Ile Asn Glu Lys Glu
<210> 9266
<211> 142
<212> PRT
<213> Enterobacter cloacae
<400> 9266
Arg Val Leu Thr Asp Pro Arg Phe Thr Ala Glu Val Glu Ile Thr Val
                            10
Pro Phe His Asp Val Asp Met Met Gly Val Val Trp His Gly Asn Tyr
         2.0
                          25
                                          3.0
Phe Arg Tyr Phe Glu Ile Ala Arg Glu Ala Leu Leu Asn Gln Phe Asp
      35
                      4.0
Tyr Gly Tyr Arg Gln Met Lys Ala Ser Gly Tyr Val Trp Pro Val Val
                  5.5
                                 60
5.0
Asp Thr Arg Val Lys Tyr Arg Asp Ala Val Thr Phe Glu Gln Arg Ile
                                75
              70
Arq Ile Arg Ala His Ile Glu Glu Val Glu Asn Arg Leu Arg Ile Ala
            8.5
                             90
Tyr Gln Ile Phe Asp Ala Gln Thr Gly Lys Arg Thr Thr Thr Gly Tyr
         100
                          105 110
Thr Ile Gln Val Ala Val Glu Glu Ala Ser Arg Glu Met Cys Phe Val
                      120
Ser Pro Ala Ile Leu Phe Glu Arg Met Gly Ile Ala Pro
  130
                   135
<210> 9267
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<211> 417 <212> PRT

<213> Enterobacter cloacae

<400> 9267 Thr Val Thr Ala Gly Ala Asn Arg Leu Ala Leu Cys Ser Thr Leu Phe 10 Thr Thr Thr Ser Pro Phe Asn Ile Trp Val Thr Glu Met Ile Tyr Leu 20 25 30 Ser Ala Val Gly Met Val Asn Ala Leu Gly Asn Ser Ala Asp Glu Ile 4.5 40 Ala Ala Asn Leu Ile Ala Gly Val Ala Pro Gly Met Arg Gln Arg Ala Gly Trp Leu Gln Gly Leu Pro Glu Ala Val Leu Gly Gly Val Glu Gly 7.0

Glu Leu Pro Pro Val Pro Glu Ser Phe Ser Ala His Arg Ser Arg Asn 8.5 90 Asn Gln Leu Leu Ala Ala Leu Ala Gln Ile Trp Pro Ala Val Asp 105 100 Ala Ala Ile Ala Arg Val Gly Arg Asp Arg Val Ala Val Val Leu Gly 115 120 Thr Ser Thr Ser Gly Leu Asp Glu Gly Asp Glu Tyr Val Arg Arg Ala 130 135 140 Gln Asn Gly Glu Arg Ser Pro Gln Trp Gln Tyr Pro Gln Gln Glu Leu 145 150 155 160 Gly Asp Pro Ser Arg Phe Leu Ala Ser Trp Leu Ala Leu Asp Gly Pro 165 170 175 Ala Tyr Thr Ile Ser Thr Ala Cys Ser Ser Ser Ala Arg Ala Ile Ile 180 185 190 Ser Gly Arg Arg Leu Ile Asp Ala Gly Leu Val Asp Val Ala Ile Val 195 200 205 Gly Gly Ala Asp Ser Leu Ser Arg Met Pro Val Asn Gly Phe Asn Ser 210 215 220 Leu Glu Ser Phe Ser Pro Thr Leu Cys Glu Pro Phe Gly Arg Asn Arg 230 235 240 Arg Gly Ile Thr Ile Gly Glu Ala Ala Ala Leu Met Val Leu Thr Arg 245 250 255 Glu Pro Gly Glu Val Ala Leu Leu Gly Ala Gly Glu Ser Ser Asp Ala 265 270 260 Tyr His Ile Ser Ala Pro His Pro Gln Gly Glu Gly Ala Ile Arg Ala 280 275 Ile Asn Gln Ala Leu Asn Glu Ala Gly Ile Thr Ala Ala Asp Val Gly 290 295 300 Tyr Ile Asn Leu His Gly Thr Ala Thr Pro Leu Asn Asp Arg Ile Glu 310 315 305 Ala Gln Val Ile His Asp Leu Phe Gly Asp Arg Val Pro Cys Ser Ser 325 330 Thr Lys His Leu Thr Gly His Thr Leu Gly Ala Ala Gly Ile Thr Glu 345 350 340 Ala Ala Leu Ser Trp Leu Ile Leu Thr Arg Ser Leu Pro Leu Pro Pro 360 365 355 Gln Asp Phe Ser Arg Tyr Ala Pro Asp Asp Thr Leu Pro Ala Phe Gly 375 380 370 Leu Leu His Gln Ser Ala Pro Leu Asn Lys Pro Val Ile Leu Ser Asn 390 395 400 Ser Phe Ala Phe Gly Gly Asn Asn Ala Ser Leu Leu Gly Arg Val

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<210> 9268
<211> 110
<212> PRT
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4.05

<213> Enterobacter cloacae

Ala Ala Arg Gly Asp Val Asp Tyr Pro Asp Ala Ala Tyr Gly Pro Gly 85 90 95

Arg Gly Gly Arg Gly Ala Gly Glu Leu Pro Asp Val Gly 100 105 110

<210> 9269 <211> 414

<212> PRT <213> Enterobacter cloacae

<400> 9269 Arg Arg His Ala Met Thr Arg Arg Val Val Ile Thr Gly Met Gly Gly 10 Val Thr Ala Phe Gly Glu Asp Trp Pro Thr Ile Ser Arg Arg Leu Arg 25 3.0 Glu Tyr Glu Asn Ala Val Arg Thr Met Thr Glu Trp Gln Ala Tyr Asp 40 4.5 Gly Leu Gln Thr Leu Leu Ala Ala Pro Ile Glu Asp Phe Thr Leu Pro 5.0 55 Ala His Tyr Thr Arg Lys Arg Ile Arg Ala Met Gly Arg Val Ser Leu 7.5 Leu Ser Thr Arg Ala Thr Glu Leu Ala Leu Glu Gln Ala Gly Leu Ile 90 85 Asp Asp Ala Val Leu Thr Asn Gly Gln Thr Gly Ile Ala Tyr Gly Ser 100 105 Ser Thr Gly Ser Thr Gly Pro Val Ser Glu Phe Ala Ser Met Leu Thr 120 125 Glu Lys His Thr His Asn Ile Thr Gly Thr Thr Tyr Val Gln Met Met 140 130 1.35 Pro His Thr Thr Ala Val Asn Tar Gly Leu Phe Phe Gly Leu Arg Gly 150 155 Arg Val Ile Pro Thr Ser Ser Ala Cys Thr Ser Gly Ser Gln Ala Ile 165 170 Gly Tyr Ala Trp Glu Thr Ile Arg His Gly Tyr Gln Thr Val Met Val 185 180 Ala Gly Gly Ala Glu Glu Leu Cys Pro Ser Glu Ala Ala Val Phe Asp 200 205 195 Thr Leu Phe Ala Thr Ser Gln Arg Asn Asp Ala Pro Lys Thr Thr Pro 210 215 Ser Pro Phe Asp Val Gln Arg Asp Gly Leu Val Ile Gly Glu Gly Ala 230 235 Gly Thr Leu Val Leu Glu Ala Leu Asp His Ala Arg Ala Arg Gly Ala 250 255 245 Thr Ile Tyr Gly Glu Ile Val Gly Phe Ala Thr Asn Cys Asp Ala Ala 260 270 265 His Ile Thr Gln Pro Gln Arg Glu Thr Met Gln Val Cys Met Glu Gln 280 285 Ser Leu Ala Met Ala Gly Leu Gly Pro Gln Asp Ile Gly Tyr Ile Ser 295 300 290 Ala His Gly Thr Ala Thr Asp Arg Gly Asp Ile Ala Glu Ser Gln Ala 315 310 Thr Ala Ala Ile Phe Gly Asp Ser Val Pro Ile Ser Ser Leu Lys Ser 325 330 Tyr Phe Gly His Thr Leu Gly Ala Cys Gly Ala Leu Glu Ala Leu Leu 350 340 345 Ser Leu His Met Met Arg Glu Gly Trp Phe Thr Pro Thr Leu Asn Leu 365 355 360 Arg Gln Pro Asp Glu Gln Cys Gly Ala Leu Asp Tyr Ile Met Gly Glu 375 380 Thr Arg Pro Ile Asp Cys Glu Phe Ile Gln Ser Asn Asn Phe Ala Phe

395

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4913
Gly Gly Ile Asn Thr Ser Ile Ile Ile Lys Arg Trp Ala
            405
<210> 9270
<211> 144
<212> PRT
<213> Enterobacter cloacae
<400> 9270
Ile Glu Tyr Thr Gly Pro Thr Leu Phe Asp Leu Asp Lys Gln Leu Met
Lys Leu Thr Ile Val Arg Leu Val Thr Phe Ser Asp Gln Asp His Ile
                               25
                                                  30
            20
Asp Leu Gly Lys Ile Trp Pro Glu Tyr Ser Pro Ser Ser Leu Ala Val
                                         4.5
                        40
Asp Glu Asn His Arg Ile Tyr Ala Ala Arg Phe Asn Glu Arg Leu Leu
                      55
 50
Ala Ala Val Arg Val Thr Leu Ser Gly Thr Glu Gly Ala Leu Asp Ser
                                      7.5
                   70
Leu Arg Val Arg Asp Val Thr Arg Arg Arg Gly Val Gly Gln Tyr Leu
               85
                                   90
Ile Glu Glu Val Ile Arg Glu Asn Pro Ser Val Thr Ser Trp Trp Met
                               105
           100
Ala Asp Val Gly Val Glu Asp Arg Gly Val Met Ala Ala Phe Met Gln
       115
                         120
Ala Leu Gly Phe Thr Ala Gln Ala Asn Gly Trp Glu Lys Arg Cys
   130
                       135
<210> 9271
<211> 136
<212> PRT
<213> Enterobacter cloacae
<400> 9271
Phe Thr Leu Lys Ala Lys Trp Lys Met Val Cys Arg Pro Phe Pro Phe
                                   1.0
Thr Gly Ile Cys Thr Ala Arg Arg Ser Pro Ala Arg Trp Leu Ile Val
                                25
                                                   30
            20
Cys Ile Thr Val Arg His Lys Glu Asp Pro Met Pro Val Leu Ile Asn
                                               45
        35
                           4.0
Val Gly Arg Leu Leu Met Leu Gly Val Trp Ala Phe Leu Ile Leu Asn
   50
                        55
                                           60
Leu Val His Pro Phe Pro Arg Pro Leu Asn Ile Phe Ile Asn Val Ala
                    70
                                       75
Leu Ile Phe Thr Ala Phe Met His Ala Leu Gln Met Val Met Leu Lys
                                    90
                                                       95
                85
Asn Gly Leu Pro Lys Asp Ser Pro Pro Met Thr Gly Trp Gln Gln Leu
                               105
                                                   110
            100
Arg Val Phe Ile Phe Gly Val Phe Glu Leu Leu Val Trp Met Lys Lys
       115
Phe Lys Ala Gln Val Lys Lys
   130
                        135
<210> 9272
<211> 251
<212> PRT
<213> Enterobacter cloacae
<400> 9272
Lys Ile Pro Ser Asp Tyr Ala Glu Phe Arg Ile Pro Arg Leu Pro Arg
                                                       15
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```
His Cys Gln Thr Thr Ala Arg Val Thr Thr Leu Asp Gln Glu Leu Ile
Ile Gln Pro Gln Gln Leu Gln Gly Val Asn Met Leu Trp Ser Phe Ile
     3.5
Ala Val Cys Phe Ser Ala Trp Leu Tyr Val Asp Ala Ser Tyr Arg Gly
                  55
Pro Ala Trp Gln Arg Trp Leu Phe Lys Pro Val Thr Leu Leu Leu
                70
Leu Leu Leu Ala Trp Gln Ala Pro Met Phe Asn Ala Val Ser Tyr Leu
            8.5
                            90
Val Leu Ala Gly Leu Cys Ala Ser Leu Ile Gly Asp Ala Leu Thr Leu
        100 105
                             110
Leu Pro Arg Gln Arg Leu Leu Tyr Ala Val Gly Ala Phe Phe Leu Ser
    115 120
                            125
His Leu Leu Tyr Thr Ile Tyr Phe Ala Ser Gln Met Thr Leu Ser Phe
                135 140
Phe Trp Pro Leu Pro Leu Val Leu Leu Val Ile Gly Ala Leu Leu Ile
               150 155
Ala Val Ile Trp Ser Arg Leu Glu Glu Met Arg Leu Pro Val Cys Thr
          165 170 175
Phe Ile Ala Met Thr Leu Val Met Val Trp Leu Ala Gly Glu Leu Trp
         180 185 190
Phe Phe Arg Pro Thr Ala Pro Ala Met Ser Ala Phe Phe Gly Ala Ala
195 200 205
Leu Leu Leu Gly Asn Ile Val Trp Leu Gly Ser His Tyr Arg Arg
210 215 220
210
Arg Phe Arg Ala Asp Asn Ala Ile Ser Ala Ala Cys Tyr Phe Ala Gly
                               235
225
               230
His Phe Leu Ile Val Arg Ser Leu Tyr Ile
```

<210> 9273 <211> 307

<212> PRT

<213> Enterobacter cloacae

180

245

<400> 9273

Arg Ala Arg Ala Ala Ala Lys Pro Pro Val Pro Ala Pro Leu Pro Ala 10 Gly Arg Ala Pro Val His Pro Ala Gly Arg Ala Pro Ala Val Ala Met 20 25 Asp Ala Pro Met Arg Gly Leu Arg Ser Arg Leu Asp Arg Leu Trp Arg 40 45 35 Met Leu Met Thr Gly Leu Cys Phe Ala Leu Phe Gly Leu Gly Gly Leu 5.5 Thr Leu Ser Leu Val Trp Phe Asn Leu Leu Ile Phe Gln Arg Asp 70 75 Arg Thr Gln Arg Arg Arg Leu Ala Arg Arg Thr Ile Ser Ala Ser Phe 90 8.5 Arg Leu Phe Leu Ala Val Val Arg Gly Ala Gly Val Leu Asp Tyr Arg 105 100 Phe Asn Asn Leu Asp Val Leu Arg Ala Glu Arg Gly Cys Leu Val Ile 125 120 115 Ala Asn His Pro Ser Leu Leu Asp Tyr Val Leu Leu Ala Ser Val Met 135 140 Asn Glu Thr Asp Cys Leu Val Lys Ser Ala Leu Leu Arg Asn Pro Phe 155 150 Val Ser Gly Val Ile Arg Ala Ala Asp Tyr Leu Ile Asn Ser Glu Ala 170 165

Asp Thr Leu Leu Ala Ala Ser Gln Gln Arg Leu Ser Gln Gly Asp Thr

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4915
Leu Leu Ile Phe Pro Glu Gly Thr Arg Thr Arg Val Gly Glu Ala Met
                                         205
  195
                        200
Thr Leu Gln Arg Gly Ala Ala Asn Ile Ala Val Arg Cys Asn Ser Ala
 210
                    215
                                      220
Val Arg Val Val Val Ile His Cys Ser Glu Arg Met Leu Asp Lys Gln
225 230
                                  235
Ser Ser Trp Tyr Asn Val Pro Pro Asn Lys Pro Val Phe Thr Val Asp
           245 250
Val Arg Glu Arg Ile Asn Ile His Asp Phe Tyr Asp Ala Ser Gln His
        260 265
                                270
Glu Pro Ala Leu Ala Ala Arg Gln Leu Asn Arg His Met Gln His Gln
   275 280
                                        285
Leu Thr Thr Gly Leu Gin Ser Leu Ser Gly Thr Lys Asp Ala Ser Ala
                                      300
            295
Leu Ser
305
<210> 9274
<211> 110
<212> PRT
<213> Enterobacter cloacae
<400> 9274
Arg Asp Ala Ser Ala Leu Leu Phe Arg Cys His Ala Arg Gly Phe Tyr
                         10
Pro Ser Thr Thr Arg Leu Arg Met Thr Ala Met Thr Glu Gln Gln Thr
                           25
                                             30
          20
Ile Tyr Gln Glu Val Ser Ala Leu Leu Ile Thr Leu Phe Glu Ile Ala
                        40
                                       4.5
Pro Glu Asp Ile Thr Pro Glu Ala Arg Leu Tyr Glu Asp Leu Asp Leu
 50
Asp Ser Ile Asp Ala Val Asp Met Val Val His Leu Gln Lys Lys Thr
                 70
                                75
```

Gly His Lys Ile Lys Pro Glu Thr Phe Lys Ala Val Arg Thr Val Gln

Asp Val Val Asp Val Val Glu Gln Leu Gln Arg Asp Ala

90

<210> 9275 <211> 271

65

<212> PRT

<213> Enterobacter cloacae

100

85

<400> 9275

Cys Leu Pro Arg His Gly Pro Arg Glu His Leu Pro Ala Glu Arg Gly 10 Arg Ile Asn His Thr Phe Gln Pro Gly Asn Thr Ile Met Arg Ser Val 20 Leu Val Thr Gly Ala Ser Lys Gly Ile Gly Arg Ala Ile Ala Leu Gln 40 45 35 Leu Ala Ala Asp Gly Phe Thr Val Gly Val His Tyr His Arg Asp Glu 55 Ala Gly Ala Gln Glu Thr Leu Glu Ala Ile Val Gln Ala Gly Gly Ala 70 7.5 Gly Arg Leu Leu Thr Phe Asp Val Gly Asn Arg Glu Gln Cys Arg Thr 90 8.5 Val Leu Glu Gln Glu Ile Ala Asp His Gly Ala Trp Tyr Gly Val Val 105 110 100 Ser Asn Ala Gly Ile Thr Arg Asp Gly Ala Phe Pro Ala Leu Ser Asp 120 125 Asp Asp Trp Asp Ser Val Ile His Thr Asn Leu Asp Ser Phe Tyr Asn

```
135
Val Ile His Pro Cys Ile Met Pro Met Ile Gly Thr Arg Lys Gly Gly
         150
                              155
Arg Ile Ile Thr Leu Ser Ser Val Ser Gly Ile Met Gly Asn Arg Gly
                        170
            165
Gin Val Asn Tyr Ser Ala Ala Lys Ala Gly Ile Ile Gly Ala Thr Lys
      180
               185
                                       190
Ala Leu Ala Thr Glu Leu Ala Lys Arg Lys Ile Thr Val Asn Cys Ile
 195 200
                                    205
Ala Pro Gly Leu Ile Asp Thr Gly Met Ile Glu Met Asp Glu Ala Ala
 210 215
                                 220
Leu His Ala Ala Met Ser Ile Ile Pro Met Gln Arg Met Gly Gln Ala
225 230 235
Glu Glu Val Ala Gly Leu Ala Ser Tyr Leu Met Ser Asp Lys Ala Gly
         245 250 255
Tyr Val Thr Arg Gln Val Ile Ser Ile Asn Gly Gly Met Leu
               265
         260
```

<211> 266 <212> PRT

<210> 9276

<213> Enterobacter cloacae

<400> 9276 Thr Met Lys Ile Asp Leu Thr Gly Lys Val Ala Leu Val Thr Ala Ser 10 Thr Gly Gly Ile Gly Phe Ala Ile Ala Arg Gly Leu Ala Glu Ser Gly 25 3.0 Ala Glu Val Ile Val Asn Gly Arg Ser Val Asp Ser Val Asn Lys Gly 45 35 40 Ile Gln Ala Leu Gln Gln Val Val Pro Gly Val Gln Val Arg Ala Ala 50 55 Ile Ala Asp Leu Ser Ser Gln Glu Gly Val Asp Glu Leu Leu Arg Val 70 75 Ala Thr His Val Asp Ile Leu Val Asn Asn Ala Gly Ile Tyr Gly Gln 85 90 Gln Asp Phe Tyr Ser Thr Asp Asp Glu Thr Trp Glu Arg Tyr Trp Gln 100 105 Thr Asn Val Met Ser Gly Val Arg Leu Ser Arg Ala Leu Leu Pro Gly 115 120 125 Met Val Gln Lys Gly Trp Gly Arg Val Val Phe Ile Ser Ser Glu Ser 135 Ala Cys Asn Ile Pro Ala Asp Met Ile His Tyr Gly Val Thr Lys Thr 145 150 155 Ala Gln Leu Ser Leu Ala Arg Gly Leu Ala Lys Phe Val Ala Gly Ser 165 170 Gly Val Thr Val Asn Ser Val Leu Pro Gly Pro Thr Met Ser Asp Gly 180 185 190 Phe Ala Ala Met Met Lys Asp Glu Ile Glu Arg Thr Gly Lys Ser Leu 195 200 205 Glu Gln Leu Ala Lys Ala Phe Val Met Glu Asn Arg Pro Ser Ser Val 210 215 220 Ile Gln Arg Ala Ala Thr Val Glu Glu Val Ala Asn Met Val Val Tyr 230 235 240 Val Cys Ser Met Gln Ala Ser Ala Thr Ser Gly Ala Ala Leu Arg Val 245 250 Asp Gly Gly Val Val Asp Asp Ile Val 265

<210> 9277 <211> 748 <212> PRT <213> Enterobacter cloacae

<400> 9277 Arq Leu Thr Leu Glu Ser Thr Pro Glu Cys Met Leu Arg Leu Met Arg Lys Leu Ser Leu Pro Glu Thr Ala Met Ser Thr Pro Glu Thr Pro Lys 25 Lys Val Pro Gln Phe Ser Ala Leu Lys Leu Ser Pro Val Pro Pro Lys Glu Asp Cys Cys Cys Glu Gly Ala Cys Glu Thr Gln Thr Glu Ala Leu Pro Glu Ser Gly Asn Arg Tyr Ser Trp Val Val Asn Gly Met Asp Cys 70 7.5 Ala Ala Cys Ala Arg Lys Val Glu Asn Ala Val Lys Gln Val Pro Gly 85 90 Val Asn His Val Gln Val Leu Phe Ala Thr Glu Lys Leu Leu Val Ser 100 105 110 Ala Glu Asn Asp Val Ser Arg Gln Val Glu Ala Ala Val Ser Lys Ala 115 120 125 Gly Tyr Thr Leu Arg Ser Glu Thr Ala Pro Ala Glu Lys Thr Ser Pro 130 135 140 Leu Lys Glu Asn Leu Pro Leu Ile Thr Leu Ile Ile Met Met Ala Leu 145 150 155 160 Ser Trp Gly Leu Glu Gln Ile Asn His Pro Phe Gly Asn Leu Ala Phe 165 170 175 Ile Ala Thr Thr Leu Val Gly Leu Phe Pro Ile Ala Arg Gln Ala Leu 180 185 190 Arg Leu Met Arg Ser Gly Ser Trp Phe Ala Ile Glu Thr Leu Met Ser 195 200 205 Val Ala Ala Ile Gly Ala Leu Phe Ile Gly Ala Thr Ala Glu Ala Ala 210 215 220 Met Val Leu Leu Phe Leu Ile Gly Glu Arg Leu Glu Gly Trp Ala 225 230 235 Ala Ser Arg Ala Arg Lys Gly Val Ser Ala Leu Met Ala Leu Lys Pro 245 250 255 Glu Thr Ala Thr Arg Val Ile Asp Gly Gln Arg Glu Thr Val Ala Ile 265 270 Asn Thr Leu Arg Pro Gly Asp Val Ile Glu Val Pro Ala Gly Gly Arg 275 280 285 Leu Pro Ala Asp Gly Ala Leu Val Thr Ala Thr Ala Ser Phe Asp Glu 295 300 Ser Ala Leu Thr Gly Glu Ser Ile Pro Vai Ala Arg Ala Ala Gly Glu 310 315 Lys Val Pro Ala Gly Ala Thr Ser Val Asp Arg Leu Val Gln Leu Thr 330 325 Val Leu Ser Glu Pro Gly Asp Ser Ala Ile Asp Arg Ile Leu Arg Leu 340 345 350 Ile Glu Glu Ala Glu Glu Arg Arg Ala Pro Val Glu Arg Phe Ile Asp 355 360 365 355 360 Arg Phe Ser Arg Ile Tyr Thr Pro Ala Ile Met Leu Val Ala Leu Leu 375 380 Val Thr Val Val Pro Pro Leu Cys Phe Gly Ala Pro Trp Glu Gly Trp 390 395 Ile Tyr Lys Gly Leu Thr Leu Leu Leu Ile Gly Cys Pro Cys Ala Leu 405 410 Val Ile Ser Thr Pro Ala Ala Ile Thr Ser Gly Leu Ala Ala Ala Ala 420 425 Arg Arg Gly Ala Leu Ile Lys Gly Gly Ala Ala Leu Glu Gln Leu Ser 440 Gln Ile Arg His Val Ala Phe Asp Lys Thr Gly Thr Leu Thr Val Gly

```
455
Lys Pro Gln Val Thr Gly Val Tyr Pro Gln Asp Val Ser Glu Asp Asp
                           475
              470
Leu Leu Thr Leu Ala Ala Ala Val Glu Gln Gly Ser Thr His Pro Leu
          485
                           490
Ala Gln Ala Ile Val Arq Glu Ala Gln Ser Arg Gly Leu Asn Ile Pro
        500
             505
Pro Ala Thr Ala Gln Arg Ala Leu Val Gly Ser Gly Ile Glu Ala Val
 515 520
Val Glu Gly Lys Lys Val Leu Ile Ala Ala Ala Asp Ser Arg Ser Thr
      535
                                 540
Pro Gln Val Glu Ala Leu Glu Gln Ala Gly Gln Thr Val Val Ala Val
545 550 555
Met Gln Asp Gly Val Pro Met Gly Met Leu Ala Leu Arg Asp Thr Leu
         565 570 575
Arg Asp Asp Ala Lys Asp Ala Val Asp Ala Leu His Arg Leu Gly Val
        580 585 590
Gln Gly Val Ile Leu Thr Gly Asp Asn Pro Arg Ala Ala Ala Ala Ile
    595 600 605
Ala Gly Glu Leu Gly Leu Ala Phe Lys Ala Gly Leu Leu Pro Ala Asp
610 615 620
Lvs Val Ser Ala Val Thr Glu Leu Asn Ser Asn Ala Pro Leu Ala Met
625 630 635 640
Val Gly Asp Gly Ile Asn Asp Ala Pro Ala Met Lys Ala Ser Thr Ile
          645 650
Gly Ile Ala Met Gly Ser Gly Thr Asp Val Ala Leu Glu Thr Ala Asp
     660 665 670
Ala Ala Leu Thr His Asn Arg Leu Thr Gly Leu Ala Gln Met Ile Asp
675 680 685
Leu Ala Arg Ala Thr Arg Ala Asn Ile Arg Gln Asn Ile Gly Ile Ala
690 695 700
Leu Gly Leu Lys Gly Ile Phe Leu Val Thr Thr Leu Leu Gly Met Thr
705 710 715 720
Gly Leu Trp Leu Ala Val Leu Ala Asp Thr Gly Ala Thr Val Leu Val
          725 730
Thr Ala Asn Ala Leu Arg Leu Leu Arg Gln Arg
<210> 9278
<211> 97
<212> PRT
<213> Enterobacter cloacae
<400> 9278
Gin Pro Val Phe Asn Leu Cys Gln Glu Arg Lys Met Gln Ala Leu Tyr
                           10
Leu Glu Ile Lys Asn Leu Ile Ile Ser Thr Leu Asn Leu Glu Glu Leu
        20
                        25
Thr Pro Glu Asp Ile Asp Thr Asp Ala Ala Leu Phe Gly Asp Gly Leu
     35
                     40
Gly Leu Asp Ser Ile Asp Ala Leu Glu Leu Gly Leu Ala Val Lys Asn
  50
                  55
Gln Tyr Gly Val Val Leu Ser Ala Glu Ser Asp Glu Met Arg Gln His
               7.0
                      75 80
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Phe Tyr Ser Val Ala Thr Leu Ala Ala Phe Ile His Gln Gln Arg Ala

85

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<212> PRT
<213> Enterobacter cloacae
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<400> 9279 Arg Pro Ala Pro Gly Ala Ala Val Gly Arg Gly Met Pro Asp Pro Ala Gly Arg Ala Ala Val Ala Ala Ala Trp Arg Ala Ala Glu Gln Gln Arg Ala Arq His Ala Ala Glu Thr Asp Ala Arg Arg Asp Pro Ser Arg Ser Gln Arg Arg Ile Tyr Ala Ala Pro Arg Pro Pro Ala His Leu Ala Gly 5.5 50 Gln Pro Arg Gln Thr Ala Gly Pro Ala Arg Gly Ala Ala Val Val Asn 70 7.5 Pro Ala Ala Thr Gln Pro Gly Ala Glu Cys Arg Lys Arg Ser Ala Gly 85 90 Cys Arg Arg Ala Thr Gly Leu Gly Arg Pne Leu Leu Ala Ala Pro Gln 100 105 110 Trp Pro Gly Arg Ser Gly His Pro Arg Pro Pro Ala Lys Arg Arg 115

<211> 181 <212> PRT <213> Enterobacter cloacae

<400> 9280

<210> 9280

Leu Ala Pro Phe Leu Asp Ala Asp Gly Asn Leu Pro Gly Trp Phe Ala 65 70 75 80

Leu Glu Leu Met Ala Gln Thr Val Gly Val Trp Ser Glu Trp His Arg 95 95

Met Gln Lys Gly Leu Pro His Cys Ala Leu Gly Met Val Leu Gly Ala 100 105 110 Arg Glu Leu Val Cys Asp Ala Gly His Phe Ala Ala Gly Ser Thr Leu

115 120 125
Thr Ile Thr Ile Glu Arg Leu Met Gln Asp Glu Arg Phe Gly Ser Phe

130 135 140 Cys Thr Ile His Ala Asp Ser Val Ser Leu Ala Thr Gly Arg Val

145 150 160 Asn Thr Phe Gln Pro Ser Glu Glu Glu Leu Thr Thr Leu Phe Asn Gln 165 170 177

Gly Thr Pro Ser 180

<210> 9281

<211> 203 <212> PRT

<213> Enterobacter cloacae

<400> 9281

Thr Leu Gly Val Thr Met Tyr Gln Phe Val Leu Gly Lys Ile Ser Thr 1 5 10 15 Leu Ser Ala Asp Pro Leu Ala Ser Thr Leu Ala Asp Met Ala Pro Gln

Gly Ala Arg His Ala Ser Trp Leu Ala Gly Arg Thr Leu Leu Ala Arg 35 4.0 Thr Leu Ser Pro Ser Pro Leu Pro Glu Ile Ile Tyr Gly Glu Gln Gly 55 Lys Pro Ala Phe Ala Asn Gly His Pro Leu Trp Phe Asn Leu Ser His 70 7.5 Ser Gly Asp Asp Ile Ala Leu Leu Met Ser Asp Glu Gly Glu Val Gly 8.5 90 Cys Asp Ile Glu Val Ile Arg Pro Arg Glu Asn Trp Gln Ala Leu Ala 105 110 100 Asn Ala Val Phe Ser Leu Thr Glu His Asp Glu Leu Glu Arg Glu Ala 115 120 125 Pro Glu Glu Gln Leu Ser Ala Phe Trp Arg Ile Trp Thr Arg Lys Glu 130 135 140 Ala Ile Val Lys Gln Arg Gly Gly Ser Ala Trp Gln Ile Val Ser Ile 145 150 155 Asp Ser Thr Ala Gln Ser Leu Pro Val Ser Gln Leu Arg Phe Gly Ser 165 170 175 Leu Ser Leu Ala Val Cys Thr Pro Thr Pro Phe Thr Leu Thr Ala Glu 180 185 190 Ala Val Thr Tyr Ser Gly Ile Pro Ala Ala

<210> 9282 <211> 309 <212> PRT <213> Enterobacter cloacae

<400> 9282 Ile Thr Leu Cys Leu Asn Gln Ile His Pro Lys Phe Arg Leu Ile Met 10 His Lys Thr Thr Leu Glu Gln Trp Ala Leu Leu Glu Arg Val Ile Glu Ala Gly Ser Phe Ala Lys Ala Ala Glu Glu Thr Tyr Arg Ser Gln Ser 35 40 Ser Val Ser Tyr Asn Leu Ser Leu Leu Gln Glu Arg Leu Gly Val Ala 5.5 Leu Leu Met Thr Glu Gly Arg Arg Ala Val Leu Thr Pro Ala Gly Glu 7.5 Leu Leu Leu Asn Gln Val Lys Pro Leu Leu Lys Ala Phe Ala Tyr Val 90 85 Glu Thr Arg Ala Ala Thr Leu Arg Ser Gly Met Arg Thr Arg Ile Asp 100 105 Leu Met Val Asp Ser Ile Phe Pro Arg Ser Arg Leu Phe Ala Ile Leu 115 120 125 Arg Gln Phe Gln Gln Leu Tyr Pro Gln Thr Gln Val Arg Leu Thr Glu 135 140 130 Val Leu Glu Asn Ser Arg Ala Asp Ala Leu Asn Asp Glu Ala Asp Val 150 155 145 Met Val Leu Thr Arg Arg Gln Asp Ile Thr Gly Leu Gly Glu Trp Leu 165 170 175 Met Asn Ile Asp Phe Val Ala Val Ala His His Ala His Pro Leu Phe 185 190 180 Ser Leu Asp Thr Pro Leu Asn Asp Glu Met Leu Arg Pro Trp Pro Arg 200 205 195 Ile Gln Ile Ala Asp Ser Gln Pro Thr Thr His Pro Thr Gly Glu Ser 220 215 Trp Thr Phe Ser Thr Ile Asp Ala Ala Ile Glu Ala Val Met Tyr Gln 235 230 Val Gly Tyr Gly Trp Leu Pro Glu Glu Arg Ile Gln Thr Pro Leu Gln

<210> 9285 <211> 233 <212> PRT

250 245 Gln Gly Ile Leu Lys Thr Leu Pro Leu Ser His Gly Val Arg Arg Ala 265 270 260 Thr Pro Leu His Leu Ile Val Lys Arg Ser Leu Ser Pro Leu Asp Glu 275 280 285 Gln Val Glu Thr Leu Leu Arg Leu Phe Lys Gln Glu Pro Ser Ser Ser 290 295 Thr Ala Thr Leu 305 <210> 9283 <211> 106 <212> PRT <213> Enterobacter cloacae <400> 9283 Gly Glu Ala Phe Ala Tyr Ala Leu Asn Gln Trp Asp Ala Leu Cys Tyr 10 Tyr Cys Asp Asp Gly Leu Ala Glu Pro Asp Asn Asn Ala Ala Glu Arg 20 25 30 Ala Leu Arg Ala Val Cys Leu Gly Lys Lys Asn Tyr Ile Phe Phe Gly 35 40 45 Ser Asp His Gly Gly Glu Arg Gly Ala Leu Leu Tyr Gly Leu Ile Gly 55 60 Thr Cys Arg Leu Asn Gly Ile Asp Pro Glu Gly Tyr Leu Arg His Ile 70 75 Leu Ser Val Leu Pro Glu Trp Pro Ile Asn Lys Val Ala Glu Leu Leu 85 Pro Trp Asn Val Asp Leu Thr Asn Lys 100 <210> 9284 <211> 156 <212> PRT <213> Enterobacter cloacae <400> 9284

Leu Phe Gly Tyr Val Asn Thr Gly Asp Pro Thr Met Lys Lys Ile Leu 10 Val Ser Phe Val Ala Ile Met Ala Ala Ala Ser Ser Ala Met Ala Ala 20 . 2.5 Glu Thr Met Asn Met His Asp Gln Val Asn Asn Ala Gln Ala Pro Ala 35 40 45 His Gln Met Gln Ser Ser Ala Glu Lys Ser Ala Ile Gln Gly Asp Ser 55 60 Met Thr Met Met Asp Met Ser Ser His Asp Gln Ala Ala Met Ser His 70 7.5 Asp Met Met Gln Asn Ser Asn Ser Ala Ala His Gln Asp Met Ala Glu 90 85 Met His Lys Lys Met Met Lys Ala Lys Pro Gly Ala Thr Asn Glu Thr 105 100 Ala Lys Ser Phe Ser Glu Met Ser Glu His Glu Lys Ala Ala Ala Val 115 120 125 His Glu Lys Ala Asn Asn Gly Gln Ser Ser Val Val His Gln Gln Gln 135 Ala Asp Lys His Arg Ser Gln Ile Thr Gln Asn 150

<213> Enterobacter cloacae

<400> 9285 Gly Thr Ile Cys Pro Arg Gly Leu Thr Met Ile Arg Phe Glu His Val Ser Lys Ala Tyr Leu Gly Gly Arg Gln Ala Leu Gln Gly Val Thr Phe 2.0 25 30 His Leu Gln Pro Gly Glu Met Ala Phe Leu Thr Gly His Ser Gly Ala 4.0 35 Gly Lys Ser Thr Leu Leu Lys Leu Ile Cys Gly Ile Glu Arg Pro Ser 55 Ala Gly Lys Ile Trp Phe Ser Gly His Glu Ile Ser Arg Leu Lys Asn 70 7.5 Arg Glu Val Pro Phe Leu Arg Arg Gln Ile Gly Met Ile Phe Gln Asp 90 85 His His Leu Leu Met Asp Arg Thr Val Phe Asp Asn Val Ala Ile Pro 100 105 110 Leu Ile Ile Ala Gly Ala Ser Tyr Asp Asp Ile Arg Arg Arg Val Ser 125 115 120 Ala Ala Leu Asp Lys Val Gly Leu Leu Asp Lys Ala Lys Asn Phe Pro 130 135 140 Ile Gln Leu Ser Gly Gly Glu Gln Gln Arg Val Gly Ile Ala Arg Ala 150 155 160 Val Val Asn Lys Pro Ala Val Leu Leu Ala Asp Glu Pro Thr Gly Asn 170 175 165 Leu Asp Asp Ala Leu Ser Glu Gly Ile Leu Arg Leu Phe Glu Glu Phe 180 185 190 Asn Arg Val Gly Val Thr Val Leu Met Ala Thr His Asp Met Gly Leu 195 200 205 Ile Ser Arg Arg Ser Tyr Arg Met Leu Thr Leu Ser Asp Gly His Leu 215 His Gly Gly His Gly Glu Gln Ala

<210> 9286 <211> 448

<212> PRT <213> Enterobacter cloacae

<400> 9286 Arg Pro Leu Trp Arg Ile Pro Cys Pro Trp Gln Thr Leu Thr Asp Ala 1.0 Leu Ser Arg Arg Leu Ser Glu Gly Asp Arg Val Lys Asn Asn Glu Leu 20 25 Asn Asp Arg Arg Leu Gln Ala Thr Pro Arg Gly Ile Gly Val Met Cys 35 4.0 Asn Phe Tyr Ala Asp Lys Ala Glu Asn Ala Thr Val Trp Asp Val Glu 55 Gly Asn Glu Tyr Ile Asp Phe Ala Ala Gly Ile Ala Val Leu Asn Thr 70 75 Gly His Arg His Pro Lys Val Ile Ala Ala Val Glu Lys Gln Leu His 85 90 Ala Phe Thr His Thr Ala Tyr Glr Ile Val Pro Tyr Glu Gly Tyr Val 105 100 Ser Leu Ala Glu Arg Ile Asn Gln Arg Val Pro Ile Glu Gly Pro Ala 115 120 Lys Thr Ala Phe Phe Ser Thr Gly Ala Glu Ala Val Glu Asn Ala Val 135 140 Lys Ile Ala Arg Ala Tyr Thr Arg Arg Ser Gly Leu Ile Thr Phe Gly 150 155 Gly Ala Phe His Gly Arg Thr Phe Met Thr Met Ala Leu Thr Gly Lys

```
170
            165
Val Ala Pro Tyr Lys Leu Gly Phe Gly Pro Phe Pro Gly Ser Val Tyr
                    185
        180
                                       190
His Ala Gln Phe Pro Asn Ser Leu His Gly Val Ser Thr Ala Glu Ala
   195
          200
                                   205
Leu Lys Ser Leu Glu Arg Ile Phe Lys Ala Asp Ile Ala Pro Asp Gln
 210 215
                         220
Val Ala Ala Ile Ile Ile Glu Pro Val Gln Gly Glu Gly Gly Phe Asn
225 230 235 240
Val Ala Pro Ala Asp Phe Met Gln Ala Leu Arg Ala Leu Cys Asp Thr
         245 250
                               255
His Gly Ile Leu Leu Ile Ala Asp Glu Val Gln Thr Gly Phe Ala Arg
        260 265 270
Thr Gly Lys Leu Phe Ser Met Glu Asn His Cys Val Lys Pro Asp Leu
     275 280 285
Ile Thr Met Ala Lys Ser Leu Ala Gly Gly Met Pro Leu Ser Ala Val
 290 295 300
Ser Gly Arg Ala Glu Val Met Asp Ala Pro Ala Pro Gly Gly Leu Gly
305 310 315
Gly Thr Tyr Ala Gly Asn Pro Leu Ala Ile Ala Ala Ala His Ala Val
           325 330 335
Leu Asp Val Ile Asp Glu Asp Asp Leu Cys Thr Arg Ala Ala His Leu
     340
             345 350
Gly His His Leu Val Glu Val Leu Asn Lys Ala Lys Asp Gly Cys Pro
355 360 365
Tyr Ile Ala Asp Ile Arg Gly Gln Gly Ser Met Val Ala Val Glu Phe
370 375 380
Thr Asp Pro Gln Thr Gly Gln Pro Ser Pro Glu Phe Thr Arg Gln Val
    390 395
Gln Glu Arg Ala Leu Asn Glu Gly Leu Leu Leu Ser Cys Gly Val
         405 410 415
Tyr Gly Asn Val Ile Arg Phe Leu Tyr Pro Leu Thr Ile Pro Glu Ala
      420 425 430
Gln Phe Arg Lys Ala Leu Asp Ile Ile Ser Ala Ser Leu Thr Arg
                    440
<210> 9287
<211> 112
<212> PRT
<213> Enterobacter cloacae
<400> 9287
Lys Tyr Arg Met Leu Phe Asn His Asn Lys Thr Lys Tyr Lys His Asp
                          10
Ile Thr Asn Gly Asp Ser Glu Met Lys Arg Asn Ala Lys Thr Leu Ile
 20
                       25
Ala Gly Met Val Ala Leu Ser Ile Ser His Ala Ala Met Ala Asp Asp
                  40
                            4.5
Ile Lys Val Ala Val Val Gly Ala Met Ser Gly Pro Val Ala Gln Trp
               55
Gly Asp Met Glu Phe Asn Gly Ala Arg Gln Ala Ile Lys Asp Ile Asn
              70 75
Ala Lys Gly Gly Ile Lys Gly Asp Lys Leu Val Gly Val Glu Tyr Asp
         85 90
Asp Ala Cys Asp Pro Val Leu Thr Pro Gly Ala Arg Ile Asn Ala Ser
         100
                       105
<210> 9288
<211> 366
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<211> 366 <212> PRT

<213> Enterobacter cloacae

```
<400> 9288
Arg Asp Ala Ser Leu Thr Gly Pro Arg Phe Leu Leu Cys Ala Trp Cys
                          10
Phe Val Phe Leu Lys Gly Leu Ser Met Ser Ala Ala His Leu Gly Phe
   20
                       25
Pro Thr Glu Thr Val Val Val Phe Val Val Met Ala Val Gly Ala Met
                                   45
   35
                    40
Phe Ile Asp Leu Phe Met His Arg His Asp Lys Pro Ile Ser Leu Lys
 50 55
Ser Ala Val Met Trp Ser Ile Phe Trp Val Met Met Ala Met Ala Phe
             7.0
                             7.5
Ala Gly Phe Leu Tyr Val His His Gly Ala Glu Met Ala Ser Leu Phe
         8.5
                          90
Leu Thr Gly Tyr Ala Leu Glu Glu Val Leu Ser Val Asp Asn Leu Phe
       100
            105 110
Val Met Met Ala Ile Phe Ala Trp Phe Gly Val Pro Asp Arg Tyr Arg
                                   125
  115 120
His Arg Val Leu Tyr Trp Gly Val Leu Gly Ala Ile Val Phe Arg Gly
 130 135 140
Ile Phe Val Ala Ile Gly Thr Ser Leu Leu Ser Leu Gly Pro Tyr Val
145 150 155
Glu Val Ile Phe Ala Leu Val Val Gly Trp Thr Ala Val Met Met Leu
         165 170 175
Lys Arg Asn Glu Glu Ser Asp Glu Val Glu Asp Tyr Ser Asn His Leu
       180 185 190
Ala Tyr Arg Leu Val Lys Arg Phe Tyr Pro Val Trp Pro Lys Ile Ser
                    200
                                  205
 195
Ser His Ala Phe Ile Leu Thr Gln Lys Glu Val Asp Ala Glu Leu Glu
 210 215 220
Lys Pro Glu Asn Lys Asp Val Met Val Gly Arg Val Lys Lys Ala Lys
225 230 235
                                         240
Arg Tyr Ala Thr Pro Leu Leu Cys Val Ala Val Val Glu Leu Ser
         245 250 255
Asp Val Met Phe Ala Phe Asp Ser Val Pro Ala Ile Ile Ala Val Ser
        260 265 270
Arg Glu Pro Leu Ile Ile Tyr Ser Ala Met Met Phe Ala Ile Leu Gly
                    280 285
     275
Leu Arg Thr Leu Tyr Phe Val Leu Glu Ala Leu Lys Gln Tyr Leu Val
                 295 300
His Leu Glu Lys Ala Val Val Leu Leu Phe Phe Val Ala Phe Lys
              310 315 320
305
Leu Gly Leu Asn Ala Thr Asp His Phe Trp His His Gly Tyr Asn Ile
                                       335
           325 330
Gly Ala Thr Ala Ser Leu Phe Val Val Leu Gly Val Leu Ala Leu Gly
        340 345 350
Ile Ile Ala Ser Val Met Phe Pro Gly Lys Arg Glu Ala
     355
                    360
<210> 9289
```

<211> 182 <212> PRT

<213> Enterobacter cloacae

<400> 9289

Arg Gly Thr Ile Val Ser Ser Lys Gln Arg Arg His Arg Met Ser Thr 10 Phe Asp Lys His Asp Leu Ser Gly Phe Val Gly Lys His Leu Val Tyr 20 Thr Tyr Asp Asn Gly Trp Asn Tyr Glu Ile Tyr Val Lys Asn Glu Asn 35 40

```
Thr Leu Asp Tyr Arg Ile His Ser Gly Leu Val Gly Asn Arg Trp Val
Lys Asp Gln Gln Ala Tyr Ile Val Arg Val Gly Glu Ser Ile Tyr Lys
                70
                                75
Ile Ser Trp Thr Glu Pro Thr Gly Thr Asp Val Ser Leu Ile Val Asn
            85
Leu Gly Asp Arg Leu Phe His Gly Thr Ile Phe Phe Pro Arg Trp Val
        100
                              110
                         105
Met Asn Asn Pro Glu Lys Thr Val Cys Phe Gln Asn Asp His Ile Pro
    115 120
Leu Met Asn Ser Tyr Arg Asp Ala Gly Pro Ala Tyr Pro Thr Glu Val
              135
                       140
Ile Asp Glu Phe Ala Ala Ile Thr Phe Val Arg Asp Cys Gly Ala Asn
          150 155 160
145
Asp Asp Ser Val Ile Asn Cys Ala Ala Ser Glu Leu Pro Ala Asn Phe
          165
                  170
Pro Glu Asn Leu Lys
```

180

<210> 9290

<211> 82 <212> PRT

<213> Enterobacter cloacae

<400> 9290

Thr Ala Val Thr Gly His Ser Arg Ala Val Asn Ala Leu Arg Pro Ser 5 10 Ser Trp Gln Thr Arg Ser Ile Arg Arg Met Pro His Asn Pro Phe Thr 20 Ser Cys Cys Cys Ala Gln Cys Cys Glu Arg Arg Arg Ile Ser Arg Glu

35 40 4.5 Gly Met Arg Gly Ser Met Leu Arg Asn Arg Arg Val Cys Ile Asn Glu

55 Met Arg Thr Leu Ser Phe Arg Ala Ser Lys Trp Asp Thr Pro Ser Gly 65 70 75

Glv

<210> 9291

<211> 95 <212> PRT

<213> Enterobacter cloacae

<400> 9291

Arg Gly Val Asn Tyr Ser Arg Phe Tyr Leu Asn Glu Lys Lys Met Thr 10 Asp Leu Phe Ser Ser Pro Asp His Thr Leu Asp Ala Gln Gly Leu Arg 25 Cys Pro Glu Pro Val Met Met Val Arg Lys Thr Val Arg Asn Met Gln 35 40 4.5 Ser Gly Glu Thr Leu Leu Ile Val Ala Asp Asp Pro Ala Thr Thr Arg 55 60 Asp Ile Pro Gly Phe Cys Thr Phe Met Glu His Glu Leu Val Ala Gln 70 75

Gln Thr Glu Thr Leu Pro Tyr Arg Tyr Leu Ile Arg Lys Gly 90

<210> 9292

<211> 334 <212> PRT

<213> Enterobacter cloacae

```
<400> 9292
Arg Leu Ser His Tyr Pro Gly Val Asp Leu Met Lys Thr Thr Leu Lys
Pro Leu Leu Ala Ala Leu Cys Leu Thr Ala Phe Ala Cys Thr Val Ser
         20
Ala Gln Thr Ile Lys Ala Ala Asp Val His Pro Glu Gly Tyr Pro Asn
                      40
                                   45
Val Val Ala Val Gln His Met Gly Glu Lys Leu Lys Gln Gln Thr Asp
                   55
                                  60
Gly Lys Leu Glu Ile Lys Val Phe Pro Gly Gly Val Leu Gly Asp Glu
                               75
                70
Lys Gln Met Ile Glu Gln Ala Gln Met Gly Ala Ile Asp Met Ile Arg
          8.5
                            90
Val Ser Met Ala Pro Val Ala Ala Ile Leu Pro Asp Ile Glu Val Phe
        100
                        105
Thr Leu Pro Tyr Val Phe Arg Asp Glu Asp His Met His Lys Val Ile
    115
                     120 125
Asp Gly Asp Ile Gly Lys Gln Ile Gly Asp Lys Leu Thr Ala Asn Pro
 130 135
                                  140
Lys Ser Arg Leu Val Phe Leu Gly Trp Met Asp Ser Gly Thr Arg Asn
   150 155
Leu Ile Thr Lys Glu Pro Ile Val Lys Pro Asp Asp Leu Lys Gly Lys
           165
                          170
Lys Ile Arg Val Gln Gly Ser Pro Val Ala Leu Ala Thr Leu Lys Ala
        180 185
                                         190
Met Gly Ala Asn Ser Val Ala Met Gly Val Ser Glu Val Tyr Ser Gly
                     200 205
Met Gln Thr Gly Val Ile Asp Gly Ala Glu Asn Asn Pro Pro Thr Phe
                  215
                                  220
Ile Ala His Asn Tyr Met Pro Val Ala Lys Asn Tyr Thr Leu Ser Gly
             230
                               235
                                                240
His Phe Ile Thr Pro Glu Met Leu Leu Tyr Ser Lys Val Lys Trp Asp
    245
                            250
                                            255
Lys Leu Ser Ala Asp Glu Gln Gln Lys Ile Leu Thr Leu Ala Arg Glu
   260
                         265 270
Ala Gln Phe Glu Gln Arg Lys Leu Trp Asn Ala Tyr Asn Asp Gln Ala
                      280
                                     285
Leu Ala Lys Met Lys Ala Gly Gly Val Gln Phe His Asp Ile Asp Lys
290
                  295
                                  300
Thr Val Phe Ile Lys Ala Thr Glu Pro Val Arg Ala Gln Tyr Gly Asp
             310 315
Lys His Gln Asp Leu Met Lys Ala Ile Ala Asp Val Gln
            325
                            330
```

<210> 9293 <211> 174

<212> PRT <213> Enterobacter cloacae

<400> 9293

Ala Gly Val Arg Met Ser Glu Leu Tyr Leu Lys Trp Met Asp Arg Leu 1 5 10 15

Tyr Leu Leu Ala Met Val Val Ala Gly Leu Ser Leu Leu Val Met Thr 20 25 30 40

Ile Val Ile Pro Ile Gly Ile Phe Ser Arg Tyr Val Leu Asn Arg Gly 35

Glu Ser Trp Pro Glu Pro Ile Ala Ile Ile Cys Met Val Thr Phe Thr 50 56

Phe Ile Gly Ala Ala Val Ser Tyr Arg Ala Gly Ser His Ile Ala Val 65 70 75 80

Asn Met Leu Thr Asp Arg Leu Pro Ala Ser Leu Gln Arg Val Cys Ala Arg Val Val Asp Leu Leu Met Leu Leu Ile Ser Gly Leu Met Cys Trp 100 105 Tyr Ser Tyr Trp Leu Cys Val Glu Leu Trp Glu Gln Pro Val Ala Glu 115 120 125 Phe Pro Leu Leu Thr Ser Gly Glu Ser Tyr Leu Pro Leu Pro Val Gly 1.30 135 140 Ser Ala Ile Leu Ile Leu Phe Val Leu Glu Arg Leu Leu Phe Gly Ser 150 155 Gln Glu Asn Arg Pro Val Val Leu Ile Gly Asn His Ser 165 <210> 9294 <211> 489 <212> PRT <213> Enterobacter cloacae <400> 9294 Ser Gln Met Ala Lys Gln Lys Lys Arg Gly Phe Phe Ser Trp Leu Gly 1.0 Phe Gly Glu Lys Glu Gln Glu Thr Glu Gln Lys Thr Glu Glu Gln Gln 20 25 30 Val Val Glu Glu Gln Ser Gln Pro Glu Thr Pro Val Glu Thr Ala Ala 35 40 4.5 Val Val Glu Ala Glu Glu Pro Ala His Ser Lys Glu Glu Ile Glu Ser 55 60 Phe Ala Glu Glu Val Val Glu Val Thr Glu Gln Val Gln Glu Ser Glu 70 7.5 80 Lys Pro Glu Pro Val Ile Val Glu Thr Leu Thr Glu Ala Pro Gln Ala 85 90 Ala Ile Glu His Glu Ala Leu Pro Leu Pro Glu Glu Val Lys Ala Glu 100 105 110 Glu Val Ser Ala Glu Glu Trp Gln Ala Glu Ala Glu Thr Val Glu Ile 115 120 Val Glu Ala Val Glu Glu Glu Ala Ala Leu Glu Pro Glu Leu Thr Asp 130 135 140 Glu Glu Leu Glu Ala Gln Ala Leu Ala Ala Glu Ala Ala Glu Glu Ala 145 150 155 160 Val Ile Val Val Pro Val Glu Glu Glu Ala Glu Glu Glu Ile Val Gln 165 170 175 Glu Gln Glu Lys Pro Thr Lys Glu Gly Phe Phe Ala Arg Leu Lys Arg 180 185 190 Ser Leu Leu Lys Thr Lys Glu Asn Leu Gly Ser Gly Phe Ile Ser Leu 195 200 Phe Arg Gly Lys Lys Ile Asp Asp Leu Phe Glu Glu Leu Glu Glu 210 215 220

Met Val Gly Val Asn Gly Val Gly Lys Thr Thr Thr Ile Gly Lys Leu 290 295 300 Ala Arg Gln Phe Glu Gln Gln Gly Lys Ser Val Met Leu Ala Ala Gly 305 315 320

310 310 320 Asp Thr Phe Arg Ala Ala Ala Val Glu Gln Leu Gln Val Trp Gly Gln 325 330

```
Arg Asn Asn Ile Pro Val Ile Ala Gln His Thr Gly Ala Asp Ser Ala
    340
                         345
Ser Val Ile Phe Asp Ala Ile Gln Ala Ala Lys Ser Arg Asn Val Asp
                      360
Val Leu Ile Ala Asp Thr Ala Gly Arg Leu Gln Asn Lys Ser His Leu
                   375
                                  380
Met Glu Glu Leu Lys Lys Ile Val Arg Val Met Lys Lys Leu Asp Glu
               390
                               395
Asp Ala Pro His Glu Ile Met Leu Thr Ile Asp Ala Ser Thr Gly Gln
            405
                          410
                                          415
Asn Ala Ile Ser Gln Ala Lys Leu Phe His Glu Ala Val Gly Leu Thr
                    425 430
       420
Gly Ile Thr Leu Thr Lys Leu Asp Gly Thr Ala Lys Gly Gly Val Ile
           440 445
    435
Phe Ser Val Ala Asp Gln Phe Gly Ile Pro Ile Arg Tyr Ile Gly Val
  450 455 460
Gly Glu Arg Ile Glu Asp Leu Arg Pro Phe Lys Ala Asp Asp Phe Ile
465 470 475
Glu Ala Leu Phe Ala Arg Glu Asp
           485
<210> 9295
<211> 361
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<213> Enterobacter cloacae
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Ala Met Gly Ile Cys Thr Glu Ala Thr Val Asn Lys Arg Asp Ala Met
                          10
Asn Gln Ile Arg Gln Phe Ser Asn Arg Phe Asp Arg Phe Arg Lys Pro
       20
                  25
Gln Gly Gly Asp Gly Asn Arg Asn Ala Pro Lys Arg Ala Lys Ala
               40
                           4.5
Thr Pro Lys Pro Asn Ser Arg Lys Thr Asn Val Phe Asn Glu Gln Val
               5.5
Arg Tyr Ala Phe Gln Gly Ala Leu Gln Asp Leu Lys Ser Lys Pro Leu
    70
                              75
Ala Thr Phe Leu Thr Val Met Val Ile Ala Ile Ser Leu Thr Leu Pro
         85
                90
Ser Val Cys Tyr Met Val Tyr Lys Asn Val Asn Gln Ala Ala Ser Gln
       100 105 110
Tyr Tyr Pro Ser Pro Gln Ile Thr Val Tyr Leu Asp Lys Ala Leu Asp
    115
                     120
                                     125
Asp Asn Ala Ala Ala Gln Val Val Gly Gln Ile Gln Ala Glu Gln Gly
  130 135
                                  140
Val Glu Lys Val Asn Tyr Leu Ser Arg Asp Glu Ala Leu Gly Glu Phe
145 150
                              155
Arg Asn Trp Ser Gly Phe Gly Gly Ala Leu Asp Met Leu Glu Glu Asn
         165 170 175
Pro Leu Pro Ala Val Ala Val Val Ile Pro Lys Leu Asp Phe Gln Gly
    180
                        185
                                        190
Thr Asp Ser Leu Asn Thr Leu Arg Asp Arg Ile Thr Arg Ile Asn Gly
    195 200
                                     205
Ile Asp Glu Val Arg Met Asp Asp Ser Trp Phe Ala Arg Leu Ala Ala
                215
Leu Thr Gly Leu Val Gly Arg Val Ser Ala Met Ile Gly Val Leu Met
225 230
                               235
Val Ala Ala Val Phe Leu Val Ile Gly Asn Ser Val Arg Leu Ser Ile
           245
                           250
Phe Ala Arg Arg Asp Thr Ile Asn Val Gln Lys Leu Ile Gly Ala Thr
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265

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Asp Gly Phe Ile Leu Arg Pro Phe Leu Tyr Gly Gly Ala Leu Leu Gly
   275
                     280
Phe Ser Gly Ala Phe Leu Ser Leu Ile Leu Ser Glu Ile Leu Val Met
                  295
                         300
Arg Leu Ser Ser Ala Val Thr Glu Val Ala Gln Val Phe Gly Thr Lys
    310
                    315 320
Phe Asp Ile Ser Gly Leu Gly Phe Asp Glu Cys Leu Leu Leu Leu
            325 330 335
Val Cys Ser Met Ile Gly Trp Val Ala Ala Trp Leu Ala Thr Val Gln
     340 345
His Leu Arg His Phe Thr Pro Asp
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<211> 430
<212> PRT
<213> Enterobacter cloacae
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Thr Met Asp Ala Phe Val Leu Leu Phe Thr Leu Ala Ile Leu Leu Ala
                         10
Leu Gly Met Pro Val Ala Phe Ala Val Gly Leu Ser Ala Val Ala Gly
 20
                        25
                                        3.0
Ala Leu Trp Ile Asp Leu Pro Leu Glu Ala Leu Met Ile Gln Ile Thr
35
          40
                              45
Ser Gly Val Asn Lys Phe Thr Leu Leu Ala Ile Pro Phe Phe Ile Leu
                        60
Ala Gly Ala Ile Met Ala Glu Gly Gly Ile Ala Arg Arg Leu Val Asn
            70
Phe Ala Tyr Val Phe Val Gly Phe Ile Arg Gly Gly Leu Ser Leu Val
          85
                         90
Asn Ile Val Ala Ser Thr Phe Phe Gly Ala Ile Ser Gly Ser Ser Val
 100 105
                                        110
Ala Asp Thr Ala Ser Ile Gly Ser Val Met Ile Pro Glu Met Glu Lys
115 120
                                    125
Lys Gly Tyr Pro Arg Glu Tyr Ala Ala Ala Val Thr Ala Ser Gly Ser
 130
      135 140
Val Gln Ala Ile Leu Ile Pro Pro Ser His Asn Ser Val Ile Tyr Ser
145 150
                              155
Leu Ala Ala Gly Gly Thr Val Ser Ile Ala Thr Leu Phe Ile Ala Gly
           165
                           170
Val Leu Pro Gly Leu Leu Gly Val Ser Leu Met Val Leu Cys Leu
   180 185 190
Cys Phe Ala Arg Lys Arg Gly Tyr Pro Lys Gly Asp Lys Ile Pro Phe
                    200
                                    205
Arg Gln Ala Leu Lys Ile Met Leu Asp Ala Leu Trp Gly Leu Met Thr
                 215
                     220
Val Val Ile Ile Leu Gly Gly Ile Leu Ser Gly Ile Phe Thr Ala Thr
             230
                              235
Glu Ser Ala Ala Val Ala Cys Leu Trp Ala Phe Phe Val Thr Met Phe
           245
                           250
Ile Tyr Arg Asp Tyr Lys Trp Ser Glu Leu Pro Lys Leu Met Cys Arg
                        265
Thr Val Lys Thr Val Thr Ile Val Met Ile Leu Ile Gly Phe Ala Ala
                    280
    275
                            285
Ala Phe Gly Ala Val Met Thr Tyr Met Gln Leu Pro Met Arg Ile Thr
 290 295
                     300
Glu Phe Phe Thr Ser Leu Ser Asp Asn Lys Tyr Val Ile Leu Met Tyr
305 310
                            315
Leu Asn Ile Met Leu Leu Ile Gly Thr Leu Met Asp Met Ala Pro
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330

325

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Ile Ile Leu Ile Leu Thr Pro Val Leu Leu Pro Val Thr Asn Ser Leu
           340
                              345
 Gly Ile Asp Pro Val His Phe Gly Met Ile Met Met Val Asn Leu Gly
                          360
                                   365
 Ile Gly Leu Ile Thr Pro Pro Val Gly Ser Val Leu Phe Val Ala Ser
                      375
    370
                                         380
 Ala Val Ser Lys Gln Lys Ile Glu His Val Val Arg Ala Met Leu Pro
                  390
                           395
Phe Tyr Gly Met Leu Leu Val Val Leu Gly Met Val Thr Tyr Ile Pro
            405 410
Ala Ile Ser Leu Trp Leu Pro Gly Leu Leu Gly Met Gln
                              425
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<213> Enterobacter cloacae
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Trp Asp Phe Ser Met Ser Lys Met Pro Leu Phe Phe Ile Ile Val Val
                               10
Ala Ile Ile Val Ile Ala Ala Ser Phe Arg Phe Val Gln Gln Arg Arg
         20
                                                 30
Glu Lys Ala Asp Asn Asp Ala Ala Pro Leu Met Gln Lys Arg Val Val
                          4.0
Val Thr Asn Lys Arg Glu Lys Pro Leu Asn Asp Arg Arg Ser Arg Gln
                     5.5
                                  60
Gln Gln Val Thr Pro Ala Gly Thr Thr Met Arg Tyr Glu Ala Ser Phe
                 7.0
                                     75
Lys Pro Glu Thr Gly Gly Leu Glu Met Thr Phe Arg Leu Glu Ala Gln
              85
                                  90
Gln Tyr His Gln Leu Thr Val Gly Glu Lys Gly Thr Leu Ser Tyr Lys
       100
                105
Gly Ser Arg Phe Val Gly Phe Arg Ala Glu
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<212> PRT
<213> Enterobacter cloacae
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Met Thr Lys Glu Met Gln Thr Leu Ala Leu Ala Pro Val Gly Asn Leu
Glu Ser Tyr Ile Arg Ala Ala Asn Thr Trp Pro Met Leu Thr Ala Glu
                              25
Glu Glu Lys Glu Leu Ala Glu Lys Leu His Tyr Gln Gly Asp Leu Glu
                          40
                                             45
Ala Ala Lys Thr Leu Ile Leu Ser His Leu Arg Phe Val Val His Val
                      55
Ala Arg Asn Tyr Ala Gly Tyr Gly Leu Pro Gln Ala Asp Leu Ile Gln
                  7.0
                                     75
Glu Gly Asn Ile Gly Leu Met Lys Ala Val Arg Arg Phe Asn Pro Glu
              85
                                 90
Val Gly Val Arg Leu Val Ser Phe Ala Val His Trp Ile Lys Ala Glu
           100
                             105
                                                110
Ile His Glu Tyr Val Leu Arg Asn Trp Arg Ile Val Lys Val Ala Thr
                         120
                                            125
Thr Lys Ala Gln Arg Lys Leu Phe Phe Asn Leu Arg Lys Thr Lys Gln
                    135
                                  140
Arg Leu Gly Trp Phe Asn Gln Asp Glu Val Glu Met Val Ala Arg Glu
```

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150
                                155
Leu Gly Val Ser Ser Lys Asp Val Arg Glu Met Glu Ser Arg Met Ala
            165
                    170 175
Ala Gln Asp Met Thr Phe Asp Met Ser Ala Asp Asp Asp Ala Ser Asp
         180
              185 190
Ser Gln Pro Met Ala Pro Val Leu Tyr Leu Gln Asp Lys Thr Ser Asn
      195
           200 205
Phe Ala Asp Gly Ile Glu Glu Asp Asn Trp Glu Asp Gln Ala Ala Asn
  210 215 220
Lys Leu Thr Phe Ala Met Glu Gly Leu Asp Glu Arg Ser Gln Asp Ile
225 230 235
Ile Arg Ala Arg Trp Leu Asp Glu Asp Asn Lys Ser Thr Leu Gln Glu
       245 250 255
Leu Ala Asp Arg Tyr Gly Val Ser Ala Glu Arg Val Arg Gln Leu Glu
    260
             265 270
Lys Asn Ala Met Lys Lys Leu Arg Ala Ala Ile Glu Ala
<210> 9299
<211> 388
<212> PRT
<213> Enterobacter cloacae
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Asn Lys Ala Leu His Asn Asn Ile Thr Thr Ile Val Ile Thr Ile Ile
                              10
Met Gly Asn Leu Arg Met Asn Met Lys Gly Lys Ala Leu Leu Ala Gly
                          25
Cys Ile Ala Leu Ala Phe Ser Ala Met Ala Gln Ala Asp Ile Lys Val
               40
Ala Val Val Gly Ala Met Ser Gly Pro Val Ala Gln Tyr Gly Asp Gln
50 55
Glu Phe Thr Gly Ala Glu Gln Ala Val Ala Asp Ile Asn Ala Lys Gly
    70
                                7.5
Gly Ile Lys Gly Glu Lys Leu Gln Ile Val Lys Tyr Asp Asp Ala Cys
                             90
Asp Pro Lys Gln Ala Val Ala Val Ala Asn Lys Val Val Asn Asp Gly
                          105
                                          110
Ile Lys Tyr Val Ile Gly His Leu Cys Ser Ser Ser Thr Gln Pro Ala
      115
                      120
                                       125
Ser Asp Ile Tyr Glu Asp Glu Gly Ile Leu Met Ile Thr Pro Ala Ala
                   135
                                   140
Thr Ala Pro Glu Leu Thr Ala Arg Gly Tyr Lys Leu Ile Leu Arg Thr
               150
                              155
Thr Gly Leu Asp Ser Asp Gln Gly Pro Thr Ala Ala Lys Tyr Ile Val
            165
                             170
Glu Lys Val Lys Pro Gln Arg Ile Ala Ile Val His Asp Lys Gln Gln
         180
                          185
                                          190
Tyr Gly Glu Gly Leu Ala Arg Ala Val Gln Asp Asn Leu Lys Lys Ala
                      200
Asn Ala Asn Val Val Phe Phe Asp Gly Ile Thr Ala Gly Glu Lys Asp
                   215
                                    220
Phe Ser Thr Leu Val Ala Arg Leu Lys Lys Glu Asn Ile Asp Phe Val
               230
                               235
Tyr Tyr Gly Gly Tyr His Pro Glu Met Gly Gln Ile Leu Arg Gln Ala
             245
                            250
                                             255
Arg Ala Ala Gly Leu Lys Thr Gln Phe Met Gly Pro Glu Gly Val Ala
         260
                         265
                                          270
Asn Val Ser Leu Ser Asn Ile Ala Gly Glu Ser Ala Glu Gly Leu Leu
                      280
Val Thr Lys Pro Lys Asn Tyr Asp Gln Val Pro Ala Asn Lys Pro Val
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295
Val Asp Ala Ile Lys Ala Lys Lys Gln Asp Pro Ser Gly Ala Phe Val
                310
                         315 320
Trp Thr Thr Tyr Ala Ala Leu Gln Ser Leu Gln Ala Gly Leu Asn Gln
                     330 335
             325
Ser Ala Asp Pro Ala Glu Ile Ala Thr Trp Leu Lys Ala Asn Ser Val
          340
                  345 350
Glu Thr Val Met Gly Pro Leu Ser Trp Asp Glu Lys Gly Asp Leu Lys
     355
            360 365
Gly Phe Glu Phe Gly Val Phe Asp Trp His Ala Asn Gly Thr Ala Thr
 370
                   375
Asp Ala Lys
385
<210> 9300
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<212> PRT
<213> Enterobacter cloacae
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1 5
                             10
Gly Ala Ser Ala Phe Ala Ala Pro Ala Gly Asp Leu Pro Leu Met Pro
20
                          25
Trp Pro Ala Lys Val Glu Arg Pro Thr Thr Gln Gly Ala Leu Glu Leu
3.5
                      40
                                 45
Asn Asn Gln Leu Thr Val Ser Val Ser Gly Asp Asp Leu Gly Asp Ala
                 55
                                    60
Val Asn Arg Leu Arg Gln Arg Ile Ala Leu Gln Thr Gly Trp Thr Leu
               70 75
Gln Pro Gln Ala Glu Lys Pro Asp Lys Pro Thr Ile Arg Ile Ala Ile
             85
                              90
Ala Lys Lys Val Lys Pro Gln Pro Leu Pro Asp Ser Asp Glu Ser Tyr
       100 105
                                           110
Lys Leu Thr Val Asp Ala Asn Gly Val Asn Ile Ser Ala Asn Thr Arq
 115 120
                                       125
Phe Gly Ala Leu Arg Ala Met Glu Thr Leu Leu Gln Leu Met Gln Asn
 130
       135 140
Gly Ala Glu Asn Thr Ser Ile Pro Trp Val Thr Ile Glu Asp Ser Pro
               150
                                 155
Arg Phe Pro Trp Arg Gly Leu Leu Leu Asp Ser Ala Arg His Phe Leu
                              170
            165
Pro Ile Pro Asp Ile Lys Arg Gln Ile Asp Gly Met Ala Ala Ala Lys
                          185
                                           190
Leu Asn Val Leu His Trp His Leu Thr Asp Asp Gln Gly Trp Arg Phe
     195
                       200
Ser Ser Lys Arg Tyr Pro Lys Leu Thr Gln Leu Ala Ser Asp Gly Leu
                   215
                                    220
Phe Tyr Thr Pro Glu Gln Met Arg Glu Ile Val Arg Tyr Ala Ala Glu
                230
                                 235
Arg Gly Ile Arg Val Val Pro Glu Ile Asp Met Pro Gly His Ala Ser
             245
                              250
Ala Ile Ala Val Ala Tyr Pro Glu Leu Met Ser Ala Leu Gly Pro Tyr
         260
                          265
                                           270
Ala Met Glu Arg His Trp Gly Val Leu Lys Pro Val Leu Asp Pro Thr
      275
                      280
                                        285
Lys Glu Ala Thr Tyr Thr Phe Ala Asp Ala Met Val Ser Glu Leu Ala
                   295
                                    300
Ala Ile Phe Pro Asp Pro Tyr Leu His Ile Gly Gly Asp Glu Val Asp
               310
                                315
Asp Ser Gln Trp Lys Ala Asn Ala Ala Ile Gln Arg Phe Leu Arg Asp
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Asn Lys Leu Ala Asp Ser His Ala Leu Gln Ala Tyr Phe Asn Arg Lys 340 345 350 Leu Glu Thr Ile Leu Glu Lys His His Arg Gln Met Val Gly Trp Asp 355 360 365 Glu Ile Tyr His Pro Asp Leu Pro Lys Ser Ile Leu Ile Gln Ser Trp 375 380 Gln Gly Gln Asp Ala Leu Gly Gln Val Ala Gln Asn Gly Tyr Lys Gly 390 395 400 Ile Leu Ser Thr Gly Phe Tyr Leu Asp Gln Pro Gln Ser Thr Ala Tyr 405 410 415 His Tyr Arg Asn Glu Ile Val Pro Gln Gly Leu Asn Gly Val Asp Val 420 425 430 Ile Ala Asp Thr Asp Ser Val Gln Ser Trp Ala Phe Ser Met Pro Arg 435 440 445 Leu Lys Gly Lys Pro Val Glu Gly Ser Phe Thr Leu Val Lys Gly Asp 450 455 460 Ala Gly Trp Arg Gly Phe Ile Asp Phe Ala Gly Lys Ser Arg Arg Ala 465 470 475 Val Asp Asn Ile Gln Trp Arg Asp Asp Asn Gln Val Thr Phe Thr Val 485 490 Asp Thr Trp Met Gly Glu Thr Arg Pro Val Val Ser Val Glu Asn Asp 500 505 510 Lys Leu Ser Gly Tyr Phe Leu Vai Gly Asn Ala Arg Tyr Pro Ile Ser 515 520 Gly Thr Arg Leu Asp Ala Val Pro Lys Gly Ile Pro Pro Val Val Pro 530 535 540 Asp Pro Ala Asn Glu Ala Asn Leu Leu Gly Gly Glu Ala Ala Leu Trp 545 550 555 560 Ala Glu Asn Val Val Ala Pro Val Leu Asp Ile Arg Leu Trp Pro Arg 565 570 -575 Ala Phe Ala Val Ala Glu Arg Leu Trp Ser Ala Lys Asp Val Asn Asp 580 585 590 Ile Asp Asn Met Tyr Thr Arg Leu Gln Ala Met Asp Ser Trp Ser Thr 595 600 605 Val Ser Ala Gly Leu Gln Gln His Thr Gln Gln Gln Val Gln Phe Thr 620 615 Arg Leu Ala Asn Asn Ala Asp Thr Leu Pro Leu Gln Ile Leu Thr Gln 630 - 635 Ala Leu Glu Pro Ala Gln Tyr Tyr Thr Arg Gln His Leu Lys Phe Gln 645 650 655 Ala Gly Asn Tyr His Gln Phe Glu Pro Leu Asn Arg Leu Ala Asp Ala 660 665 670 Leu Asn Ala Glu Ser Ala Thr Val Arg Gln Met Asn Lys Trp Ala Asp 680 Arg Leu Val Ser Asp Ala Glu Asp Thr Glu Ser Ala Asp Ala Leu Arg 695 700 His Val Phe Asn Arg Trp Gln Asn Asn Thr Ser Asp Ala Leu Ala Leu 705 710 715 Ser Glu Asn Ser Tyr Gln Leu Lys Ala Ile Lys Pro Val Ile Gln Glu 725 730 Val Asp Lys Leu Ala Ala Ile Gly Leu Arg Leu Thr Asp Leu Val Ala 740 745 Arg Gln Gly Tnr Leu Asp Asp Lys Glu Ile Ala Ser Ile Gln Ser Glu 760 Leu Asp Asn Ala Ala Lys Val Gln Asp Glu Val Val Ile Ala Ala Val 770 775 780 Tyr Pro Leu Glu Thr Leu Leu Arg Ala Thr Arg Asn Gln 790

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<212> PRT
<213> Enterobacter cloacae
<400> 9301
Ser Glu Gly Cys Ile Met Ile Ile Gly Asn Ile His His Leu Gln Ser
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Trp Leu Pro Glu Glu Leu Arg Gln Ala Ile Glu His Val Lys Ala His
         20
                             25
                                               30
Val Thr Asp Ala Thr Pro Tnr Gly Lys His Asp Ile Asn Gly Asn Ser
       35
                        40
                                         4.5
Leu Phe Tyr Leu Val Ser Glu Asp Met Thr Gln Pro Phe Ala Glu Arg
  5.0
                   55
Arg Ala Glu Tyr His Ala Arg Tyr Leu Asp Ile Gln Ile Val Leu Lys
                 70
                                    7.5
                                                       8.0
Gly Gln Glu Gly Met Thr Phe Ser Thr Leu Pro His Gly Thr Pro Asp
             85
                                 90
                                                    95
Thr Asp Trp Leu Ala Asp Lys Asp Ile Ala Phe Leu Pro Glu Gly Glu
          100
                            105
                                               110
Gln Glu Lys Thr Val Val Leu Ser Glu Gly Asp Phe Val Val Phe Trp
 115
                         120
                                         125
Pro Gly Glu Val His Lys Pro Leu Cys Ala Val Gly Ala Pro Ala Lys
 130
                   135
Val Arg Lys Val Val Val Lys Met Leu Val Glu
                  150
<210> 9302
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<212> PRT
<213> Enterobacter cloacae
<400> 9302
Ala Met Ala Asn Pro Glu Leu Leu Glu Glu Gln Arg Glu Glu Thr Arg
              5
                                 10
Leu Ile Ile Glu Glu Leu Leu Glu Asp Gly Ser Asp Pro Asp Ala Leu
          20
                             2.5
                                                3.0
Tyr Thr Ile Glu His His Phe Ser Ala Asp Asp Phe Asp Ala Leu Glu
                         4.0
Lys Met Ala Val Glu Ala Phe Lys Leu Gly Tyr Glu Val Thr Glu Pro
                      55
                                        60
Glu Glu Leu Glu Val Glu Glu Gly Asp Thr Val Ile Cys Cys Asp Ile
                 70
                                    75
Leu Ser Glu Gly Ala Leu Lys Ala Glu Leu Ile Asp Ala Gln Val Glu
                                90
Gln Leu Met Asn Leu Ala Glu Lys Phe Glu Val Glu Tyr Asp Gly Trp
          100
                             105
                                                110
Gly Thr Tyr Phe Glu Asp Pro Asn Gly Glu Asp Gly Glu Glu Gly Asp
      115
                         120
                                            125
Asp Glu Asp Tyr Val Asp Glu Asp Asp Asp Gly Val Arg His
                     135
                                        140
<210> 9303
<211> 1110
<212> PRT
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<400> 9303
Val Thr Gly Trp Gly Met Asp Ser Asn Thr Gln Gly Phe Thr Ser Tyr
                              10
Trp Arg Asn Thr Leu Ala Asp Ala Glu Ser Gly Lys Gly Ala Phe Glu
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25

20

Arg Lys Asp Glu Glu Ser Phe Thr Gln Trp Met Asn Val Asp Arg Gly 4.5 Arg Leu Asp Glu Glu Ile Val Gln Ala Phe Phe Glu Gly Glu Asp Glu 5.5 Gln Val Lys Thr Val Glu Val Met Leu Arg Pro Gln Val Trp Ile Arg 70 75 Leu Leu Lys His Gly Lys Glu Arg Thr Ala Gly Ala Pro Gly Ile Val 90 Thr Pro Leu Val Thr Ser Ala Leu Leu Asn Arg Glu Gly Phe Leu Phe 100 105 Pro Ala Ser Pro Ala Thr Ile Pro Arg Asp Leu Leu Glu Pro Leu Pro 115 120 125 Lys Gly Thr Phe Ser Ile Gly Glu Met Thr Glu Tyr Asp Arg Tyr Lys 130 135 140 Thr Thr His Asp Ser Val Thr Phe Gly Pro Gly Asp Glu Asp Glu Lys 150 155 Arg Glu Glu Thr Asp Glu Gln Arg Ala Glu Arg Tyr Ala Arg Tyr Lys 165 170 Gln Leu Trp Gln Thr Tyr Leu Lys Glu Thr Asn Glu Leu Leu Lys Ser 180 185 190 Val Ala Gly Lys Trp Leu Asp Ala Pro Glu Gln Tyr Glu Pro Ala Gly 195 200 205 Tyr Gly Tyr Val Ile Lys Ala Asn Gln Ser Gly Gly Ala Ser Ile His 210 215 220 Ile Leu Pro Met Tyr Asp His Leu Leu Ser Cys Lys Lys Glu Val Pro 225 230 235 Leu Leu Ala Arg Phe Ala Ser Lys Asp Lys Ser Pro Val Glu Pro Leu 245 250 255 Leu Ala Ser Asn Ala Met Phe Thr Glu Arg Leu Gly His Ser Gly Asp 260 265 1 270 Lys Phe Pro Leu Ala Val Ala Gln Arg Asp Ala Leu Ser His Tyr Leu 275 280 285 Thr Gln Gln Pro Gly Asp Ile Leu Ala Val Asn Gly Pro Pro Gly Thr 295 300 Gly Lys Thr Thr Leu Val Leu Ser Ile Ile Ala Thr Glu Trp Ala Arg 305 310 315 Ala Ala Leu Asn Lys Thr Glu Pro Pro Val Val Ile Ala Thr Ser Thr 325 330 Asn Asn Gln Ala Val Thr Asn Ile Ile Glu Ala Phe Gly Lys Asp Phe 340 345 350 Ala Thr Gly Ser Gly Pro Met Ala Gly Arg Trp Leu Pro Asp Val Lys 355 360 365 Ser Phe Gly Ala Tyr Phe Pro Ser Ser Ser Arg Lys Ala Glu Ala Ala 375 380 Lys Lys Tyr Gln Thr Glu Asp Phe Phe Asn Arg Val Glu Ser Leu Glu 390 395 Tyr Val Glu Asp Ala Arg Phe Phe Phe Leu Glu Lys Ala Ser Ala Ala 405 410 415 Phe Pro Thr Val Glu Cys His Ser Pro Glu Gln Val Val Asp Leu Leu 425 430 His Gln Arg Leu Val Glu Leu Ser Ala Glu Leu Glu Gln Ile Glu Pro 440 Ala Trp Asp Ala Leu Asn Ala Ile Arg Glu Glu Arg Ser Ala Val Ser 450 455 460 Asp Asp Leu Glu Gln Tyr Ile Glu Asp Lys Arg Thr Ser Leu Leu Asn 470 475 Ser Thr Asn Glu Ile Ser Leu Leu Thr Gln Gly Lys Lys Gln Trp Glu 485 490 Gln Tyr Arg Ala Gly Glu Ser Phe Met Phe Ala Leu Phe Ser Trp Leu 505 Pro Ala Val Arg Thr Lys Arg His Tyr Gln Met Lys Leu Phe Leu Glu

520 Ala Thr Phe Gly Glu Arg Met Thr Ala Phe Gln Gly Ala Leu Pro Asp 530 540 Gly Ile Asp Ala Phe Ile Asn Gly Leu Ile Glu Gln Ala Arg Lys Glu 550 555 Gln Ala Gly Tyr Gln Gln Gln Met Asp Leu Ala Glu Asp Ile Ser Arg 565 570 575 Arg Glu Ser Glu Ala Ala Met Arg Trp His His Ile Thr His Ser Leu 580 585 590 Gly Asn Pro Gly Glu Thr Glu Leu Ser Leu His Glu Ala Asp Glu Leu 595 600 605 Ala Asp Thr Gln Leu Arg Phe Pro Met Phe Leu Leu Ala Thr His Tyr 615 620 Trp Glu Gly Arg Trp Leu Met Asp Met Ala Ala Ile Asp Asn Ile Gln 630 635 640 Lys Glu Lys Gly Arg Thr Gly Ala Lys Ser Thr Lys Ala Arg Trp Gln 645 650 655 Arg Arg Met Lys Leu Thr Pro Cys Val Val Met Thr Cys Phe Met Phe 660 665 670 Pro Tyr His Met Lys Thr Ser Glu Phe Val Gly Gly Asn Lys Lys Phe 675 680 685 Asp Asp Asn Tyr Leu Tyr Asn Phe Ala Asp Leu Leu Ile Val Asp Glu 690 695 700 Ala Gly Gln Val Leu Pro Glu Val Ala Ala Ala Ser Phe Ala Leu Ala 705 710 715 720 Lys Lys Ala Leu Val Ile Gly Asp Thr Glu Gln Ile Ala Pro Ile Trp 725 730 Asn Ser Leu Pro Gly Ile Asp Ile Gly Asn Met Val Glu Glu Asn Ile 740 745 750 Leu Pro Gly Gly Thr Gin Glu Glu Leu Thr Glu Ser Tyr Ala Leu Val 755 760 Cys Asp Ser Gly Lys Ser Ala Ala Ser Gly Ser Val Met Lys Ile Ala 770 775 780 Gln Phe Asn Ser Arg Tyr Gln Tyr Asp Pro Asp Phe Ala Arg Gly Met 790 795 Tyr Leu Tyr Glu His Arg Arg Cys Phe Asp Asn Ile Ile Gly Tyr Cys 805 810 815 Asn Thr Leu Cys Tyr His Gly Lys Leu Gln Pro Lys Arg Gly Glu Glu 820 825 830 Lys Glu Thr Ile Phe Pro Ala Met Gly Tyr Leu His Ile Asp Gly Lys 835 840 845 Gly Met Gln Ala Ser Gly Gly Ser Arg Tyr Asn Ala Phe Glu Ala Glu 850 855 860 Thr Ile Ala Ala Trp Leu Ala Ala His Lys Glu Glu Ile Glu Arg His 865 870 875 Tyr Gly Glu Pro Leu His Lys Val Val Gly Val Val Thr Pro Phe Ser 885 890 Ala Gln Val Ser Thr Ile Lys Ser Ser Leu Arg Lys Leu Asp Ile Asn 900 905 910 Cys Ser Gly Asp Glu Asn Ser Leu Thr Val Gly Thr Val His Ser Leu 915 920 925 Gln Gly Ala Glu Arg Ala Ile Val Leu Phe Ser Pro Val Tyr Ser Lys 930 935 940 His Glu Asp Gly Ser Phe Ile Asp Ser Asp Ser Ser Met Leu Asn Val 945 950 955 960 Ala Val Ser Arg Ala Lys Asp Ser Phe Leu Val Phe Gly Asp Met Asp 965 970 Leu Phe Glu Ile Gln Pro Gly Ser Ser Pro Arg Gly Leu Leu Ala Lys 980 985 Tyr Leu Phe Ala Ser Thr Asp Asn Ala Leu Gln Phe Glu Phe Gln Glu 1000

Arg Gln Asp Leu Ser Thr Ser Gln Thr Gln Ile Ser Thr Leu His Gly 1010 1015 Val Glu Gln His Asp Ala Phe Leu Asn Gln Thr Phe Asp Ala Ile Asn 1030 1035 1040 1025 Gln Ser Ile Thr Ile Val Ser Pro Trp Leu Thr Trp Gln Lys Leu Glu 1045 1050 1055 Gln Thr Gly Phe Leu Ala Ser Met Ser Gln Ala Arg Ala Arg Gly Ile 1060 1065 1070 Asp Ile Thr Val Val Thr Asp Lys Thr Phe Asn Thr Glu His Thr Asp 1075 1080 1085 Phe Glu Lys Arg Lys Glu Lys His Gln Leu Thr Cys Ser Pro Leu Ile 1090 1095 1100 Ser Thr Pro Arg Cys <210> 9304 <211> 98 <212> PRT <213> Enterobacter cloacae <400> 9304 Cys Leu His Lys Pro His Glu Asp Ile Pro Met Lys Lys Arg Phe Ser 10 Asp Glu Gln Ile Ile Ser Ile Leu Arg Glu Ala Glu Ala Gly Val Pro 20 25 30 Ala Arg Glu Leu Cys Arg Lys His Ala Ile Ser Asp Ala Thr Phe Tyr 40 45 Ile Trp Arg Lys Lys Tyr Gly Gly Met Glu Val Pro Glu Val Lys Arg Leu Lys Ser Leu Glu Glu Ala Ang Leu Lys Lys Leu Leu Ala 65 70 75 80 Glu Ala Met Leu Asp Lys Glu Ala Leu Gln Val Ala Leu Gly Arg Lys Tyr <210> 9305 <211> 925 <212> PRT <213> Enterobacter cloacae <400> 9305 Gln Val Arg Leu Cys His Ala Cys Gly Lys Asp Cys Val Arg Leu Cys Gly Cys Gly Gly Met Thr Met Leu Lys Asn Ile Thr Arg Gln Leu Gln 30 Ala Leu Leu Ser Arg His Leu Pro His Arg Leu Ile Ala Arg Asp Pro 40 45 Leu Pro Asn Ala Asn Thr Met Ala Gly Ala Ala Ile Pro Ala Ser Leu 55 Thr Glu Arg Cys Leu Asn Val Ala Ala Met Asp Glu Asn Glu Val Trp 65 70 7.5 Arg Ala Phe Gly Gly His Pro Glu Gly Leu Asn Ala Gln Glu Val Ser 8.5 90 Lys Ile Arg Ala Glu His Gly Asp Asn Gln Ile Pro Ala Gln Lys Pro 100 105 110 Ser Pro Trp Trp Val His Leu Trp Leu Cys Tyr Arg Asn Pro Phe Asn 115 120 125 Leu Leu Thr Val Leu Gly Ile Ile Ser Tyr Ala Thr Glu Asp Leu 130 135 140 Phe Ala Ala Gly Val Ile Ala Leu Met Val Gly Ile Ser Thr Leu Leu

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150
                            155
Asn Phe Ile Gln Glu Ala Arg Ser Thr Lys Ala Ala Asp Ala Leu Lys
        165
                        170
Ala Met Val Ser Asn Thr Ala Thr Val Ser Arg Val Ile Asn Asp Leu
        180
                 185
Gly Glu Asn Ala Trp Ile Glu Leu Pro Ile Asp Gln Leu Val Pro Gly
   195
         200 205
Asp Leu Val Lys Leu Ala Ala Gly Asp Met Ile Pro Ala Asp Leu Arg
       215 220
Ile Ile Gln Ala Arg Asp Leu Phe Val Ala Gln Ala Ser Leu Thr Gly
   230 235
Glu Ser Leu Pro Val Glu Lys Val Ala Arg Thr Arg Asp Pro Gln Gln
      245 250 255
Met Asn Pro Leu Glu Cys Asp Thr Leu Cys Phe Met Gly Thr Thr Val
      260 265 270
Val Ser Gly Thr Ala Gln Ala Ile Val Thr Ala Thr Gly Gly Asn Thr
   275 280 285
Trp Phe Gly Gln Leu Ala Gly Arg Val Ser Glu Gln Glu Ser Glu Pro
 290 295 300
Asn Ala Phe Gln Lys Gly Ile Gly Arg Val Ser Met Leu Leu Ile Arg
305 310 315
Phe Met Met Val Met Thr Pro Ile Val Leu Leu Ile Asn Gly Tyr Thr
      325 330
                                        335
Lys Gly Asp Trp Trp Glu Ala Ala Leu Phe Ala Leu Ser Val Ala Val
 340
                      345 350
Gly Leu Thr Pro Glu Met Leu Pro Met Ile Val Thr Ser Thr Leu Ala
355 360
                                  365
Arg Gly Ala Val Lys Leu Ser Lys Gln Lys Val Ile Val Lys His Leu
                    380
370 375
Asp Ala Ile Gln Asn Phe Gly Ala Met Asp Ile Leu Cys Tnr Asp Lys
   390 395
Thr Gly Thr Leu Thr Gln Asp Lys Ile Val Leu Glu Asn His Thr Asp
      405 410
Ile Ala Gly Lys Thr Ser Glu Arg Val Leu Tyr Ser Ala Trp Leu Asn
       420 425
                          430
Ser His Tyr Gln Thr Gly Leu Lys Asn Leu Leu Asp Val Ala Val Leu
    435 44C 445
Glu Gly Val Asp Glu Glu Ser Ala Arg Met Leu Ser Gly Arg Trp Gln
 450 455
                              460
Lys Val Asp Glu Ile Pro Phe Asp Phe Glu Arg Arg Arg Met Ser Val
465 470 475 480
Val Val Ser Glu Gln Pro Asp Val His Gln Leu Ile Cys Lys Gly Ala
          485
                         490
                                       495
Leu Gln Glu Ile Leu Asn Val Ser Thr Gln Val Arg His Asn Gly Glu
       500 505
Ile Val Leu Leu Asp Glu Thr Met Leu Arg Arg Ile Lys Arg Val Thr
                   520
Asp Asn Leu Asn Arg Gln Gly Leu Arg Val Val Ala Val Ala Ser Lys
530 535
                               540
Phe Leu Pro Ala Arg Glu Gly Asp Tyr Gln Arg Ile Asp Glu Ser Asp
   550 555
Leu Ile Leu Glu Gly Tyr Ile Ala Phe Leu Asp Pro Pro Lys Glu Thr
               570 575
          565
Thr Ala Pro Ala Leu Lys Ala Leu Lys Ala Ser Gly Ile Thr Val Lys
       580 585
Ile Leu Thr Gly Asp Ser Glu Leu Val Ala Ala Lys Val Cys His Glu
                   600
Val Gly Leu Asp Ala Gly Asp Val Val Val Gly Ser Asp Ile Glu Leu
                615
Leu Ser Asp Asp Glu Leu Ala Asp Leu Ala Gln Arg Thr Thr Leu Phe
             630
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Ala Arg Leu Thr Pro Met His Lys Glu Arg Ile Val Thr Leu Leu Arg
           645
                     650
Arg Glu Gly His Val Val Gly Phe Met Gly Asp Gly Ile Asn Asp Ala
        660
                       665
Pro Ala Leu Arg Ala Ala Asp Ile Gly Ile Ser Val Asp Gly Ala Val
                    680
                         685
Asp Ile Ala Arg Glu Ala Ala Asp Ile Ile Leu Leu Glu Lys Ser Leu
 690 695 700
Met Val Leu Glu Glu Gly Val Ile Glu Gly Arg Arg Thr Phe Ala Asn
   710 715
Met Leu Lys Tyr Ile Lys Met Thr Ala Ser Ser Asn Phe Gly Asn Val
       725 730 735
Phe Ser Val Leu Val Ala Ser Ala Phe Leu Pro Phe Leu Pro Met Leu
 740 745 750
Pro Leu His Leu Leu Ile Gln Asn Leu Met Tyr Asp Val Ser Gln Val
 755
                    760
Ala Ile Pro Phe Asp Asn Val Asp Asp Glu Gln Ile Gln Lys Pro Gln
                                780
Arg Trp Asn Pro Ala Asp Leu Gly Arg Phe Met Leu Phe Phe Gly Pro
              790 795
Ile Ser Ser Ile Phe Asp Ile Leu Thr Phe Cys Leu Met Trp Phe Val
           805
                          810 815
Phe His Ala Asn Thr Pro Glu His Gln Thr Leu Phe Gln Ser Gly Trp
       820
                       825
                           830
Phe Val Val Gly Leu Leu Ser Gln Thr Leu Ile Val His Met Ile Arg
                    840
                                   845
Thr Arg Arg Ile Pro Phe Ile Gln Ser Arg Ala Ala Trp Pro Leu Ile
                 855
                                860
Val Met Thr Gly Ile Val Met Ala Leu Gly Ile Ala Leu Pro Phe Ser
              870
                             875
Pro Leu Ala Ser Tyr Leu Gln Leu Gln Ala Leu Pro Leu Ser Tyr Phe
           885
                          890 895
Pro Trp Leu Val Ala Ile Leu Ala Gly Tyr Met Val Leu Thr Gln Met
   900 905
Val Lys Gly Phe Tyr Ser Arg Arg Tyr Gly Trp Gln
                    920
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<210> 9306 <211> 675 <212> PRT

<213> Enterobacter cloacae

<400> 9306 Gly Ala Ala Glu Asn Pro Ala Ala Thr Ala Gln Ala Leu Leu Ser Trp 10 Thr Ile Thr Met Thr Ile Glu Lys Ile Phe Thr Pro Gln Asp Asp Ala 20 2.5 Phe Tyr Ala Val Ile Thr His Ala Ala Gly Pro Gln Gly Thr Leu Pro 35 40 Leu Thr Pro Gln Met Leu Met Glu Ser Pro Ser Gly Asn Leu Phe Gly 55 60 Met Thr Gln Asn Ala Gly Met Gly Trp Asp Ala Asn Lys Leu Thr Gly 7.0 75 Lys Glu Val Leu Ile Ile Gly Thr Gln Gly Gly Ile Arg Ala Gly Asp Gly Arg Pro Val Ala Leu Gly Tyr His Thr Gly His Trp Glu Ile Gly 100 Met Gln Met Gln Ala Ala Ala Lys Glu Ile Thr Arg Asn Gly Gly Ile 120 Pro Phe Ala Ala Phe Val Ser Asp Pro Cys Asp Gly Arg Ser Gln Gly 130 140

Thr His Gly Met Phe Asp Ser Leu Pro Tyr Arg Asn Asp Ala Ala Ile 145 150 155 Val Phe Arg Arg Leu Ile Arg Ser Leu Pro Thr Arg Arg Ala Val Ile 165 170 Gly Val Ala Thr Cys Asp Lys Gly Leu Pro Ala Thr Met Ile Ala Leu 180 185 190 Ala Ser Met His Asp Leu Pro Thr Ile Leu Val Pro Gly Gly Ala Thr 200 195 205 Leu Pro Pro Thr Val Gly Glu Asp Ala Gly Lys Val Gln Thr Ile Gly 215 220 210 Ala Arg Phe Ala Asn His Glu Leu Ser Leu Gln Glu Ala Ala Glu Leu 225 230 235 240 Gly Cys Arg Ala Cys Ala Ser Pro Gly Gly Gly Cys Gln Phe Leu Gly 245 250 255 Thr Ala Gly Thr Ser Gln Val Val Ala Glu Ala Leu Gly Leu Ala Leu 260 265 270 Pro His Ser Ala Leu Ala Pro Ser Gly Gln Ala Val Trp Leu Glu Ile 275 280 285 Ala Arg Gln Ser Ala Arg Ala Val Ser Glu Leu Asp Asn Arg Gly Ile 290 295 300 Thr Thr Arg Asp Ile Leu Thr Asp Lys Ala Ile Glu Asn Ala Met Val 305 310 315 Ile His Ala Ala Phe Gly Gly Ser Thr Asn Leu Leu Leu His Ile Pro 325 330 335 Ala Ile Ala His Ala Ala Gly Cys Thr Ile Pro Asp Val Glu His Trp 345 350 Thr Arg Val Asn Arg Arg Val Pro Arg Leu Val Ser Val Leu Pro Asn 360 365 Gly Pro Asp Tyr His Pro Thr Val Arg Ala Phe Leu Ala Gly Gly Val 370 375 380 Pro Glu Val Met Leu His Leu Arg Asp Leu Gly Leu Leu His Leu Asp 390 395 Ala Met Thr Val Thr Gly Gln Thr Val Gly Glu Asn Leu Asp Trp Trp 405 410 415 Gln Ala Ser Glu Arg Arg Lys Arg Phe Arg Gln Cys Leu Arg Glu Gln 420 425 430 Asp Gly Val Asp Pro Asp Asp Val Ile Leu Pro Pro Glu Lys Ala Lys 445 435 440 Ala Lys Gly Leu Thr Ser Thr Val Cys Pne Pro Thr Gly Asn Ile Ala 450 455 460 Pro Glu Gly Ser Val Ile Lys Ala Thr Ala Ile Asp Pro Ser Val Val 470 475 Gly Glu Asp Gly Val Tyr Arg His Thr Gly Arg Ala Arg Val Phe Val 485 490 Ser Glu Ala Gln Ala Ile Lys Ala Ile Lys Arg Glu Glu Ile Lys Gln 500 505 Gly Asp Ile Met Val Val Ile Gly Gly Gly Pro Ser Gly Thr Gly Met 515 520 525 Glu Glu Thr Tyr Gln Leu Thr Ser Ala Leu Lys His Ile Ser Trp Gly 535 540 Lys Thr Val Ser Leu Ile Thr Asp Ala Arg Phe Ser Gly Val Ser Thr 550 555 Gly Ala Cys Phe Gly His Val Ser Pro Glu Ala Leu Ala Gly Gly Pro 565 570 Ile Gly Lys Leu Arg Asp Asn Asp Ile Ile Glu Ile Ala Val Asp Arg 580 585 Leu Thr Leu Thr Gly Ser Val Asn Phe Ile Gly Thr Ala Asp Asn Pro 595 600 Leu Thr Pro Glu Glu Gly Ala Arg Glu Leu Ala Met Arg Gln Thr His 615 Pro Asp Leu His Ala His Asp Phe Leu Pro Asp Asp Thr Arg Leu Tro

630 Ala Ala Leu Gln Ser Val Ser Gly Gly Thr Trp Lys Gly Cys Ile Tyr 645 650 655 Asp Thr Asp Lys Ile Ile Glu Val Ile Asn Ala Gly Lys Lys Ala Leu 665 Gly Ile 675

<210> 9307 <211> 575 <212> PRT

<213> Enterobacter cloacae

<400> 9307

Ala His Arg Cys Pro Arg Gly Gly His Gln Pro Ala Ala Asp Gln Ala 1.0 Pro Arg Gly Ala Gly Arg Gly Arg Ser Arg Arg Cys Asp Ser Arg Ile 20 2.5 Pro Leu Thr Gly Gly Thr Met Glu Ile Thr Asn Pro Ile Leu Thr Gly 35 40 Phe Asn Pro Asp Pro Ser Leu Cys Arg Gln Gly Glu Asp Tyr Tyr Ile 55 60 Ala Thr Ser Thr Phe Glu Trp Phe Pro Gly Val Arg Ile Tyr His Ser 70 75 Arg Asp Leu Lys Asn Trp Ser Leu Val Ser Thr Pro Leu Asp Arg Val 90 Ser Met Leu Asp Met Lys Gly Asr. Pro Asp Ser Gly Gly Ile Trp Ala 105 110 Pro Cys Leu Ser Tyr Ala Asp Gly Lys Phe Trp Leu Leu Tyr Thr Asp 125 Val Lys Ile Val Asp Ser Pro Trp Lys Asn Gly Arg Asn Phe Leu Val 130 135 140 Thr Ala Pro Ser Ile Glu Gly Pro Trp Ser Glu Pro Ile Pro Met Gly 150 155 Asn Gly Gly Phe Asp Pro Ser Leu Phe His Asp Asp Asp Gly Arg Lys 165 170 175 Tyr Tyr Leu Tyr Arg Pro Trp Gly Pro Arg His His Ser Asn Pro His 180 185 190 Asn Thr Ile Val Met Gln Ala Phe Asp Pro Gln Thr Gly Thr Leu Ser 195 200 205 Pro Glu Arg Lys Thr Leu Phe Thr Gly Thr Pro Leu Cys Tyr Thr Glu 210 215 220 Gly Ala His Leu Tyr Arg His Ala Gly Trp Tyr Tyr Leu Met Val Ala 230 235 Glu Gly Gly Thr Ser Tyr Glu His Ala Val Val Leu Arg Ser Lys 245 250 Thr Ile Asp Gly Pro Tyr Glu Leu His Pro Asp Val Thr Met Met Thr 260 265 Ser Trp His Leu Pro Glu Asn Pro Leu Gln Lys Ser Gly His Gly Ser 280 Leu Leu Gln Thr His Thr Gly Glu Trp Tyr Met Ala Tyr Leu Thr Ser 295 300 Arg Pro Leu Arg Leu Pro Gly Val Pro Leu Leu Ala Ser Gly Gly Arg 310 315 Gly Tyr Cys Pro Leu Gly Arg Glu Thr Gly Ile Ala Arg Ile Glu Trp 325 330 Arg Asp Gly Trp Pro Tyr Val Glu Gly Gly Lys His Ala Gln Leu Thr 340 345 Val Lys Gly Pro Gln Met Ala Glu Gln Pro Val Ser Ile Gln Gly Asn 355 360 Trp Arg Glu Asp Phe Asp Gly Ser Thr Leu Asp Pro Glu Leu Gln Thr

Leu Arg Ile Pro Phe Asp Asp Thr Leu Gly Ser Leu Thr Ala Arg Pro 390 395 400 Gly Tyr Leu Arg Leu Tyr Gly Asn Asp Ser Leu Asn Ser Thr Phe Thr 405 410 415 Gln Ser Thr Val Ala Arg Arg Trp Gln His Phe Ala Phe Arg Ala Glu 420 425 430 Thr Arg Met Gln Phe Ser Pro Val His Phe Gln Gln Ser Ala Gly Leu 435 440 445 Thr Cys Tyr Tyr Asn Ser Lys Asn Trp Ser Tyr Cys Phe Val Asp Tyr 450 455 460 Glu Glu Gly Gln Gly Arg Thr Ile Lys Val Ile Gln Leu Asp His Asn 470 475 Val Pro Ser Trp Pro Leu His Glu Gln Pro Ile Pro Val Pro Glu His 485 490 495 Ala Glu Ser Val Trp Leu Arg Val Asp Val Asp Arg Leu Val Tyr Arg 500 505 510 Tyr Ser Tyr Ser Phe Asp Gly Glu Thr Trp His Ala Val Pro Val Thr 515 520 525 Tyr Glu Ala Trp Lys Leu Ser Asp Asp Tyr Ile Gly Gly Arg Gly Phe 530 535 540 Phe Thr Gly Ala Phe Val Gly Leu His Cys Glu Asp Ile Ser Gly Asp 545 550 555 560 Gly Cys His Ala Asp Phe Asp Tyr Phe Thr Tyr Glu Pro Ala <210> 9308 <211> 312 <212> PRT <213> Enterobacter cloacae <400> 9308 Thr Trp Pro Arg Ser Leu Arg Trp Asn Thr Thr Ala Gly Glu Pro Thr 10 Ser Lys Ile Arg Thr Val Lys Thr Ala Lys Arg Ala Thr Thr Lys Ile 25 3.0 Thr Ser Thr Lys Thr Thr Ala Cys Val Thr Lys Arg Phe Arg Arg 35 4.0 45 Trp Arg Ala Pro Pro Leu Phe Gln Gly Arg Thr Met Asp Tyr Pro Gln 55 60 Ile Leu Ala Pro Val Leu Asn Phe Leu Gln Cys Pro Thr Pro Gln Ala 70 75 Trp Ile Asp Lys Ala Arg Asp Pro Ala Asn Leu Pro Leu Leu Thr 90 Asp His Met Val Cys Glu Leu Lys Ala Ala Gln Thr Ala Leu Leu Leu 100 105 Val Arg Lys Tyr Val Ala Asp Glu Ser Gly Ala Asp Ala Leu Leu Glu 115 120 125 Trp Leu Lys Pro Tyr Glu Gln Phe Thr Phe Arg Asp Gly Pro Glu Pro 135 140 Asp Phe Ile Ala Leu His Arg Gln Ile Gly Lys Ser Val Met Pro Lys 145 150 155 Thr Asp Asp Pro Trp Gly Gln Ala Leu Ile Asp Ser Met Val Leu Leu 165 170 175 Ile Lys Glu Glu Leu His His Phe Trp Gln Val Arg Glu Ala Met Leu 180 185 190 Ala Arg Asp Ile Pro Tyr Val Lys Ile Thr Ala Ser Arg Tyr Ala Lys 195 200 Gly Met Leu Lys Asp Val Arg Thr His Glu Pro Leu Thr Leu Ile Asp 215 220

Lys Leu Ile Cys Gly Ala Tyr Ile Glu Ala Arg Ser Cys Glu Arg Phe

<212> PRT

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230
                                235
Ala Ala Leu Ala Pro Phe Leu Asp Asp Leu Gln Lys Phe Tyr Leu
         245
                    250 255
Ser Leu Leu Arg Ser Glu Ala Arg His Tyr Gln Asp Tyr Leu Thr Leu
        260
              265
Ala Gln Gln Val Ser Asp Asp Ile Ser Pro Arg Ile Gln Leu Phe
 275 280 285
Gly Glu Ile Glu Ala Thr Leu Ile Ser Thr Pro Asp Asn Glu Phe Arg
 290 295
                          300
Phe His Ser Gly Val Pro Val
<210> 9309
<211> 163
<212> PRT
<213> Enterobacter cloacae
<400> 9309
Gly Ile Ser Met Ser Ala Pro Ala His Leu Trp Leu Glu Asp Glu Asn
                             10
Gly Ser Pro Ile Val Gly Cys Cys Ala Met Pro Leu Arg Leu Gly Ser
 20
                          25
                                          30
Ile Glu Leu Lys Ser Phe Ser His Gly Val Thr Ile Pro Val Asp Pro
35
                      4.0
                                       4.5
Ser Trp Gly Lys Leu Thr Gly Thr Arg Val His Arg Pro Ile Thr Ile
50 55
                                   60
Val Lys Glu Phe Asp Gln Thr Thr Pro Leu Leu Tyr Arg Ala Val Cys
65 70
                                 7.5
Glu Gly Arg Thr Met Lys Lys Ala Thr Ile Lys Met Tyr Arg Ile Leu
           8.5
                             90
Glu Ser Gly Ile Glu Ala Glu Tyr Phe Lys Ile Ile Leu Glu Asn Val
        100
                          105
                                          110
Lys Phe Thr Thr Val Ala Pro Tyr Leu Ser Pro Gly Ser Met Thr Ser
115
                      120
                                       125
Thr His Leu Glu Thr Leu Glu Leu Arg Tyr Glu Ala Ile Thr Trp Lys
130 135 140
Tyr Thr Glu Gly Asn Ile Leu Tyr Arg Asp Ser Trp Asn Asp Arg Cys
145
              150
                                 155
Cys Ala
<210> 9310
<211> 74
<212> PRT
<213> Enterobacter cloacae
<400> 9310
Asn Asn Gln Leu Ser Leu Met Leu Ser Cys Glu Phe Ala Met Gly Lys
1 5
                          10
Val Trp Phe Thr Phe Gly Leu Phe Ala Gly Arg Tyr Asn Thr Ala Arg
      20
                        25
                                           30
Leu Val Thr Asn Gly Met Asp Lys Ser Leu Tyr Cys Ala Pro Ile Pro
      35
                       40
Asn Phe Leu Leu Thr Gly Gly His Met Asp Pro Asp Pro Thr Pro Leu
                   55
Leu Thr Arg Arg Lys Pro Ser Tyr Arg
<210> 9311
<211> 306
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<213> Enterobacter cloacae

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<400> 9311
Gly Asp His Met Pro Gln Ser Ala Leu Phe Thr Gly Ile Ile Pro Pro
                                1.0
Val Ser Thr Ile Phe Thr Ala Asp Gly Gln Leu Asp Lys Gln Gly Thr
         20
                             25
Ala Ala Leu Ile Asp Asp Leu Ile Lys Ala Gly Val Asp Gly Leu Phe
      35
                       40
Phe Leu Gly Ser Gly Gly Glu Phe Ser Gln Leu Gly Ala Glu Glu Arg
                     55
Lys Thr Ile Ala Gln Phe Ala Ile Asp His Val Asp Cys Arg Val Pro
                 70
                                75
Val Leu Ile Gly Thr Gly Gly Thr Asn Ala Arg Glu Thr Ile Glu Leu
                          90
Ser Gln His Ala Gln Gln Ala Gly Ala Asp Gly Ile Val Val Ile Asn
                            105
                                               110
Pro Tyr Tyr Trp Lys Val Ser Glu Ala Asn Leu Ile Arg Tyr Phe Glu
      115
                        120
                                            125
Gln Val Ala Asp Ser Val Thr Leu Pro Val Met Leu Tyr Asn Phe Pro
                     135
                                        140
Ala Leu Thr Gly Gln Asp Leu Thr Pro Ala Leu Val Lys Thr Leu Ala
     150
                                    155
                                                      160
Asp Ser Arg Ser Asn Ile Val Gly Ile Lys Asp Thr Ile Asp Ser Val
             165
                                 170
Ala His Leu Arg Ser Met Ile His Thr Val Lys Ala Ala His Pro His
          180
                                               190
                             185
Phe Thr Val Leu Cys Gly Tyr Asp Asp His Leu Phe Asn Thr Leu Leu
       195
                         200
                                           205
Leu Gly Gly Asp Gly Ala Ile Ser Ala Ser Gly Asn Phe Ala Pro Gln
 210
                     215
                                        220
Val Ser Val Asn Leu Leu Lys Ala Trp Arg Asp Lys Asp Val Ala Lys
               230
                                    235
Ala Ala Glu Tyr His Gln Thr Leu Leu Gln Ile Pro Gln Met Tyr Gln
              245
                                250 255
Leu Asp Thr Pro Phe Val Asn Val Ile Lys Glu Ala Ile Val Leu Cys
          260
                             265
                                               270
Gly Arg Pro Ile Ser Thr His Val Leu Pro Pro Ala Ser Ala Leu Asp
                        280
                                            285
Glu Pro Arg Lys Ala Gln Leu Lys Thr Leu Leu Gln Gln Leu Lys Leu
                     295
Cys
305
<210> 9312
<211> 471
<212> PRT
<213> Enterobacter cloacae
<400> 9312
Phe Ser Thr Leu His Lys Gly Val Ile Leu Met Thr Gln Leu Thr Met
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Phe Ser Thr Leu His Lys Gly Val Ile Leu Met Thr Gln Leu Thr Met 1 5 10 15

Lys Asp Lys Ile Gly Tyr Gly Leu Gly Asp Thr Ala Cys Gly Phe Val 20 25 30

Trp Gln Ala Thr Met Phe Leu Leu Ala Tyr Phe Tyr Thr Asp Val Phe 35 40

Gly Leu Ser Ala Gly Ile Met Gly Thr Leu Phe Leu Val Ser Arg Val 50

Leu Asp Ala Val Thr Asp Pro Leu Met Gly Leu Leu Val Asp Arg Thr 67 75

Arg Thr Arg Tyr Gly Gln Phe Arg Pro Phe Leu Leu Trp Gly Ala Ile

```
Pro Phe Gly Ile Val Cys Met Leu Thr Phe Tyr Thr Pro Asp Phe Ser
        100
                      105
                               110
Ala Gln Gly Lys Ile Ile Tyr Ala Cys Ala Thr Tyr Ile Leu Leu Thr
     115
          120
Leu Val Tyr Thr Phe Val Asn Val Pro Tyr Cys Ala Met Pro Gly Val
      135 140
Ile Thr Ala Asp Pro Lys Glu Arg His Ala Leu Gln Ser Trp Arg Phe
145 150 155 160
Phe Leu Ala Ala Ala Gly Ser Leu Ala Ile Ser Gly Ile Ala Leu Pro
      165 170 175
Leu Val Ser Ile Ile Gly Lys Gly Asp Glu Gln Val Gly Tyr Phe Gly
       180 185 190
Ala Met Cys Val Leu Gly Met Thr Gly Val Val Leu Leu Tyr Val Cys
     195 200 205
Phe Phe Thr Thr Lys Glu Arg Tyr Thr Phe Glu Val Gln Pro Gly Ser
 210 215
                      220
Ser Val Ala Lys Asp Leu Lys Leu Leu Leu Gly Asn Gly Gln Trp Arg
225 230 235
Ile Met Cys Ala Phe Lys Met Met Ala Thr Cys Ser Asn Val Val Arg
        245 250
Gly Gly Ala Thr Leu Tyr Phe Val Lys Tyr Val Met Asp His Pro Glu
      260 265
                                       270
Met Ala Thr Gln Phe Leu Leu Tyr Gly Ser Leu Ala Thr Met Phe Gly
275 280
                                    285
Ser Leu Cys Ser Ser Arg Leu Leu Gly Arg Phe Asp Arg Val Thr Ala
      295
                                 300
Phe Lys Trp Ile Ile Val Ala Tyr Ser Leu Ile Ser Leu Leu Ile Phe
305 310
                              315
Phe Thr Pro Ala Glu His Ile Ala Leu Ile Phe Ala Leu Asn Ile Leu
            325 330 335
Phe Leu Phe Val Phe Asn Thr Thr Thr Pro Leu Gln Trp Leu Met Ala
 340
                        345
                                       350
Ser Asp Val Val Asp Tyr Glu Glu Ser Arg Ser Gly Arg Arg Leu Asp
355
                     360
Gly Leu Val Phe Ser Thr Tyr Leu Phe Ser Leu Lys Ile Gly Leu Ala
 370
                  375
                                 380
Ile Gly Gly Ala Val Val Gly Trp Ile Leu Ala Tyr Val Asn Tyr Ser
385
               390
                              395
Ala Ser Ser Ser Val Gln Pro Val Glu Val Leu Thr Thr Ile Lys Ile
           405
                           410
Leu Phe Cys Val Val Pro Val Val Leu Tyr Ala Gly Met Phe Ile Met
                            430
        420
                        425
Leu Ser Phe Tyr Lys Leu Thr Asp Ala Arg Val Glu Ala Ile Ser Gln
         440
                                    445
Gln Leu Ile Lys His Arg Ala Ala Gln Gly Glu Ala Val Pro Asp Ala
 450
Ala Thr Ala Ala Ser His
<210> 9313
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 9313
Arg Gly Ala Ser Gly Gly Ser Trp Ala Lys Val Leu Thr Thr Asp Gln
                           10
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Lys Arg Glu Ala Val Met Leu Met Cys Asp Ala Thr Gly Leu Ser Gln 20 30 Arg Arg Ala Cys Arg Leu Thr Gly Leu Ser Leu Ser Thr Cys Arg Tyr

40 Glu Ala His Arg Pro Ala Ala Asp Ala His Leu Ser Trp Arg <210> 9314 <211> 496 <212> PRT <213> Enterobacter cloacae <400> 9314 Val Trp Lys Glu Asn Met Ser Ile Ser Ser Val Ile Lys Ser Leu Gln 5 10 Asp Ile Met Arg Lys Asp Ala Gly Val Asp Gly Asp Ala Gln Arg Leu 20 2.5 Gly Gln Leu Ser Trp Leu Leu Phe Leu Lys Ile Phe Asp Thr Gln Glu 40 Glu Glu Leu Glu Leu Glu Gln Asp Asp Tyr Gln Phe Pro Ile Pro Gln 55 60 Arg Tyr Leu Trp Arg Ser Trp Ala Ala Asn Ser Glu Gly Ile Thr Gly 70 7.5 Asp Ala Leu Leu Glu Phe Val Asn Asp Asp Leu Phe Pro Thr Leu Lys 8.5 90 Asn Leu Thr Ala Gln Ile Asp Lys Asn Pro Arg Gly Phe Val Val Lys 100 105 110 Gln Ala Phe Ser Asp Ala Tyr Asn Tyr Met Lys Asn Gly Thr Leu Leu 120 125 Arg Gln Val Ile Asn Lys Leu Asn Glu Ile Asp Phe Ser Ser Gln 135 140 Glu Arg His Leu Phe Gly Asp Ile Tyr Glu Gln Ile Leu Arg Asp Leu 145 150 155 Gln Ser Ala Gly Asn Ala Gly Glu Phe Tyr Thr Pro Arg Ala Val Thr 165 170 Arg Phe Met Val Asn Arg Ile Asp Pro Lys Leu Gly Glu Ser Ile Met 180 185 190 Asp Pro Ala Cys Gly Thr Gly Gly Phe Leu Ala Cys Ala Phe Asp His 200 205 Val Lys Glu His Tyr Val Lys Thr Thr Glu Asp His Lys Thr Leu Gln 210 215 220 Lys Gln Ile His Gly Val Glu Lys Lys Gln Leu Pro His Leu Leu Cys 230 235 Thr Thr Asn Met Leu Leu His Gly Ile Glu Val Pro Val Gln Ile Arg 245 250 His Asp Asn Thr Leu Asn Lys Pro Leu Ser Ser Trp Asp Glu Gln Val 260 265 270 Asp Val Ile Val Thr Asn Pro Pro Phe Gly Gly Thr Glu Glu Asp Gly 275 280 Ile Glu Lys Asn Phe Pro Ala Glu Met Gln Thr Arg Glu Thr Ala Asp 295 300 Leu Phe Leu Gln Leu Ile Ile Glu Val Leu Ala Asp Lys Gly Arg Ala 310 315 Ala Val Val Leu Pro Asp Gly Thr Leu Phe Gly Glu Gly Val Lys Thr 325 330 Lys Ile Lys Lys Leu Leu Thr Glu Glu Cys Asn Leu His Thr Ile Val 340 345 Arg Leu Pro Asn Gly Val Phe Asn Pro Tyr Thr Gly Ile Lys Thr Asn 355 360 365 Ile Leu Phe Phe Thr Lys Gly Gln Pro Thr Lys Asp Val Trp Phe Tyr 370 375 380 Glu His Pro Tyr Pro Asp Gly Val Lys Asn Tyr Ser Lys Thr Lys Pro 390 395 Met Lys Phe Glu Glu Phe Gln Ala Glu Ile Asp Trp Trp Gly Asn Glu

405 410 Ala Asp Gly Phe Ala Ser Arg Glu Glu Asn Asn Gln Ala Trp Lys Val 420 425 430 Gly Ile Gly Asp Ile Ile Ala Arg Asn Phe Asn Leu Asp Ile Lys Asn 440 435 445 Pro Tyr Gln Gly Glu Thr Ile Ser His Asp Pro Asp Glu Leu Leu Ala 450 455 460 Lys Tyr Gln Lys Gln Gln Thr Asp Ile Ser Glu Leu Arg Asn Gln Leu 470 475 480 Arg Asp Ile Leu Gly Ala Ala Leu Ala Gly Asn Lys Gly Ala Asn 485 490

<210> 9315 <211> 317 <212> PRT <213> Enterobacter cloacae

<400> 9315 Ala Ala His Trp Asn Ala Thr Glu Phe Lys Gly Ala Ile Met Glu Arg 10 Lys Pro Thr Leu Val Val Ala Leu Gly Gly Asn Ala Leu Leu Lys Arg 20 25 Gly Glu Pro Leu Glu Ala Asp Ile Gln Arg Gln Asn Ile Glu Gln Ala 35 4.0 Ala Arg Thr Ile Ala Gly Leu Thr Glu Gln Trp Arg Val Val Leu Val 55 60 His Gly Asn Gly Pro Gln Val Gly Leu Leu Ala Leu Gln Asn Ser Ala 75 7.0 Tyr Asp Lys Val Thr Pro Tyr Pro Leu Asp Val Leu Gly Ala Glu Ser 8.5 90 Gln Gly Met Ile Gly Tyr Met Leu Gln Gln Ala Leu Lys Asn Asn Leu 100 105 110 Pro Gln Arg Glu Val Ser Val Leu Leu Thr Gln Val Glu Val Asp Ala 115 120 125 Ala Asp Pro Ala Phe Ser Asn Pro Thr Lys Tyr Ile Gly Pro Val Tyr 135 140 Ser Glu Ala Gln Ala Lys Thr Leu Ala Ala Glu Lys Gly Trp Val Phe 150 155 Lys Ala Asp Gly Ser Tyr Phe Arg Arg Val Val Pro Ser Pro Gln Pro 165 170 Lys Arg Ile Val Glu Ser Asp Ala Ile Thr Ala Leu Ile Gln Arg Asp 180 185 190 His Leu Val Ile Cys Asn Gly Gly Gly Gly Val Pro Val Val Glu Asn 195 200 Ala Asn Gly Tyr Arg Gly Ile Glu Ala Val Ile Asp Lys Asp Leu Ser 210 215 Ala Ala Leu Leu Ala Arg Gln Ile Glu Ala Asp Ala Leu Leu Ile Leu 230 235 Thr Asp Ala Asp Ala Val Tyr Leu Asp Trp Gly Lys Pro Thr Gln Arg 245 250 Pro Leu Ala Gln Val Thr Pro Glu Leu Leu Arg Gly Met Gln Phe Asp 260 265 Ala Gly Ser Met Gly Pro Lys Val Ala Ala Cys Arg Glu Phe Val Glu 280 285 Ala Cys Gly Gly Ile Ala Gly Ile Gly Ala Leu Asn Asp Gly Ala Glu 290 295 300 Ile Leu Ala Gly Glu Lys Gly Thr Leu Ile Arg Asn

310

<210> 9316 <211> 517

305

<212> PRT <213> Enterobacter cloacae

<400> 9316 Arg Lys Arg Ser Ser Asn His Arg Thr Pro Ser Ser Ser Thr Lys Gln 5 10 Arg Thr Ala Cys Thr Pro Leu Lys Arg Ser Trp Trp Arg His Ser Ala 20 25 30 Thr Asn His Arg Pro Ala Arg Arg Gly Val Arg Arg Val Gln Glu Asn 35 40 45 Ile Met Gly Lys Phe Lys Phe Pro Ser Ala Tyr Thr Ile Leu Phe Phe 5.5 Leu Ile Ala Val Val Ala Val Leu Thr Trp Ile Val Pro Ala Gly Gln 70 75 Tyr His Met Ala Met Asn Glu Ala Leu Gly Lys Glu Val Pro Val Ala 85 90 Gly Thr Tyr Ala Gln Val Ala Ser His Pro Gln Gly Leu Val Ser Val 100 105 110 Leu Met Ala Pro Ile Ala Gly Leu Tyr Asp Pro Glu Ser Gly Gln Ala 115 120 125 Gly Ala Ile Asp Val Ala Leu Phe Ile Leu Ile Ile Gly Gly Phe Leu 135 130 140 Gly Ile Val Thr Lys Thr Gly Ala Ile Asp Ala Gly Ile Glu Arg Val 150 145 155 Thr Thr Arg Leu Arg Gly Arg Glu Glu Trp Met Ile Pro Ile Leu Met 165 170 Ala Leu Phe Ala Ala Gly Gly Thr Ile Tyr Gly Met Ala Glu Glu Ser 180 185 190 Leu Pro Phe Tyr Thr Leu Leu Val Pro Val Met Leu Ala Ala Arg Phe 195 200 205 Asp Pro Val Val Ala Ala Ser Thr Val Leu Leu Gly Ala Gly Ile Gly 215 210 220 Thr Leu Gly Ser Thr Ile Asn Pro Phe Ala Thr Val Ile Ala Ala Asn 230 235 Ala Ala Gly Ile Pro Phe Thr Asn Gly Ile Ala Leu Arg Leu Ala Leu 245 250 255 Leu Val Ile Gly Trp Ile Ile Cys Val Ala Trp Val Met Arg Tyr Ala 270 260 265 Arg Lys Val Arg Lys Asp Pro Ser Leu Ser Ile Val Ala Asp Lys Gln 280 285 Glu Glu Asn Leu Ala His Phe Leu Gly Asn Lys Gly Glu Gln Ser Leu 290 295 300 Glu Phe Thr Pro Val Arg Lys Leu Ile Leu Val Ile Phe Ala Leu Ala 315 310 Phe Ala Val Met Ile Tyr Gly Val Ala Val Leu Gly Trp Trp Met Ala 325 Glu Ile Ser Ala Val Phe Leu Ala Ser Ala Ile Ile Val Gly Leu Ile 340 345 350 Ala Arg Met Ser Glu Glu Glu Leu Thr Ser Thr Phe Ile Asn Gly Ala 355 360 Arg Asp Leu Leu Gly Val Ala Leu Ile Ile Gly Ile Ala Arg Gly Ile 370 375 380 Val Val Ile Met Asp Lys Gly Met Ile Thr His Thr Ile Leu His Ser 395 390 Ala Glu Gly Met Val Thr Gly Leu Ser Thr Val Ala Phe Ile Asn Val 405 410 Met Tyr Trp Leu Glu Val Val Leu Ser Phe Leu Val Pro Ser Ser Ser 425 430 Gly Leu Ala Val Leu Thr Met Pro Ile Met Ala Pro Leu Ala Asp Phe 440 Ala Asn Val Asn Arg Asp Leu Val Val Thr Ala Tyr Gln Ser Ala Ser

```
455
Gly Ile Val Asn Leu Ile Thr Pro Thr Ser Ala Val Val Met Gly Gly
           470
                                  475
Leu Ala Ile Ala Arg Val Pro Tyr Val Arg Tyr Leu Lys Trp Val Ala
           485
                           490
                                         495
Pro Leu Leu Gly Ile Leu Thr Val Val Ile Met Val Ala Leu Ser Leu
       500
                 505
Gly Ala Leu Leu
      515
<210> 9317
<211> 100
<212> PRT
<213> Enterobacter cloacae
<400> 9317
Trp Leu Phe Ser His Ala Leu Tyr Ser Thr Arg Ser Leu Val Phe Pro
                              10
Ala Ile Ser Val Trp Phe Ser Ser Thr Ile Leu Ser Trp Val Arg Val
    20
                  25
Pro Val Leu Ser Val Gln Arg Met Ser Ile Ala Pro Lys Phe Trp Met
 3.5
                         4.0
                                           4.5
Ala Ser Arg Cys Leu Thr Ile Thr Phe Cys Leu Glu Ser Leu Thr Ala
                      55
                                      60
Pro Arg Ala Ser Val Glu Val Thr Ile Ile Gly Ser Ile Ser Gly Val
                                  7.5
               7.0
Lys Pro Thr Ala Thr Glu Ser Ala Asn Ser Ala Ala Ser His Gln Ser
                                90
Pro Leu Val
<210> 9318
<211> 822
<212> PRT
<213> Enterobacter cloacae
<400> 9318
Ser Tyr Phe Val Glu Ser Ser Ala Met Val Gly Glu Asn Lys Thr His
                               10
Leu Thr Glu Thr Asp Ile Ile Thr Lys Tyr Ile Leu Pro Ala Val Lys
                              25
                                                30
Thr Ala Gly Trp Asp Val Met Ser Gln Val Arg Gln Glu Val Lys Leu
       35
                         40
                                            45
Arg Asp Gly Lys Ile Val Val Arg Gly Lys Leu Ala Ser Arg Ile Lys
 5.0
                      55
Val Lys Ser Ala Asp Ile Val Leu Tyr His Lys Pro Asn Leu Pro Leu
                                     75
                  70
                                                       8.0
65
Ala Val Ile Glu Ala Lys Ala Asn Lys His Ala Ile Ser Lys Gly Met
              85
Gln Gln Gly Leu Asp Tyr Ala Ser Leu Leu Asp Val Pro Phe Val Phe
           100
                             105
Ala Ser Asn Gly Asp Gly Phe Ile Phe His Asp Lys Thr Asn Pro Gln
       115
                          120
                                            125
Gln Leu Glu Ser Glu Ile Ala Leu Ser Asp Phe Pro Thr Pro Glu Gln
Leu Trp Gln Lys Tyr Cys Ala Trp Lys Gly Phe Thr Gln Glu Gln Leu
                  150
                                    155
Pro Val Ile Ser Gln Asp Tyr Tyr Asp Asp Gly Ser Gly Lys Ser Pro
               165 170
```

Arg Tyr Tyr Gln Met Gln Ala Ile Asn Arg Thr Val Asp Ala Val Ser

185

190

180

Ala Gly Lys Asn Arg Ile Leu Leu Val Met Ala Thr Gly Thr Gly Lys 200 195 Thr Tyr Thr Ala Phe Gln Ile Ile Trp Arg Leu Trp Lys Ala Lys Asn 210 215 220 Lys Lys Arg Ile Leu Phe Leu Ala Asp Arg Asn Ile Leu Val Asp Gln 230 235 Thr Lys Asn Asn Asp Phe Gln Pro Phe Gly Thr Ala Met Thr Lys Val 245 250 255 Thr Gly Arg Thr Ile Asp Pro Ala Tyr Glu Val His Leu Ala Leu Tyr 260 265 270 Gln Ala Ile Thr Gly Pro Glu Glu His Gln Lys Ala Tyr Lys Gln Val 275 280 285 Asp Pro Asn Phe Phe Asp Leu Ile Val Ile Asp Glu Cys His Arg Gly 290 295 300 Ser Ala Ser Glu Asp Ser Ala Trp Arg Glu Ile Leu Glu Tyr Phe Gly 305 310 315 Ser Ala Thr Gln Val Gly Leu Thr Ala Thr Pro Lys Glu Thr Glu Asp 325 330 Val Ser Asn Ile Asp Tyr Phe Gly Glu Pro Val Tyr Thr Tyr Ser Leu 340 345 350 Lys Glu Gly Ile Glu Asp Gly Phe Leu Ala Pro Tyr Lys Val Val Arg 355 360 365 Val Asp Ile Asp Val Asp Val Gln Gly Trp Arg Pro Val Lys Gly Gln 370 375 380 Leu Asp Lys Tyr Gly Glu Glu Ile Glu Asp Arg Ile Tyr Asn Leu Lys 390 395 Asp Phe Asp Arg Lys Leu Val Ile Asp Glu Arg Thr Met Leu Val Ala 405 410 415 Gln Thr Ile Thr Asp Tyr Leu Lys Arg Thr Asn Pro Met Asp Lys Thr 420 425 430 Ile Val Phe Cys Asn Asp Ile Asp His Ala Asp Arg Met Arg His Ala 440 445 Leu Val Val Leu Asn Pro Glu Gln Val Leu Lys Asn Glu Lys Tyr Val 450 455 460 Met Lys Ile Thr Gly Asp Asp Ile Gly Lys Ala Gln Leu Asp Asn 470 475 Phe Ile Asn Pro Lys Lys Ala Tyr Pro Val Ile Ala Thr Thr Ser Glu 490 495 485 Leu Met Thr Thr Gly Val Asp Ala Gln Thr Cys Lys Leu Val Val Leu 500 505 510 Asp Gln Asn Ile Gln Ser Met Thr Lys Phe Lys Gln Ile Ile Gly Arg 515 520 525 Gly Thr Arg Ile Asn Glu Arg His Gly Lys Leu Trp Phe Thr Ile Leu 535 540 Asp Phe Lys Lys Ala Thr Glu Leu Pne Ala Asp Pro Arg Phe Asp Gly 550 555 Leu Pro Glu Lys Val Leu Val Val Lys Pro Gly Asp Ile Ser Asp Glu 565 570 575 Ser Ser Asp Phe Asn Glu Arg Leu Asp Glu Glu Thr Thr Asn Asp Asp 580 585 590 Gly Asp Asn Pro His Asn Glu Met Arg Glu Asp Ala Ala Glu Tyr His 595 600 605 Val Asn Arg Asp Asn His Ser Gly Asn Gly Glu Phe His Ser Asp Asp 610 615 620 Ala Asp Lys Val Arg Lys Phe Tyr Val Asn Gly Val Ala Val Lys Val 630 635 Leu Ala Lys Arg Val Gln Tyr Tyr Asp Ser Asp Gly Lys Leu Val Thr 645 650 655 Glu Ser Phe Gln Asp Tyr Thr Arg Lys Thr Met Leu Lys Asp Ser Glu 660 665 Tyr Ala Ser Leu Asp Ser Phe Val Arg Lys Trp Gln Glu Ala Pro Arg

```
680
Lys Gln Ala Ile Ile Glu Glu Leu Ala Gln Leu Gly Ile Leu Trp Asp
                   695
                            700
Val Leu Ala Glu Glu Val Gly Lys Asp Leu Asp Pro Phe Asp Leu Leu
              710
                              715
Cys His Val Val Tyr Gly Gln Pro Pro Leu Thr Arg Gln Glu Arg Ala
            725 730 735
Ala Asn Val Arg Lys Arg Asn Tyr Phe Thr Lys Tyr Ala Glu Pro Ala
                745 750
         740
Gln Gln Val Leu Asn Thr Leu Leu Asp Lys Tyr Ala Asp Glu Gly Val
     755 760 765
Gln Glu Ile Glu Asp Val Gln Val Leu Lys Leu Lys Pro Phe Asp Ala
       775
                         780
Leu Gly Arg Pro Ile Glu Ile Ile Lys Thr Arg Phe Gly Asp Lys Lys
    790 795
Ala Tyr Glu Gln Ala Val Asn Glu Leu Glu Asn Glu Ile Tyr Gln Leu
       805 810
Pro Pro Arg Ser Ala
         820
<210> 9319
<211> 305
<212> PRT
<213> Enterobacter cloacae
<400> 9319
Cys Ser Arg Leu Cys Cys Arg Met Ala Leu Arg Pro Asp Ala Leu Thr
                              10
Pro Ala Leu Ser His Gly Glu Arg Glu Asn Thr Gly Ser Ile Ser Leu
 20
                           2.5
                                            3.0
Ile Phe His Pro Glu Lys Gly Thr Phe Ser Pro Ser Phe Gln Arg Gly
                       40
                                         45
His Ala Ser Ile Met Pro Ile Ile Gln Ser Val Glu Arg Ala Leu Gln
50
                 5.5
                                     60
Ile Leu Asp Leu Phe Asn Glu Gln Ala Thr Glu Leu Lys Ile Thr Asp
6.5
         70
                                7.5
Ile Ser Lys Leu Met Gly Leu Ser Lys Ser Thr Leu His Ser Leu Leu
            85
                              90
Lys Thr Leu Gln Leu His Gly Tyr Ile Asp Gln Asn Pro Glu Asn Gly
          100
                           105
                                            110
Lys Tyr Arg Leu Gly Met Lys Leu Val Glu Arg Gly His Phe Val Val
      115
                       120
                                         125
Gly Ser Ile Asp Ile Arg Gln Lys Ala Lys Gly Trp Leu Thr Glu Leu
                                     140
   130
                    135
Ser Gln Arg Thr Gly Gln Thr Thr His Leu Gly Ile Leu Asp Gly Ser
                150
                                  155
Glu Gly Val Tyr Ile Glu Lys Ile Glu Gly Lys Leu Ala Ala Ile Ala
             165
                              170
                                               175
Tyr Ser Arg Ile Gly Arg Arg Leu Pro Val His Ala Thr Ala Ile Gly
                                            190
          180
                           185
Lys Val Leu Ile Ala Trp Leu Gly Glu Ala Glu Leu Asn Ala Leu Leu
                       200
                                        205
      195
Glu Gly Tyr His Tyr Thr Thr Tyr Thr Pro Ser Thr Leu Ala Ser Arg
  210
                    215
                                     220
Glu Ala Leu Met Ala Ala Leu Thr Gln Thr Arg Glu Gln Gly Tyr Ala
225
                 230
                                  235
                                                   240
Leu Asp Ser Glu Glu Asn Glu Gln Gly Val Arg Cys Val Ala Val Pro
                              250
             245
                                               255
Val Trp Asn His Glu Ser Arg Val Ile Ala Ala Leu Ser Leu Ser Thr
          260
                           265
```

Leu Thr Ser Arg Val Asp Asp Ala Glu Leu Ala Asn Phe Arg Glu Gln

```
280
Leu Gln Gln Ala Gly Leu Gln Leu Ser Arg Ala Leu Gly Tyr Pro Ala
                      295
305
<210> 9320
<211> 338
<212> PRT
<213> Enterobacter cloacae
<400> 9320
Lys Phe Ser Arg Trp Ser Trp Leu Ser Ser Ser Ala Glu Leu Glu
                           10
Leu Leu Gln Gln Gly Phe Gln Leu Arg Leu Thr Arg Leu Val Gln Arg
 20
                             25
Arg Gly Gly Arg Gln His Val Gly Arg Asn Arg Thr Thr Ala Glu His
Asn Arg Leu Phe Asn Asn Val His Lys Arg Arg Ile Gln Leu Ile His
                     5.5
                                       60
Leu Arg Asp Leu Gln Gln Gly Leu Met Ile Leu Ser Arg Phe Arg His
            7.0
                                    75
Val Phe Ile Pro Pro Gly Phe Gln Lys Ile Tyr Arg His Leu Trp Gly
              85
                                 90
Lys Val Ala Thr Gly Arg Asp Arg Pro Val Ala Ala Glu Gln Gln Gly
           100
                            105
                                                110
Ile Lys Gln Met Ile Val Val Ala Ala Glu His Gly Glu Val Arq Met
    115
                         120
                                            125
Gly Gly Phe Asp Gly Val Asp His Ala Ala Gln Val Gly Asn Gly Val
 130
                   135
                                        140
Asp Gly Val Phe Asp Ala Asp Asp Val Ala Ala Arg Val Gly Gln Gly
                  150
                                    155
Phe Asp Gln Arg Arg Gly Gln Ile Leu Pro Gly Gln Arg Arg Glu Val
              165
                                 170
Ile Glu His His Arg Gln Arg Asp Ala Val Arg His Leu Leu Glu Ile
          180
                             185
                                             190
Ala Asp Gln Val Arg Phe Arg His Phe Pro Val Val Arg Val Asp His
                         200
                                            205
      195
His Asp Thr Val Arg Pro Cys Leu Leu Arg Val Leu Ala Gln Leu Asn
   210
                      215
                                         220
Gly Phe Pro Gly Val Gly Ala Ala Gly Ala Asp Gln Asp Arg His Ala
                  230
                                     235
Thr Ile Asp Met Ile Asp Arg Lys Leu Gly Asn Gly Phe Thr Leu Phe
              245
                                250
Gly Ala Glu Leu Gly Glu Leu Ala Ala Ala Ala Gln Glu Lys Gln Ala
          260
                             265
                                               270
Val Asp Ala Cys Phe Asp Gln 1le Val Asp Gln Arg Gly Gly Ala Leu
                          280
                                            285
Leu Ile Glu Leu Ala Ile Gly Gly Lys Asn Gly Gly Asp Arg Gly Asn
   290
                      295
                                        300
Asp Thr Arg Glu Gln Arg Gly Leu Arg His Val Ile Ser Leu Leu Asn
                  310
                                 315
His Phe Val Leu His Cys Arg Thr Val Phe Ile Lys Leu Thr Ile Ile
              325
                                 330
Leu
```

<210> 9321

<211> 331

<212> PRT

<213> Enterobacter cloacae

```
<400> 9321
Thr Tyr Ser Gln Ser Pro Ser Phe Glu Gly Leu Phe Phe Ala Arg Arg
         5
                      10
Gln Glu Ile Asn Met Asn Pro Leu Tyr Gln Lys His Ile Ile Ser Ile
     20
                        25
                                         30
Asn Asp Leu Ser Arg Glu Glu Leu Glu Leu Val Leu Glu Thr Ala Ala
35
          40
                                     4.5
Lys Leu Lys Ala Asn Pro Gln Pro Glu Leu Leu Lys His Lys Val Ile
       55
                       60
 5.0
Ala Ser Cys Phe Phe Glu Ala Ser Thr Arg Thr Arg Leu Ser Phe Glu
       70
                               75
Thr Ser Met His Arg Leu Gly Ala Ser Val Val Gly Phe Ser Asp Ser
          8.5
                 90 95
Ser Asn Thr Ser Leu Gly Lys Lys Gly Glu Thr Leu Ala Asp Thr Ile
        100
                       105 110
Ser Val Ile Ser Thr Tyr Val Asp Ala Ile Val Met Arg His Pro Gln
                120 125
      115
Glu Gly Ala Ala Arg Leu Ala Thr Glu Phe Ser Gly Gly Ile Pro Val
 130
                  135
                                  140
Leu Asn Ala Gly Asp Gly Ala Asn Gln His Pro Thr Gln Thr Leu Leu
145
               150
                              155
Asp Leu Phe Thr Ile Gln Glu Thr Gln Gly Thr Leu Glu Asn Leu Asn
            165 170 175
Ile Ala Met Val Gly Asp Leu Lys Tyr Gly Arg Thr Val His Ser Leu
         180 185
                                         190
Thr Gln Ala Leu Ala Lys Phe Asn Gly Asn Arg Phe Phe Phe Ile Ala
195
                     200
                             205
Pro Asp Ala Leu Ala Met Pro Gin Tyr Ile Leu Asp Met Leu Asp Glu
                  215
                                  220
 210
Lys Gly Ile Ala Trp Ser Leu His Ala Ser Ile Glu Glu Val Met Gly
               230
225
                                235
Asn Val Asp Ile Leu Tyr Met Thr Arg Val Gln Lys Glu Arg Leu Asp
            245
                            250
Pro Ser Glu Tyr Ala Asn Val Lys Ala Gln Phe Val Leu Arg Ala Gly
         260
                         265
                                         270
Asp Leu Glu Gly Ala Arg Asp Asn Met Lys Val Leu His Pro Leu Pro
                      280
     275
                                      285
Arg Ile Asp Glu Ile Thr Thr Asp Val Asp Lys Thr Pro His Ala Trp
 290
                   295
                                   300
Tyr Phe Gln Gln Ala Gly Asn Gly Ile Phe Ala Arg Gln Ala Leu Leu
305 310 315
Ala Leu Val Leu Asn Arg Glu Leu Ala Leu
            325
                            330
<210> 9322
<211> 158
<212> PRT
<213> Enterobacter cloacae
<400> 9322
Gly Glu Thr Thr Met Thr His Asp Asn Lys Leu Gln Val Glu Ala Ile
                            10
Lys Arg Gly Thr Val Ile Asp His Ile Pro Ala Gln Val Gly Phe Lys
Leu Leu Thr Leu Phe Lys Leu Thr Glu Thr Asp Gln Arg Ile Thr Ile
                    4.0
                                      45
Gly Leu Asn Leu Pro Ser Gly Glu Met Gly Arg Lys Asp Leu Ile Lys
                  55
```

Ile Glu Asn Thr Phe Leu Thr Asp Glu Gln Val Asn Gln Leu Ser Leu

75

7.0

Tyr Ala Pro Asp Ala Thr Val Asn Arg Ile Asp Glu Tyr Glu Val Val 95
Gly Lys Ser Arg Pro Ser Leu Pro Glu Arg Ile Glu Ser Val Leu Val 100
Cys Pro Asn Ser Asn Cys Ile Ser His Ala Glu Pro Val Ser Ser Ser 115
Phe Ala Val Lys Lys Arg Ala Asn Asp Ile Ala Leu Lys Cys Lys Tyr 130
Cys Glu Lys Glu Phe Ser His Tyr Val Val Leu Ala Asn 150
140
Cys Glu Lys Glu Phe Ser His Tyr Val Val Leu Ala Asn 151
145

<210> 9323 <211> 598 <212> PRT

<213> Enterobacter cloacae

<400> 9323 Pro Ala Ala Arg Tyr Ser Trp Cys Ser Ser Gly Arg Gln Gln Gly Gly Glu Leu Met Thr Val Glu Lys Leu Ile Thr Asp His Ile Asp Ile Trp Ser Ser Ala Leu Gln Thr Arg Ser Thr Ala Gly Arg Gly Ser Asn Gly Lys Ile Asp Leu Tyr Gly Ile Lys Lys Leu Arg Glu Leu Ile Leu Glu 5.0 Leu Ala Val Arg Gly Lys Leu Val Pro Gln Asp Pro Ser Asp Glu Pro Ala Ser Glu Leu Leu Lys Arg Ile Ala Thr Glu Lys Ala Glu Leu Val 8.5 Lys Gln Gly Lys Ile Lys Lys Gln Lys Pro Leu Pro Glu Ile Ser Glu Asp Glu Lys Pro Phe Glu Leu Pro Glu Gly Trp Glu Leu Asn Arg Leu Gly Asp Leu Ile Asn Val Ile Asn Gly Arg Ala Tyr Lys Lys His Glu Met Leu Gln Ala Gly Thr Pro Leu Leu Arg Val Gly Asn Leu Phe Thr Ser Asn Glu Trp Tyr Tyr Ser Asp Leu Glu Leu Glu Pro Glu Lys Tyr Ile Asp Asn Gly Asp Leu Ile Tyr Ser Trp Ser Ala Ser Phe Gly Pro Phe Ile Trp Asn Gly Gly Lys Val Ile Tyr His Tyr His Ile Trp Lys Met Asp Ile Phe Asp Thr Gln Ser Leu Asp Lys His Phe Met Lys Leu Tyr Leu Glu Ser Val Ser Ala Ser Ile Lys Ala Ser Gly Asn Gly Ile Ala Met Ile His Met Thr Lys Glu Arg Met Glu Lys Leu Val Ile Pro Leu Pro Pro Arg Ala Glu Gln Leu Arg Ile Val Ala Lys Val Asn Glu Leu Met Ser Leu Cys Asp Gln Leu Glu Gln Gln Ser Leu Thr Ser Leu Asp Ala His Gln Gln Leu Val Glu Thr Leu Leu Ser Thr Leu Thr Asp Cys Lys Asn Ala Glu Glu Leu Ala Glu Asn Trp Ala Arg Ile Ser Gln 310 315 Asn Phe Asp Thr Leu Phe Thr Thr Glu Ala Ser Ile Asp Val Leu Lys Gln Thr Ile Leu Gln Leu Ala Val Met Gly Lys Leu Val Pro Gln Asp

```
Pro Asn Asp Glu Pro Ala Ser Glu Leu Leu Lys Arg Ile Asp Gln Glu
 355
                    360
Lys Ala Gln Leu Val Lys Glu Gly Arg Ile Lys Lys Gln Lys Pro Leu
 370 375
                                380
Pro Pro Ile Ser Asp Asp Glu Lys Pro Phe Glu Leu Pro Glu Gly Trp
385 390 395
                                            400
Glu Trp Cys Arg Leu Glu Thr Ile Thr Glu Leu Ile Thr Lys Gly Ser
           405 410 415
Ser Pro Lys Trp Gln Gly Val Ser Tyr Thr Asp Asn Pro Asn Asp Val
        420 425 430
Leu Phe Ile Thr Ser Glu Asn Val Gly Ser Phe Lys Ile Leu Leu Asp
 435 440 445
Ser Glu Lys Tyr Val Glu Lys Lys Phe Asn Glu Ile Glu Pro Arg Ser
 450 455 460
Ile Leu Thr His Asn Asp Ile Leu Met Asn Ile Val Gly Ala Ser Ile
              470 475
Gly Arg Thr Ala Ile Phe Asn Met Asn Arg Asn Ala Asn Ile Asn Gln 485 490 495
Ala Val Cys Leu Ile Arg Val Ile Asn Asn Ser Met Leu Leu Ser Tyr
        500 505 510
Leu Leu Asn Phe Phe Asn Ser Asp Ile Cys Leu Ser Tyr Met Phe Asp
     515 520 525
Lys Gln Val Asp Asn Ala Arg Ala Asn Leu Ser Met Gly Asn Ile Ala
      535 540
 530
Lys Phe Val Leu Pro Ile Pro Pro Leu Asn Glu Gln Lys Arg Ile Val
             550
545
                             555
Glu His Ile Asp Asn Leu Met Ser Ile Cys Asp Lys Leu Gln Ser His
           565 570 575
Leu Gln Ser Val Gln Gln Ile Gln Leu His Leu Ala Asp Ala Leu Thr
                       585
        580
Asp Ala Ala Leu Asn
```

595

<210> 9324 <211> 346 <212> PRT

<213> Enterobacter cloacae

<400> 9324

Phe Asn Lys Trp His Ser Pro Cys Glu Asp Lys Met Ser Asp Leu Tyr 5 10 1.5 Lys Lys His Phe Leu Lys Leu Leu Asp Phe Thr Pro Ala Gln Phe Thr 2.0 Ser Leu Leu Thr Leu Ala Ala Gln Leu Lys Ala Asp Lys Lys Asn Gly 35 40 Lys Glu Val Gln Lys Leu Thr Gly Lys Asn Ile Ala Leu Ile Phe Glu 55 Lys Asp Ser Thr Arg Thr Arg Cys Ser Phe Glu Val Ala Ala Phe Asp 75 70 Gin Gly Ala Arg Val Thr Tyr Leu Gly Pro Ser Gly Ser Gin Ile Gly 90 8.5 His Lys Glu Ser Ile Lys Asp Thr Ala Arg Val Leu Gly Arg Met Tyr 100 105 Asp Gly Ile Gln Tyr Arg Gly His Gly Gln Glu Val Val Glu Thr Leu 115 120 Ala Gln Tyr Ala Gly Val Pro Val Trp Asn Gly Leu Thr Asn Glu Phe 135 140 His Pro Thr Gln Leu Leu Ala Asp Leu Leu Thr Met Gln Glu His Leu 150 155 Pro Gly Lys Ala Phe Asn Glu Met Thr Leu Val Tyr Ala Gly Asp Ala 165 170 175

```
Arg Asn Asn Met Gly Asn Ser Met Leu Glu Ala Ala Ala Leu Thr Gly
                       185
    180
Leu Asp Leu Arg Leu Val Ala Pro Lys Ala Cys Trp Pro Glu Glu Ser
     195
                    200
                           205
Leu Val Ala Glu Cys Ser Ala Leu Ala Glu Lys His Gly Gly Lys Ile
 210 215 220
Thr Leu Thr Glu Asn Val Ala Ala Gly Val Lys Gly Ala Asp Phe Ile
225 230 235
Tyr Thr Asp Val Trp Val Ser Met Gly Glu Ala Lys Glu Lys Trp Ala
    245 250 255
Glu Arg Ile Ala Leu Leu Arg Gly Tyr Gln Val Asn Ala Gln Met Met
  260 265 270
Ala Leu Thr Gly Asn Pro Asp Val Lys Phe Leu His Cys Leu Pro Ala
 275 280
                           285
Phe His Asp Asp Gln Thr Thr Leu Gly Lys Gln Met Ala Lys Glu Phe
 290 295 300
Asp Leu His Gly Gly Met Glu Val Thr Asp Glu Val Phe Glu Ser Ala
305 310 315 320
Ala Ser Ile Val Phe Asp Gln Ala Glu Asn Arg Met His Thr Ile Lys
    325 330
Ala Val Met Val Ala Thr Leu Gly Glu
         340
                          345
<210> 9325
<211> 71
<212> PRT
<213> Enterobacter cloacae
<400> 9325
Ser Ile Ala Asn Trp Ala Met Val Leu Arg Ser Ser Ala Pro Ser Trp
1 5
                            10
                                            15
Glu Asn Ser Pro Pro Leu Pro Arg Lys Asn Arg Pro Ser Thr Pro Ala
20
                          25
                                         3.0
Leu Ile Arg Ser Ser Ile Ser Ala Ala Val Pro Cys Leu Ser Ser Trp
35
                    40
Pro Ser Ala Val Lys Met Val Glu Thr Gly Gly Met Ile Pro Val Asn
Asn Ala Asp Cys Gly Met
<210> 9326
<211> 425
<212> PRT
<213> Enterobacter cloacae
<400> 9326
Thr Pro His Met Ala His Ala Leu Phe Ile Leu Lys Lys Val Lys Gly
Ile Ile Met Glu Lys His Tyr Val Gly Ser Glu Ile Gly Gln Leu Arg
         20
                          25
Ser Val Met Leu His Arg Pro Asn Leu Ser Leu Lys Arg Leu Thr Pro
                      4.0
                                      45
Ser Asn Cys Gln Glu Leu Leu Phe Asp Asp Val Leu Ser Val Glu Arg
         5.5
Ala Gly Glu Glu His Asp Ile Phe Ala Asn Thr Leu Arg Glu Gln Gly
                70
                                75
Val Glu Val Leu Leu Thr Asp Leu Leu Thr Gln Ser Leu Asp Ile
                           90
Ala Glu Ala Lys Ala Trp Leu Leu Glu Thr Gln Ile Ser Asp Tyr Arg
         100
                   105
```

Leu Gly Pro Thr Phe Ala Ala Asp Val Arg Gly Trp Leu Ala Asp Met

```
120
Pro His Arg Glu Leu Ala Arg Arg Leu Ser Gly Gly Leu Thr Tyr Gly
 1.30
         135
Glu Ile Pro Ala Ala Ile Lys Asn Met Val Val Asp Thr His Thr Ala
      150 155
Asn Asp Phe Ile Met Lys Pro Leu Pro Asn His Leu Phe Thr Arg Asp
     165 170 175
Thr Ser Cys Trp Ile Tyr Asn Gly Val Ser Ile Asn Pro Met Ala Lys
      180 185 190
Pro Ala Arg Gln Arg Glu Thr Asn Asn Leu Arg Ala Ile Tyr Arg Trp
195 200 205
His Pro Ala Phe Ala Asp Gly Glu Phe Ile Lys Tyr Phe Gly Asp Glu
 210 215 220
Asn Ile Asn Tyr Asp His Ala Thr Leu Glu Gly Gly Asp Val Leu Val
225 230 235 240
Ile Gly Arg Gly Ala Val Leu Ile Gly Met Ser Glu Arg Thr Thr Pro
       245 250 255
Gln Gly Val Glu Phe Leu Ala Asn Ser Leu Phe Lys His Arg Gln Ala
      260 265 270
Glu Arg Val Ile Ala Val Glu Leu Pro Lys His Arg Ser Cys Met His
275 280 285
Leu Asp Thr Val Met Thr His Ile Asp Val Asp Thr Phe Ser Val Tyr 290 295 300
Pro Glu Val Val Arg Lys Asp Ala Gln Cys Trp Thr Leu Thr Pro Asp
305 310 315 320
Gly Arg Gly Gly Leu Leu Arg Thr Gln Glu Thr Asp Leu Leu His Ala
          325 330 335
Ile Glu Lys Ala Leu Gly Ile Asn Gln Val Arg Leu Ile Thr Thr Gly
   340
                    345
Gly Asp Ala Phe Glu Ala Glu Arg Glu Gln Trp Asn Asp Ala Asn Asn
355
                   360
                       365
Val Leu Thr Ile Arg Pro Gly Val Val Ile Gly Tyr Glu Arg Asn Val
              375 380
Trp Thr Asn Glu Lys Tyr Asp Lys Ala Gly Ile Thr Val Leu Pro Ile
385 390 395
Pro Gly Asp Glu Leu Gly Arg Gly Arg Gly Gly Ala Arg Cys Met Ser
           405
                         410
Cys Pro Leu Glu Arg Asp Gly Ile
```

420
<210> 9327
<211> 342
<212> PRT
<213> Enterobacter cloacae

<400> 9327

Glu Tyr Arg Gly Tyr Gly Gln Ala Ile Val Glu Glu Leu Gly Glu Tyr

120 Ala Gly Val Pro Val Trp Asn Gly Leu Thr Asp Glu Phe His Pro Thr 130 135 140 Gln Ile Leu Ala Asp Leu Met Thr Met Leu Glu His Ser Pro Gly Lys 150 155 Thr Leu Pro Glu Leu Ser Phe Ala Tyr Leu Gly Asp Ala Arg Asn Asn 165 170 Met Gly Asn Ser Leu Met Val Gly Ala Ala Lys Met Gly Met Asp Ile 180 185 190 Arg Leu Val Ala Pro Lys Ser Phe Trp Pro Glu Ala Gly Leu Val Glu 195 200 205 Gln Cys Arg Ala Ile Ala Lys Glu Thr Gly Ala Arg Ile Thr Leu Thr 210 215 220 Asp Asp Val Glu Glu Gly Val Gln Gly Thr Asp Phe Leu Tyr Thr Asp 230 235 Val Trp Val Ser Met Gly Glu Pro Lys Glu Ala Trp Ala Glu Arg Val 245 250 255 Ser Leu Met Lys Pro Tyr Gln Ile Asn Ala Gln Val Met Lys Ala Thr 260 265 270 Gly Asn Pro Asn Val Lys Phe Met His Cys Leu Pro Ala Phe His Asn 275 280 285 Glu His Thr Lys Val Gly Arg Glu Ile Glu Met Ala Tyr Gly Leu Lys 290 295 300 Gly Leu Glu Val Thr Glu Glu Val Phe Glu Ser Pro Asn Ser Ile Val 310 315 320 Phe Asp Glu Ala Glu Asn Arg Met His Thr Ile Lys Ala Val Met Val 325 330 Ala Thr Leu Gly Asp 340

<210> 9328 <211> 236 <212> PRT

<213> Enterobacter cloacae

<400> 9328 Pro Asp His Ser His Leu Cys Arg Arg Asp Gly Arg Ala Gly Tyr Arg 1.0 Pro Arg Ala Leu Arg Ala Leu Ser Glu Met Gly Arg Ala Ala Ala Gly 20 25 Asp Phe Asn Gly Gly Asp Tyr Gly Gly Val Lys Pro Gly Arg Phe Val 40 Val Ile Cys Arg Met Ala Leu Arg Leu Ser Gly Leu Arg Ile Gly Ala 5.5 60 Val Pro Pro Val Ile Ser Gly Thr Asp Met Gly Thr Met Met Asp Tyr 7.0 7.5 Glu Glu Tyr Ser Pro Lys Glu Gln Leu Gln Leu Thr Val Cys Gln Arg 8.5 90 Leu Ile Ala Glu Lys Ser Tyr Leu Ser Gln Glu Glu Ile Arg Arg Asp 105 Leu Gln Glu Arg Gly Phe Glu Thr Ile Ser Gln Ser Thr Val Ser Arg 120 125 115 Leu Leu Lys Leu Leu Gly Val Ile Lys Ile Arg Asn Ala Lys Gly Leu 135 140 Lys Ile Tyr Ser Leu Asn Pro Gln Leu Arg Pro Ala Pro Asp Ala Ala 155 150 Arg Thr Val Ser Glu Met Val Val Ser Val Glu His Asn Ser Glu Phe 165 170 175 Ile Leu Ile His Thr Val Ala Gly Tyr Gly Arg Ala Val Ala Arg Ile 190 180 185 Leu Asp Tyr His Gln Leu Pro Glu Ile Leu Gly Val Val Ala Gly Ser

200 Ser Ile Val Trp Val Ala Pro Arg Ile Val Lys Arg Thr Ala Leu Val 210 215 His Lys Gln Ile Asn Tyr Leu Leu Arg Thr His <210> 9329 <211> 136 <212> PRT <213> Enterobacter cloacae <400> 9329 Arg Cys Asn Ser Gly Glu Lys Met Ser Lys Val Leu Ala Thr Glu Asn 10 Ala Pro Ala Ala Ile Gly Pro Tyr Val Gln Gly Val Asp Leu Gly Ser 20 25 Met Ile Ile Thr Ser Gly Gln Ile Pro Val Asn Pro Lys Thr Gly Glu 3.5 4.0 Val Pro Ala Asp Val Ala Ala Gln Ala Arg Gln Ser Leu Glu Asn Val 5.5 Gln Ala Ile Val Glu Ser Ala Gly Leu Lys Val Gly Asp Ile Val Lys 70 7.5 Thr Thr Val Phe Val Lys Asp Leu Asn Asp Phe Ala Thr Val Asn Ala 8.5 90 Thr Tyr Glu Ala Phe Phe Thr Glu His Asn Ala Thr Phe Pro Ala Arg 100 105 110 Ser Cys Val Glu Val Ala Arg Leu Pro Lys Asp Val Lys Ile Glu Ile 115 120 Glu Ala Ile Ala Val Arg Arg 130 <210> 9330 <211> 483 <212> PRT <213> Enterobacter cloacae <400> 9330 Met Lys Leu Ser Lys Ile Ala Leu Ala Val Thr Thr Leu Thr Val Ala 10 Ser Ser Ala Leu Ala His Gly Tyr Ile Glu Ser Pro Ala Ser Arg Ala 25 Tyr Met Cys Lys Leu Gly Gln Asn Ile Asp Cys Gly Ser Val Gln Tyr 40 45 Glu Pro Gln Ser Val Glu Lys Thr Ser Gly Phe Pro Thr Gly Ala Met 55 Pro Pro Asp Gly Gln Leu Ala Ser Ala Gly Ile Ala Ser Tyr Ser Gln 7.0 75 80 Leu Asp Lys Gln Ser Leu Asn Ala Trp Thr Lys Asn Pro Met Thr Ala 85 90 Gly Pro His Glu Phe Val Trp His His Thr Ala Pro His Lys Thr Thr 110 100 Asn Trp Arg Tyr Tyr Ile Thr Lys Gln Asn Trp Asp Pro Asn Lys Pro 120 115 125 Leu Thr Arg Asp Gln Phe Glu Leu Thr Pro Phe Cys Thr Ile Asn Gly 130 135 140 Asn Gly Gln Ala Pro Ala Met Tnr Lys Ser Met Thr Cys Asn Val Pro 145

Glu Arg Thr Gly Tyr Gln Val Ile Tyr Gly Val Trp Glu Ile Ala Asp

Thr Ala Asn Ser Phe Tyr Gln Ala Ile Asp Val Asp Phe Gly Asn Gly

185

170

190

165

```
Gly Asn Val Thr Pro Asp Asp Thr Pro Ala Val Ile Ser Gln Trp Ser
           200
 195
Lys Thr Leu Ser Gly Gln Ile Ala Gly Asn Asn Leu Asn Thr Gly Asp
 210
               215 220
Arg Val Ile Ala Arg Phe Phe Asp Ala Asn Gly Glu Val Ala Ala Leu
225 230 235
Arg Thr Glu Leu Thr Ile Gly Ser Val Ala Gln Gly Asp Thr Asn Gln
      245 250 255
Trp Ser Tyr Asp Leu Ala Gln Lys Ile Asn Ala Ala Tyr Ser Asp Val
        260 265 270
Arg Val Gly Val Lys Asp Glu Ala Gly Glu Ile Ser Pro Val His Gly
   275 280 285
Ala Asn Ser Val Phe Val Lys Asp Gly Ser Ala Leu Gln Ser Val Ala
                 295
                                300
Ile Ser Tyr Glu Glu Gln Lys Ala Glu Val Asn Glu Thr Ile Ala Val
              310
                             315
Ser Asn Pro His Tyr Ser Lys Ile Glu Asn Gly Lys Ala Ser Val Thr
               330
           325
Phe His Val Asn Thr Lys Gly Asp Val Asn Val Glu Ala His Val Met
        340
                        345
                                       350
Asn His Ser Gly Ala Glu Lys Gly Tyr Leu Lys Gln Glu Met Asn Asn
355
                     360
                                   365
Ala Ser Gln Asp Val Thr Met Thr Leu Thr Asp Val Thr Ala Gly His
                                 380
 370
                  375
His Met Leu Lys Tyr Tyr Ala Thr Asn Lys Asp Gly Thr Leu Phe Ala
             390 395
Gln Asp Val Leu Asp Leu Met Leu Glu Ser Asp Ala Ala Asp Ser Asn
           405 410 415
Gly Pro His Asp Phe Ile Phe Pro Asp Asn Val Ala Ser Tyr Lys Ala
                       425 430
        420
Gly Thr Val Val Leu Gln Pro Lys Asp Gly Lys Thr Tyr Glu Cys Arg
                          445
435
                    440
Pro Val Pro Phe Ser Gly Tyr Cys Val Gln Tyr Ser Pro Thr Ala Asn
450 455 460
Gln Phe Glu Pro Gly Val Gly Ala His Trp Arq Glu Ala Trp Val Leu
                              475
465
              470
Lys Asp
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<210> 9331 <211> 326 <212> PRT

<213> Enterobacter cloacae

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Ile Asp Gly Val Val Leu Phe Gly Phe Thr Gly Leu Lys Glu Asp Val
 130
              135
                               140
Leu Lys Pro Trp Gln Pro Ser Leu Val Leu Leu Ala Arg Asp Ala Ser
        150 155
Gly Phe Ala Ser Val Cys Tyr Asp Asp Glu Gly Ala Ile Val Ile Leu
      165 170 175
Met Gln Arg Leu Tyr Glu Gln Gly His Arg His Ile Ser Tyr Leu Gly
       180 185 190
Val Pro His Ala Asp Ile Thr Thr Gly Lys Arg Arg His Glu Ala Tyr
     195 200 205
Leu Ala Phe Cys Lys Lys His Asn Leu Pro Ala Val Ala Ala Leu Pro
      215 220
 210
Gly Leu Gly Met Lys Gln Gly Tyr Glu Gln Val Ala Ser Val Leu Thr
225 230 235 240
Pro Gln Thr Thr Ala Leu Val Cys Ala Thr Asp Thr Leu Ala Leu Gly
           245 250 255
Ala Ser Lys Tyr Leu Gln Glu Gln Arg Ile Gly Glu Leu Gln Leu Ala
        260
                      265 270
Ser Val Gly Ser Thr Pro Leu Met Lys Phe Leu His Pro Glu Ile Ile
     275
                   280
                                  285
Ser Val Asp Pro Gly Tyr Ala Glu Ser Gly Arg Gln Ala Ala Ala Gln
                295 300
290
Leu Ile Glu Gln Ile Asn Gly Arg Ala Glu Pro Arg Gln Ile Val Ile
305
           310
                          315
Pro Ala Arg Leu Ser
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<210> 9332 <211> 424

<212> PRT

<213> Enterobacter cloacae

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His Ala His Val Val Thr Thr Thr His Lys Thr Leu Ala Gly Pro
          230
                    235
Arg Gly Gly Leu Ile Leu Ala Lys Gly Gly Asp Glu Glu Leu Tyr Lys
          245 250
Lys Leu Asn Ser Ala Val Phe Pro Ser Ala Gln Gly Gly Pro Leu Met
    260 265 270
His Val Ile Ala Ala Lys Ala Val Ala Leu Lys Glu Ala Met Glu Pro
 275 280 285
Glu Phe Lys Val Tyr Gln Gln Gln Val Ala Lys Asn Ala Lys Ala Met
290 295 300
Val Glu Val Phe Leu Asn Arg Gly Tyr Lys Val Val Ser Gly Gly Thr
305 310 315
Glu Asn His Leu Phe Leu Leu Asp Leu Val Asp Lys Asn Leu Thr Gly
    325 330 335
Lys Glu Ala Asp Ala Ala Leu Gly Arg Ala Asn Ile Thr Val Asn Lys 340 345 350
Asn Ser Val Pro Asn Asp Pro Lys Ser Pro Phe Val Thr Ser Gly Ile
     355 360 365
Arg Ile Gly Ser Pro Ala Val Thr Arg Arg Gly Phe Lys Glu Ala Glu
                  375 380
370
Val Lys Glu Leu Ala Gly Trp Met Cys Asp Val Leu Asp Asn Ile Asn
385 390 395
Asp Asp Ala Val Ile Glu Arg Val Lys Gly Lys Val Leu Asp Ile Cys
    405
                      410
Ala Arg Phe Pro Val Tyr Ala
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<212> PRT
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Pro Phe Arg Glu Gly Phe Met Val Leu His Ser Thr Arg Trp Leu Ala
     2.0
                         25
Leu Ser Tyr Phe Thr Tyr Phe Phe Ser Tyr Gly Ile Phe Leu Pro Phe
35
                   40
Trp Ser Val Trp Leu Lys Gly Ile Gly Leu Thr Pro Glu Thr Ile Gly
                  55
                            60
Ile Leu Leu Gly Ala Gly Leu Val Ala Arg Phe Leu Gly Ser Leu Leu
               70
                                75
Ile Ala Pro Arg Val Ser Asp Pro Ser Leu Leu Ile Lys Ala Val Arg
                            90
            85
Ile Leu Ala Leu Leu Thr Leu Val Phe Ala Val Cys Phe Trp Val Ser
                             110
                         105
         100
His Gln Phe Ala Trp Leu Met Val Val Met Val Gly Phe Asn Leu Phe
                                      125
                      120
Phe Ser Pro Leu Val Pro Leu Thr Asp Ala Leu Ala Asn Thr Trp Gln
 130
                  135
                                 140
Lys Gln Ile Thr Met Asp Tyr Gly Arg Val Arg Leu Trp Gly Ser Ile
145
               150
                               155
Ala Phe Val Ile Gly Ser Ala Leu Val Gly Lys Leu Val Ser Leu Tyr
            165 170
Asp Tyr Arg Ala Ile Leu Ala Leu Leu Thr Leu Gly Ile Ala Ser Met
         180
             185
                                         190
Leu Leu Gly Met Leu Leu Arg Pro Ser Val Met Pro Gln Gly Glu Ser
                      200 205
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Arg His Gln Glu Ser Ala Gly Trp Pro Ala Trp Arg Ser Leu Val Ala

220

215

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Gln Ser Trp Arg Phe Leu Ala Cys Val Cys Leu Leu Gln Gly Ala His
225
                                  235
                230
Ala Ala Tyr Tyr Gly Phe Ser Ala Ile Tyr Trp Gln Gly Ala Gly Tyr
             245
                              250
Ser Ala Ser Ala Val Gly Tyr Leu Trp Ser Leu Gly Val Val Ala Glu
         260
                         265
Val Ile Ile Phe Ala Leu Ser Gln Lys Leu Phe Arg Arg Phe Gly Ala
                       280
      275
                                        285
Arg Asp Leu Leu Leu Ser Ala Val Cys Gly Val Ala Arg Trp Gly
  290 295
                                     300
Ile Met Gly Trp Thr Thr Glu Leu Pro Trp Leu Ile Val Ala Gln Ile
     310 315
Leu His Cys Gly Thr Phe Thr Val Cys His Leu Ala Ala Met Arg Tyr
            325
                              330
Ile Ala Ala Arg Glu Gly Gly Asp Val Ile Arg Leu Gln Ala Val Tyr
          340 345 350
Ser Ala Val Ala Met Gly Gly Ser Ile Ala Val Met Thr Val Phe Ala
      355
                       360
                             365
Gly Phe Leu Tyr Gln His Leu Gly His Gly Val Phe Trp Val Met Ala
 370 375
                           380
Leu Val Ala Leu Pro Ala Ile Val Ile Arg Pro Lys Val Ala Ala Arg
385
                390
                                  395
Thr
<210> 9334
<211> 111
<212> PRT
<213> Enterobacter cloacae
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                                            30
Val Arg Thr Ser Gly Cys Ser Gly Met Ala Tyr Val Leu Glu Phe Val
                       4.0
                                         4.5
Asp Glu Pro Ala Ser Asp Asp Thr Val Phe Glu Asp Lys Gly Val Lys
                    55
 5.0
                                     60
Val Val Val Asp Gly Lys Ser Leu His Phe Leu Asn Gly Thr Gln Leu
                                  7.5
                 7.0
Asp Phe Val Lys Glu Gly Leu Asn Glu Gly Phe Lys Phe Thr Asn Pro
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                              90
Asn Val Lys Asp Glu Cys Gly Cys Gly Glu Ser Phe His Val
          100
                           105
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<211> 632
<212> PRT
<213> Enterobacter cloacae
<400> 9335
Thr Thr Arg Arg Lys Ala Ala Arg Phe Leu Ile Ser Glu Ala Ile Met
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Ala Leu Ala Ala Asp Ala Ala Leu Leu Ser Ala Ala Glu Arg Gln Val 570 565 Ile Asp Asp Ala Ala Ala Arg Leu Ser Ala Val Ala Glu Gly Asn Asp 580 585 Ala Asp Ala Ile Glu Glu Ala Ile Lys Asn Val Asp Lys Gln Thr Gln 595 600 605 Asp Phe Ala Ala Arg Arg Met Asp Lys Ser Val Arg Val Ala Leu Lys 610 615 620 Gly Gln Ser Val Asp Glu Val <210> 9336 <211> 1661 <212> PRT <213> Enterobacter cloacae <400> 9336 Pro Thr Gly Pro Ser Gly Gln Gly His Arg Met Lys Pro Phe Arg Leu 10 Ala Ala Ile Ser Leu Ala Leu Leu Thr Thr Phe Thr Leu Val Glv Cvs 2.5 Asp Asn Ser Asp Asp Lys Pro Gln Ala Ala Ala Pro Ala Ala Ser Thr 40 Ala Ser Glu Gln Lys Thr Pro Ala Thr Pro Asp Pro Glu Lys Leu Ala 50 55 Lys Leu Ala Ala Gln Ser Gln Gly Lys Ala Leu Thr Leu Leu Asp Ala 65 70 75 Ser Glu Val Gln Leu Asp Gly Ala Ala Thr Leu Val Leu Thr Phe Ser 8.5 90 Val Pro Leu Asp Pro Ser Gln Asp Phe Ala Lys Thr Val His Val Val 100 105 110 Asp Lys Lys Ser Gly Lys Val Asp Gly Ala Trp Glu Leu Ala Pro Asn 115 120 125 Leu Lys Glu Leu Arg Leu Arg His Leu Glu Pro Asn Arg Asn Leu Val 130 140 Val Thr Val Glu Arg Asp Leu Leu Ala Leu Asn Lys Ala Thr Phe Gly 150 155 145 Ile Asp Tyr Glu Lys Ala Ile Thr Thr Arg Asp Val Glu Pro Thr Val 170 175 165 Gly Phe Ala Ser Arg Gly Ser Leu Leu Pro Gly Lys Val Val Glu Gly 185 190 180 Leu Pro Val Met Ala Leu Asn Val Asn Asn Val Asp Val Asn Phe Tyr 200 205 195 Arg Val Lys Pro Glu Ser Leu Ala Ser Phe Val Ser Gln Trp Glu Tyr 215 220 210 Arg Asn Ser Leu Thr Asn Trp Glu Ser Asp Asn Leu Leu Lys Met Ala 230 235 Glu Leu Val Tyr Thr Gly Arg Phe Asp Leu Asn Pro Ala Arg Asn Thr 250 Arg Glu Lys Leu Leu Pro Leu Lys Asp Ile Lys Pro Leu Gln Gln 260 265 270 Ser Gly Val Tyr Ile Ala Val Met Asn Gln Ala Gly His Tyr Asn Tyr 275 280 285 Ser Asn Ala Ala Thr Leu Phe Thr Leu Ser Asp Ile Gly Leu Ser Ala 295 His Arg Tyr His Asn Arg Leu Asp Ile Phe Thr Gln Ser Leu Glu Asn 310 315 Gly Ala Ala Gln Ser Gly Val Thr Ile Thr Leu Leu Asn Asp Lys Gly 325 330 Gln Thr Leu Ala Glu Ala Asn Ser Asp Ala Asp Gly His Ala Lys Leu

Glu Thr Asp Lys Glu Ala Ala Leu Ile Leu Ala Ser Lys Asp Gly Gln 355 360 Thr Thr Leu Leu Asp Leu Lys Leu Pro Ala Leu Asp Leu Ala Glu Phe 375 380 Asp Ile Ala Gly Asn Pro Gly Tyr Ser Lys Gln Phe Phe Met Phe Gly 390 395 Pro Arg Asp Leu Tyr Arg Pro Gly Glu Thr Val Ile Leu Asn Gly Leu 405 410 415 Leu Arg Asp Ser Asp Gly Lys Pro Leu Pro Asp Gln Pro Val Lys Leu 420 425 430 Asp Val Leu Arg Pro Asp Gly Gln Val Ala Arg Thr Val Val Val Gln 435 44C 445 Pro Glu Asn Gly Leu Tyr Arg Phe Asn Tyr Ser Leu Asp Ser Gly Ala 455 460 Gln Thr Gly Met Trp His Ile Arg Ala Asn Thr Gly Asp Asn Gln Gln 470 475 Arg Met Trp Asp Phe His Val Glu Asp Phe Met Pro Glu Arg Met Ala 485 490 Leu Asn Leu Thr Gly Gln Lys Thr Pro Val Ser Pro Gln Glu Asp Val 500 505 510 Asp Phe Asn Val Val Gly Tyr Tyr Leu Tyr Gly Ala Pro Ala Asn Gly 515 520 525 Asn Ser Leu Gln Gly Gln Leu Phe Leu Arg Pro Leu Arg Asp Ala Val 530 535 540 Pro Ala Leu Pro Gly Phe Gln Phe Gly Asp Ile Ala Glu Glu Asn Leu 545 550 555 Ser Arg Ser Leu Asp Glu Val Gln Leu Thr Leu Asp Glu Gln Gly Arg 565 570 575 Gly Gln Val Thr Thr Glu Ser Gln Trp Lys Glu Ala His Ser Pro Leu 580 585 590 Gln Leu Ile Leu Gln Ala Ser Leu Leu Glu Ser Gly Gly Arg Pro Val 595 600 605 Thr Arg Arg Ala Glu Gln Ala Ile Trp Pro Ala Ala Glu Leu Pro Gly 610 615 620 Ile Arg Pro Gln Phe Ala Ser Lys Ala Val Tyr Asp Tyr Arg Thr Asp 630 635 Thr Thr Val Asn Gln Pro Ile Val Asp Glu Asn Gly Asn Ala Ser Phe 645 650 655 Asp Ile Val Tyr Ala Asp Ala Ser Gly Ala Lys Lys Ala Val Ser Gly 665 670 660 Leu Gln Val Arg Leu Ile Arg Glu Arg Arg Asp Tyr Phe Trp Asn Trp 675 680 68.5 Ser Glu Ser Glu Gly Trp Gln Ser Gln Phe Asp Gln Lys Asp Leu Val 690 695 700 Glu Gly Glu Gln Glu Leu Asn Leu Lys Ala Asp Glu Thr Gly Lys Val 710 715 Thr Phe Pro Val Glu Trp Gly Ser Tyr Arg Leu Glu Val Lys Ala Pro 725 730 Asp Asp Met Val Ser Ser Val Arg Phe Trp Ala Gly Tyr Ser Trp Gln 740 . 745 750 Asp Asn Ser Asp Gly Thr Gly Ala Ala Arg Pro Asp Arg Val Thr Leu 765 755 760 Lys Leu Asp Lys Pro Ser Tyr Gln Pro Gly Asp Thr Ile Gln Leu His 770 775 780 Ile Ala Ala Pro Ala Ala Gly Lys Gly Tyr Ala Met Ile Glu Ser Ser 785 790 795 Glu Gly Pro Leu Trp Trp Lys Glu Ile Asp Val Pro Ala Asn Gly Leu 805 810 815 Asp Leu Ala Ile Pro Val Asp Lys Ala Trp Lys Arg His Asp Leu Tyr 825 Leu Ser Thr Leu Val Val Arg Pro Gly Asp Lys Ser Lys Ser Ala Thr

1315

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840
Pro Lys Arg Ala Val Gly Leu Leu His Leu Pro Met Gly Asp Glu Asn
              855
                                860
Arg Arg Leu Asn Ile Ala Leu Asp Asn Pro Gln Lys Met Arg Pro Asn
    870 875
Gln Thr Leu Ser Val Lys Val Lys Ala Ser Val Lys Glu Gly Ala Val
        885 890
Pro Gln Lys Val Asn Val Leu Val Ser Ala Val Asp Ser Gly Val Leu
      900 905 910
Asn Ile Thr Asp Tyr Val Thr Pro Asp Pro Trp Gln Ala Phe Phe Gly
   915 920 925
Gln Lys Arg Tyr Gly Ala Asp Ile Tyr Asp Val Tyr Gly Gln Val Ile
930 935 940
Glu Gly Gln Gly Arg Leu Ala Ala Leu Arg Phe Gly Gly Asp Gly Asp
945 950 955 960
Glu Leu Lys Arg Gly Gly Lys Pro Pro Val Asn His Val Thr Ile Ile
           965 970 975
Ala Gln Gln Ala Gln Pro Val Thr Leu Asp Ala Asn Gly Glu Gly Thr
 980 985 990
Ile Thr Leu Pro Ile Gly Asp Phe Asn Gly Glu Leu Arg Leu Met Ala
995 1000 1005
Gln Ala Trp Thr Glu Asp Asp Phe Gly Ser Ser Glu Ser Lys Ile Ile
1010 1015 1020
Val Ala Ala Pro Ile Ile Thr Glu Leu Asn Thr Pro Arg Phe Leu Ala
1025 1030 1035 1040
Ser Gly Asp Thr Ser Arg Leu Thr Leu Asp Leu Thr Asn Leu Thr Asp
         1045 1050 1055
Gln Pro Gln Thr Leu Ser Ile Ala Leu Thr Ala Ala Gly Lys Leu Ser
1060 1065 1070
Leu Glu Gly Ala Gln Pro Glu Pro Val Lys Leu Pro Pro Gly Ala Arg
1075 1080 1085
Ser Thr Leu Phe Ile Pro Val Arg Ala Leu Glu Gly Tyr Gly Asp Gly
1090 1095 1100
Ala Pro Gln Gln Lys Ser Trp Lys Ile Gly Val Arg Pro Ala Phe Pro
         1125 1130 1135
Ala Gln Thr Val Asn Thr Gly Thr Met Leu Asn Pro Gly Glu Ser Trp 1140 1145 1150
Ser Ala Pro Ala Gln His Ile Glu Gly Phe Ser Pro Ala Thr Leu Gln
 1155 1160 1165
Gly Gln Leu Leu Leu Ser Gly Lys Pro Pro Leu Asn Leu Ala Arg Tyr
1170 1175 1180
Ile Arg Glu Leu Gin Ala Tyr Pro Tyr Gly Cys Leu Glu Gln Thr Thr 1185 $1190$ 1195 1200
Ser Gly Leu Phe Pro Ser Leu Tyr Thr Asn Ala Ala Gln Leu Lys Ala
           1205 1210 1215
Leu Gly Ile Lys Gly Asp Thr Asp Asp Lys Arg Arg Ala Ala Ile Asp
      1220 1225 1230
Ile Gly Ile Ser Arg Leu Leu Gln Met Gln Arg Asp Asp Gly Gly Phe
     1235 1240 1245
Ala Leu Trp Asp Lys Asn Gly Pro Glu Glu Tyr Trp Leu Thr Ala Tyr
1250 1255 1260
Val Thr Asp Phe Leu Val Arg Ala Gly Glu Gln Gly Tyr Ser Val Pro
1265 1270 1280
Ala Glu Ala Val Asn Asn Ala Asn Ser Arg Leu Leu Arg Tyr Leu Gln
            1285 1290 1295
Asp Pro Gly Met Met Ser Ile Arg Tyr Ser Asp Asp Thr Gln Ala Ser
         1300 1305 1310
Lys Phe Ala Val Gln Ala Tyr Ala Ser Leu Val Leu Ala Arg Gln Gln
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Lys Ala Pro Leu Gly Ala Leu Arg Glu Ile Trp Glu Arg His Ala Gln 1335 1340 1330 Ala Ala Ser Gly Leu Pro Leu Met Gln Leu Gly Met Ala Leu Lys Leu 1345 . 1350 1355 1360 Met Gly Asp Ala Pro Arg Ser Gln Gln Ala Leu Asp Leu Ala Leu Lys 1365 1370 1375 Thr Pro Arg Asn Asp Ser Arg Asn Trp Met Ala Asp Tyr Gly Ser Gln \$1380\$ \$1385 \$1390Leu Arg Asp Asn Ala Leu Met Leu Ser Leu Leu Glu Glu Tyr Lys Leu 1395 1400 1405 Leu Pro Asp Ala Gln Asn Arg Leu Leu Asn Ala Leu Ser Glu Asp Ala 1410 1415 1420 Phe Ser Gln Arg Trp Leu Ser Thr Gln Glu Ser Asn Ala Leu Phe Leu 1425 1430 1435 1440 Ala Gly Arg Ser Leu Gln Thr Leu Ser Gly Ala Trp Gln Ala Thr Thr 1445 1450 1455 Ser Leu Ser Glu Gln Thr Gln Ser Ser Asp Lys Ala Gln Val Glu Asn 1460 1465 1470 Leu Asn Gly Asp Gln Ile Gly Ala Leu Lys Met Thr Asn Thr Gly Thr 1475 1480 1485 Thr Pro Leu Trp Val Arg Leu Asp Thr Thr Gly Tyr Pro Glu Tyr Ala 1490 1495 1500 Pro Gln Pro Ser Ser Asn Val Leu Gln Ile Glu Arg His Ile Leu Ala 1505 1510 1515 1520 Thr Asp Gly Ser Ser Lys Ser Leu Ser Ser Leu Lys Ser Gly Glu Leu 1525 1530 1535 Val Leu Val Trp Leu Glu Val Lys Ala Ser Gln Asn Val Pro Asp Ala 1540 1545 1550 Leu Val Val Asp Leu Leu Pro Ala Gly Leu Glu Leu Glu Asn Gln Asn 1555 1560 1565 Leu Ala Ser Ser Ser Ala Ser Leu Gln Asp Ser Gly Ser Glu Val Gln 1570 1575 1580 Asn Leu Leu Asn Gln Met Gln Gln Ser Asp Ile Gln His Met Glu Phe 1585 1590 1595 1600 Arg Asp Asp Arg Phe Val Ala Ala Val Pro Val Asn Glu Gly Gln Pro 1605 1610 1615 Val Thr Leu Val Tyr Leu Ala Arg Ala Val Thr Pro Gly Thr Tyr Gln 1620 1625 1630 Val Pro Val Pro Met Val Glu Ser Met Tyr Val Pro Gln Trp Arg Ala 1635 1640 1645 Thr Gly Ala Ala Ser Gly Pro Leu Ile Val Val Pro 1650 1655 1660 <210> 9337 <211> 179 <212> PRT <213> Enterobacter cloacae <220> <221>UNSURE <222>(179) <400> 9337 Ile Ile Cys Pro Ser Glu Arg Asp Pro Met Gln Leu Arg Lys Leu Leu 1 5 10 15 Leu Pro Gly Leu Leu Ser Val Thr Leu Leu Ser Gly Cys Ser Leu Phe 2.0 25 3.0 Ser Gly Glu Glu Asp Val Val Lys Met Ser Pro Leu Pro Thr Val Glu 35 4.0 Asn Gln Phe Thr Pro Ser Thr Ala Trp Asp Thr Ser Val Gly Asp Gly

55

Ile Gly Asp Phe Tyr Ser Asn Leu His Pro Ala Phe Ala Asp Gly Val 7.0 Val Tyr Ala Ala Asp Arg Lys Gly Thr Val Lys Ala Leu Asn Ala Asp 8.5 90 Asp Gly Lys Glu Val Trp Ser Ile Asn Leu Ala Glu Lys Asp Gly Trp 100 105 110 Phe Ser Arg Lys Pro Ala Leu Phe Tyr Gly Gly Leu Thr Val Thr Gly 115 120 125 Gly His Val Tyr Val Gly Ser Glu Lys Ala Gln Val Tyr Ala Leu Asn 135 140 130 Ala Ser Val Gly Ser Val Ala Trp Gln Thr Thr Val Ala Gly Glu Ser 145 150 155 160 Leu Ser Arg Pro Val Phe Thr Thr Gly Asn Glu His Arg Arg Leu His 170 Leu His Xaa

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Thr Leu Ala Leu Ala Gly Gly Val Ile Leu Leu Val Ala Ala Val Thr 305 310 315 320 Met Trp Met Ser Ala Leu Pro Val Gly Arg Gly Leu Arg Pro Phe 325 330 335

<210> 9339 <211> 179

<212> PRT <213> Enterobacter cloacae

<400> 9339

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20 25 30
Asp Leu Gln Arg Gln Tyr His Pro Asp Lys Phe Ala Ser Gly Thr Gln

35 40 45 Ala Glu Gln Leu Ala Ala Val Ser His Ser Ala Thr Ile Asn Gln Ala 50 55 60

50 55 50 Trp Gln Thr Leu Arg His Pro Leu Ala Arg Ala Glu Tyr Leu Leu Ser 65 70 80

Leu His Gly Phe Asp Leu Ala Ser Glu Gln His Thr Val Arg Asp Ala 85 90 95

Ala Phe Leu Met Glu Gln Leu Glu Leu Arg Glu Glu Leu Asp Glu Ile 100 \$105\$

Glu Gln Ala Lys Asp Glu Ala Arg Leu Glu Ser Phe Ile Thr Arg Val

Lys Gly Met Phe Asp Thr Arg His Gln Gln Met Val Glu Gln Leu Asn 130 140 Asn Glu Thr Trp Asp Val Ala Ala Asp Thr Val Arg Lys Leu Arg Phe

Asin out his tip asp val and and asp his val and by beet and the late 145 150 155 160 Leu Asp Lys Leu Arg Ser Ser Ala Glu Gln Leu Glu Glu Lys Leu Leu Arg Ser Ser Ala Glu Gln Leu Glu Glu Lys Leu Leu 170 175 175

Asp Phe

<210> 9340 <211> 121

<211> 121

<213> Enterobacter cloacae

<400> 9340

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Gly Glu Thr Ile Leu Asp Val Ala Leu Arg Ala Gly Ile Glu Val Glu 35 His Ala Cys Glu Lys Ser Cys Ala Cys Thr Thr Cys His Cys Ile Val

50 55 60 Asp Glu Gly Phe Asp Ser Leu Ala Glu Ser Thr Glu Asp Glu Asp Asp

65 70 75 80 80 Met Leu Asp Lys Ala Trp Gly Leu Glu Pro Asp Ser Arg Leu Ser Cys 90 95 95

Gln Ala Ala Val Thr Asp Glu Asp Leu Val Val Glu Phe Pro Arg Tyr 100 105 110

Thr Ile Asn His Ala Arg Glu His 115 120

113

<210> 9341 <211> 781 <212> PRT <213> Enterobacter cloacae

<400> 9341 Ser Leu Phe Arg Lys Met Arg Ile Ala Arg Leu Ile Arg Ser Arg Trp Leu Trp Leu Ala Gly Ala Leu Leu Val Ser Gly Gly Leu Ile Val Val 20 25 Ala Asp Arg Val Trp Pro Leu Pro Leu Lys Glu Val Asn Pro Ala Arg 4.5 40 Val Val Val Asp Glu Gln Gly Val Pro Leu Trp Arg Phe Ala Asp Ser 5.5 Glu Gly Ile Trp Arg Tyr Pro Val Thr Ile Lys Glu Val Ser Pro Arg 65 70 75 80 Tyr Leu Glu Ala Leu Ile Gln Tyr Glu Asp Arg Trp Phe Trp Asp His 8.5 90 Pro Gly Val Asn Pro Leu Ser Val Leu Arg Ala Ala Trp Gln Asp Leu 100 105 Thr Ser Gly Arg Val Val Ser Gly Gly Ser Thr Leu Thr Met Gln Val 120 125 115 Ala Arg Leu Leu Asp Pro His Pro Arg Thr Phe Gly Gly Lys Ile Arg 130 135 140 Gln Leu Trp Arg Ala Met Gln Leu Glu Trp His Leu Ser Lys Arg Glu 150 155 Ile Leu Thr Leu Tyr Leu Asn Arg Ala Pro Phe Gly Gly Thr Leu Gln 165 170 175 Gly Val Gly Ala Ala Ser Trp Thr Tyr Leu Gly Lys Pro Pro Ser Gln 180 185 190 Leu Ser Tyr Ser Asp Ala Ala Leu Leu Ala Val Leu Pro Gln Ala Pro 195 200 205 Ser Arg Leu Arg Pro Asp Arg Trp Pro Glu Arg Ala Glu Ala Ala Arg 215 220 210 Asn Lys Val Leu Asp Arg Met Leu Thr Gln Gly Val Trp Ser Glu Lys 230 235 Glm Val Lys Glu Ser Arg Glu Glu Pro Val Trp Leu Ala Pro Arg Glm 245 250 Met Pro Gln Leu Ala Pro Leu Phe Ser Arg Met Met Leu Ser Lys Ser 260 265 270 Arg Asp Thr Lys Ile Val Thr Thr Leu Asp Ala Ala Leu Gln Arg Gln 280 285 Leu Glu Glu Leu Ala Met Asn Trp Lys Ser Arg Leu Pro Ala Arg Ser 290 295 300 Ser Leu Ala Met Ile Val Val Asp His Thr Ser Met Lys Val Arg Gly 310 315 Trp Val Gly Ser Val Asp Ile Asn Asp Asp Ser Arg Phe Ser His Val 325 330 Asp Met Val Asn Ala Ile Arg Ser Pro Gly Ser Val Leu Lys Pro Phe 345 350 340 Ile Tyr Gly Met Ala Leu Asp Asp Gly Leu Ile His Pro Ala Ser Leu 355 360 365 Leu Gln Asp Val Pro Arg Lys Thr Gly Asp Tyr Arg Pro Gly Asn Phe 375 380 Asp Ser Gly Phe His Gly Pro Val Ser Met Ser Glu Ala Leu Val Arg 390 395 Ser Leu Asn Leu Pro Ala Val Gln Val Leu Glu Ala Tyr Gly Pro Lys 405 410 Arg Phe Ala Gly Met Leu Ser Asn Ala Gly Leu Pro Leu Ile Leu Pro 420 425 Ala Gly Ala Gln Pro Asn Leu Ser Leu Ile Leu Gly Gly Ala Gly Ala 440

Arg Leu Ala Asp Ile Ala Ala Ala Tyr Ser Ala Phe Ala Arg Gln Gly

```
450
                  4.55
                                 460
Lys Ala Gly Arg Leu Arg Leu Gln Pro Gly Asp Pro Leu Ile Glu Arg
        470
                    475 480
Pro Leu Leu Ser Gln Gly Ala Ala Trp Ile Ile Arg Arg Ile Leu Ala
        485 490 495
Asn Glu Ala Gln Pro Leu Pro Asp Ser Ala Leu Pro Gln Val Ala Pro
        500 505 510
Leu Ala Trp Lys Thr Gly Thr Ser Tyr Gly Tyr Arg Asp Ala Trp Ala
515 520 525
Ile Gly Leu Asn Ala Arg Tyr Val Ile Gly Ile Trp Thr Gly Arg Pro
  530 535 540
Asp Gly Thr Pro Val Ala Gly Gln Phe Gly Phe Ala Ser Ala Val Pro 545 550 555 560
Leu Leu Asn Gln Val Asn Asn Met Leu Gln Ser Arg Ser Met Val Asp
           565 570 575
Glu Ala Arg Leu Pro Arg Asp Pro Arg Pro Ala Ser Val Gly Arg Gly
        580 585 590
Val Ile Cys Trp Pro Gly Gly Gln Ser Leu Pro Glu Gly Ser Glu Asn
      595 600
                         605
Cys Arg Arg Arg Leu Ser Thr Trp Leu Leu Glu Gly Ser Glu Pro Pro
 610
                  615
                                  620
Thr Leu Leu Pro Glu Gln Glu Gly Ile Arg Gly Ile Arg Phe Pro
625 630
                              635
Val Trp Leu Asp Lys Glu Gly Lys Arg Val Ala Ala Asp Cys Pro Asp
            645
                           650
                                           655
Ala Thr Glu Lys Val Leu Asp Val Trp Pro Leu Pro Leu Glu Pro Trp
                                       670
        660
                        665
Leu Pro Ala Ala Glu Lys Arg Ala Ala Arg Leu Pro Ala Arg Ser Ala
675
                     680
                                     685
Ile Cys Pro Pro Leu Asp Asn His Asn Ala Ala Pro Leu Met Leu Ser
                                  700
                  695
Gly Val Arg Glu Gly Ala Val Ile Lys Arg Leu Pro Gly Glu Lys Asn
705
               710
                               715
Ile Thr Leu Asn Val Ser Thr Ser Gly Gly Glu Gly Gln Arg Trp Trp
          725
                           730
                                           735
Phe Leu Asn Gly Glu Pro Leu Asp Gly His Gln Lys Asn Tyr Ser Leu
      740 745
Gln Leu Tyr Leu Pro Gly Lys Tyr Gln Leu Ile Val Leu Asp Glu Thr
                     760
Gly Gln Thr Ala Thr Val Asn Phe Glu Leu Asp Arg
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<210> 9342 <211> 211 <212> PRT

<213> Enterobacter cloacae

<400> 9342 Ser Met Ser Gln Phe Lys His Tyr Ala Pro Val Ser Asp Lys Gln Leu Gly Phe Tyr Ile Asp Ser Ser Arg Cys Ser Gly Cys Lys Ala Cys Gln 20 Val Ala Cys Lys Asp Lys Asn Asn Leu Glu Val Gly Arg Arg Phe Arg 35 4.0 Arg Val Tyr Glu Val Asn Gly Gly Asn Phe Ile Pro Thr Gly Gln Gly 50 5.5 Gly Val Ser Asn Asn Val Phe Ala Tyr Thr Leu Ser Ile Ser Cys Asn 70 75 His Cys Ala Asp Pro Ile Cys Thr Lys Asn Cys Pro Thr Thr Ala Met 8.5 90

His Lys Arg Pro Gly Asp Gly Ile Val Arg Val Asp Thr Asp Lys Cys

290

100 105 Val Gly Cys Gly Tyr Cys Ala Trp Ser Cys Pro Tyr Gly Ala Pro Gln 115 125 Leu Asn Glu Gln Thr Gly Gln Met Ser Lys Cys Asp Phe Cys Val Asp 130 135 140 Leu Gln Ala Lys Gly Glu Gln Pro Val Cys Val Ala Thr Cys Pro Leu 150 155 Glu Ala Ile Lys Phe Gly Pro Ile Asp Glu Leu Arg Ala Lys Tyr Gly 165 170 175 Ala Val Cys Asp Val Lys Gly Leu Pro Asp Ser Ser Ile Thr Lys Pro 180 185 190 Asn Leu Val Ile Lys Ala His Gln Gly Ala Glu Lys Glu Gly Lys Arg 200 His Ala 210 <210> 9343 <211> 304 <212> PRT <213> Enterobacter cloacae <400> 9343 Ala Asp Ala Ala Leu Cys Phe Leu Gln Tyr Trp Leu Met Gly Gly Leu Thr Phe Ala Pro Ala Met Asp Val Thr His Ala Cys Val Arg Arg Arg 20 Phe Arg His Ser Ser Cys Leu Ala Cys Ala Asp Val Cys Pro Val Gln 35 40 Ala Phe Ser Phe Thr Asp Ser Gly Val Ser Val Asp Asp Ser Arg Cys 5.5 Ile Glu Cys Gly Asp Cys Leu Phe Val Cys Pro Ala Gly Ala Ile Thr 70 75 Gly Ile Thr Pro Arg Lys Arg Phe Leu Ser Gly Asp Thr Leu Val Gly 85 90 Pro Phe Thr Asp Arg Ala Pro Gly Val Asn Glu Leu Leu Trp His 100 103 110 Ala Gln Tyr His Val Arg Phe Ile Ser Ile Asp Ala Glu Gln Asn Pro 120 Asp Trp Leu Leu Ala Ile Ala Arg Leu Asn Leu Ala Leu Arg Arg Arg 130 135 140 Gly Glu Ala Ala Trp Ala Phe Lys His Ile Pro Val Asn Glu Val Asn 150 155 160 Thr Ala Arg Arg Ala Leu Met His Val Pro Arg Glu Asp Val Arg Val 165 170 175 Cys Ser Val Val Pro Gly Gln Arg Asp Leu Arg Arg Ala Phe Ser Ala 185 190 180 Phe Ser Glu Ala Glu Ile Thr Leu Asp Thr Glu Ser Cys Val Leu Cys 200 205 195 Gly Ala Cys Trp Arg Ser Cys Thr Glu Asn Ala Ile Arg Phe Gln Asn 215 220 Thr Glu Leu Val Val Glu Thr Gly Arg Cys Thr Gly Cys Gly Gly Cys 230 235 Val Ala Val Cys Gln His Ala Ala Ile Asn Val Thr Gln Thr Glu Gly 245 250 Thr Ala Lys Ser Val Thr Ile Pro Ala Tyr Glu Ala Val Cys Leu Thr 270 260 265 Cys His Arg His Phe Trp Ser Phe Thr Ser Asp Glu Lys Gln Cys Pro 280 285 Leu Cys Phe His His Gln His Gly Met Arg Asn Thr Ser Cys Cys

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<210> 9344
<211> 390
<212> PRT
<213> Enterobacter cloacae
<400> 9344
Cys Arg Thr Ile Ser Ser Thr Val Thr Asp Gly Gln Cys Gly Arg Phe
                       10
Tyr Met His Asn Gln Ala Pro Ile Gln Arg Arg Lys Ser Lys Arg Ile
 20
                       25
                                     30
Tyr Val Gly Asn Val Pro Ile Gly Asp Gly Ala Pro Ile Ala Val Gln
 35 40
                          4.5
Ser Met Thr Asn Thr Arg Thr Thr Asp Val Glu Ala Thr Val Asn Gln
                5.5
                       60
Ile Lys Ala Leu Glu Arg Val Gly Ala Asp Ile Val Arg Val Ser Val
              7.0
                  75
Pro Thr Met Asp Ala Ala Glu Ala Phe Lys Leu Ile Lys Gln Gln Val
          85 90
Ser Val Pro Leu Val Ala Asp Ile His Phe Asp Tyr Arg Ile Ala Leu
        100 105 110
Ile Gly Asn Glu Glu Arg Ile Arg Met Val Val Asp Cys Ala Arg Asp
 130 135 140
Lys Asn Ile Pro Ile Arg Ile Gly Val Asn Ala Gly Ser Leu Glu Lys
             150 155
145
Asp Leu Gln Glu Lys Tyr Gly Glu Pro Thr Pro Gln Ala Leu Leu Glu
           165
                         170 175
Ser Ala Met Arg His Val Asp His Leu Asp Arg Leu Asn Phe Asp Gln
 180
                       185 190
Phe Lys Val Ser Val Lys Ala Ser Asp Val Phe Leu Ala Val Glu Ser
1.95
                   200 205
Tyr Arg Leu Leu Ala Lys Gln Ile Asp Gln Pro Leu His Leu Gly Ile
                 215 220
210
Thr Glu Ala Gly Gly Leu Arg Ser Gly Ser Val Lys Ser Ala Ile Gly
225 230
                            235
Leu Gly Leu Leu Ser Glu Gly Ile Gly Asp Thr Leu Arg Val Ser
                         250 255
        245
Leu Ala Ala Asp Pro Val Glu Glu Ile Lys Val Gly Phe Asp Ile Leu
        260
                      265
                           270
Lys Ser Leu Arg Ile Arg Ala Arg Gly Ile Asn Phe Ile Ala Cys Pro
     275
                    280
                                   285
Thr Cys Ser Arg Gln Glu Phe Asp Val Ile Gly Thr Val Asn Ala Leu
                295 300
  290
Glu Gln Arg Leu Glu Asp Ile Ile Thr Pro Met Asp Val Ser Ile Ile
              310 315
Gly Cys Val Val Asn Gly Pro Gly Glu Ala Leu Val Ser Thr Leu Gly
           325
                          330
                                        335
Val Thr Gly Gly Asn Lys Lys Ser Gly Leu Tyr Glu Asp Gly Val Arg
        340
                      345
                                     350
Lys Asp Arg Leu Asp Asn Ser Asp Met Ile Asp Gln Leu Glu Ala Arg
                          365
     355
                    360
Ile Arg Ala Lys Ala Thr Met Met Asp Glu Ala Gln Arg Ile Ser Val
                 375
                               380
 370
Gln Gln Val Glu Lys
385
<210> 9345
<211> 441
<212> PRT
<213> Enterobacter cloacae
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<400> 9345 Leu Asn Pro Phe Phe Gly Phe Phe Phe Val Tyr Arg Lys Arg Ile Asn 10 Val Ala Lys Asn Ile Gln Ala Ile Arg Gly Met Asn Asp Tyr Leu Pro 25 20 Gly Glu Thr Ala Ile Trp Gln Arg Ile Glu Gly Thr Leu Lys Gln Val 40 Leu Gly Ser Tyr Gly Tyr Ser Glu Ile Arg Leu Pro Ile Val Glu Gln 5.5 60 Thr Pro Leu Phe Lys Arg Ala Ile Gly Glu Val Thr Asp Val Val Glu 75 70 Lys Glu Met Tyr Thr Phe Glu Asp Arg Asn Gly Asp Ser Leu Thr Leu 8.5 90 Arg Pro Glu Gly Thr Ala Gly Cys Val Arg Ala Gly Ile Glu His Gly 100 105 Leu Leu Tyr Asn Gln Glu Gln Arg Leu Trp Tyr Ile Gly Pro Met Phe 115 120 125 Arg His Glu Arg Pro Gln Lys Gly Arg Tyr Arg Gln Phe Asn Gln Leu 135 140 Gly Val Glu Val Phe Gly Leu Gln Gly Pro Asp Ile Asp Ala Glu Leu 145 150 155 160 Ile Met Leu Thr Ala Arg Trp Trp Arg Ala Leu Gly Ile Ser Glu His 165 170 175 Val Ser Leu Glu Leu Asn Ser Ile Gly Ser Leu Glu Ala Arg Ala Asn 185 190 180 Tyr Arg Asp Ala Leu Val Ala Phe Leu Glu Gln His Lys Glu Lys Leu 200 205 195 Asp Glu Asp Cys Lys Arg Arg Met Tyr Ser Asn Pro Leu Arg Val Leu 220 210 215 Asp Ser Lys Asn Pro Asp Val Gln Ala Leu Leu Asn Asp Ala Pro Ala 230 235 Leu Gly Asp Tyr Leu Asp Glu Asp Ser Arg Glu His Phe Ala Gly Leu 245 250 255 Cys Lys Leu Leu Glu Ala Ala Gly Ile Ala Tyr Thr Val Asn Gln Arg 260 265 270 Leu Val Arg Gly Leu Asp Tyr Tyr Asn Arg Thr Val Phe Glu Trp Val 275 280 285 Thr Thr Ser Leu Gly Ser Gln Gly Thr Val Cys Ala Gly Gly Arg Tyr 290 295 300 Asp Gly Leu Val Glu Gln Leu Gly Gly Arg Ala Ala Pro Ala Val Gly 310 315 Phe Ala Met Gly Leu Glu Arg Leu Val Leu Leu Val Gln Ala Val Asn 330 335 Pro Glu Phe Lys Ala Asp Pro Val Val Asp Ile Tyr Leu Val Ala Ser 340 345 Gly Ala Asp Thr Gln Ser Ala Ala Met Gln Leu Ala Glu Arg Val Arg 365 355 360 Asp Ala Leu Pro Asp Val Lys Leu Met Thr Asn His Gly Gly Gly Asn 375 380 Phe Lys Lys Gln Phe Ala Arg Ala Asp Lys Trp Gly Ala Ser Ile Ala 390 395 Leu Val Leu Gly Glu Ser Glu Val Ala Asn Gly Glu Val Val Lys 405 410 415 Asp Leu Arg Ser Gly Glu Gln Thr Thr Val Thr Gln Asp Gly Val Ala 420 425 Ala His Leu Arg Thr Leu Leu Gly

<210> 9346 <211> 217

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<212> PRT
<213> Enterobacter cloacae
<400> 9346
Arg Glu Glu Gln Met Gln Ile Val Lys Gln Ser Ala Val Ala Leu Phe
                            1.0
Leu Ala Val Phe Thr Phe Ala Ala Gly Ala His Pro His Ser Phe Ile
  20
                         25
                                          30
Ser Leu Lys Thr Glu Leu Val Thr Asp Gly Thr Gln Leu Ser Gly Leu
     35
          40
                                      4.5
Lys Met His Trp Thr Met Asp Glu Ile Thr Ser Ala Asp Leu Leu Tyr
             55
                                   60
Asp Ala Gly Asn Ala Lys Pro Gly Asp Glu Ile Trp Lys Lys Leu Ala
               70
                     75
Ala Glu Val Met Ala Asn Val Leu Gly Gln His Tyr Phe Thr Glu Phe
            85
                 90 95
Trp His Asn Gly Gln Lys Val Lys Phe Leu Asn Arg Pro Thr Glu Tyr
         100 105 110
Gly Met Thr Arg Glu Gly His Gln Ala Val Leu Thr Phe Val Leu Pro
                      120
 115
Leu Ala His Pro Gln Pro Leu Pro Gly Gln Thr Tyr Arg Phe Ser Thr
130
                   135
                                   140
Phe Asp Pro Thr Tyr Tyr Val Asp Met Arg Tyr Asp Lys Asp Ser Asp 145 150 155 160
Val Arg Leu Pro Asp Ala Leu Glr. Lys Ser Cys Lys Ile Gly Val His
                            170 175
            165
Thr Pro Lys Pro Ser Glu Glu Thr Leu Asn Phe Ala Ile Ser Leu Asp
        180 185 190
Lys Ala Asp Ala Pro Pro Glu Asp Met Glu Leu Gly Lys Gln Phe Ala
195 200
                                 205
Gln Glu Val Thr Leu Gln Cys Gln
  210
<210> 9347
<211> 269
<212> PRT
<213> Enterobacter cloacae
<400> 9347
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Gln Arg Asp Arg Ile Met Ser Leu Val Tyr Asp Asn Met Pro Glu Tyr 10 1.5 Ser Ser Asp Thr Glu Ser Arg His Leu Lys Ile Met Leu Gln Asn Ile 30 25 Arq Ile Val Leu Val Glu Thr Ser His Thr Gly Asn Met Gly Ser Val 35 40 Ala Arg Ala Met Lys Thr Met Gly Leu Thr Asn Leu Trp Leu Val Asn 55 60 Pro Leu Val Lys Pro Asp Ser Gln Ala Ile Ala Leu Ala Ala Gly Ala 80 70 75 Ser Asp Val Ile Gly Asn Ala Gln Ile Val Asp Thr Leu Asp Glu Ala 90 85 Leu Ala Gly Cys Ser Leu Val Val Gly Thr Ser Ala Arg Ser Arg Thr 100 105 110 Leu Pro Trp Pro Met Leu Asp Pro Arg Glu Cys Gly Leu Lys Ser Ile 115 120 125 Ser Glu Ala Glu Gln Ala Pro Val Ala Leu Val Phe Gly Arg Glu Arg 130 135 140 Val Gly Leu Thr Asn Glu Glu Leu Gln Lys Cys His Tyr His Val Ala 150 155 Ile Ala Ala Asn Pro Glu Tyr Ser Ser Leu Asn Leu Ala Met Ala Val 170

Gin Val Ile Ala Tyr Glu Val Arg Met Ala Trp Leu Ala Thr Gln Glu 190 180 185 Lys Pro Val Glu Pro Lys Glu Glu Thr Ala Tyr Pro Leu Val Asp Asp 200 205 195 Leu Glu Arg Phe Tyr Gly His Leu Glu Gln Thr Leu Leu Ser Thr Gly 210 215 220 Phe Ile Arg Glu Gly His Pro Gly Gln Val Met Asn Lys Leu Arg Arg 230 235 Met Phe Thr Arg Ala Arg Pro Glu Ser Gln Glu Leu Asn Ile Leu Arg 245 250 255 Gly Ile Leu Ala Ser Ile Glu Gln Lys Asn Lys Ala 265

<210> 9348

<211> 165 <212> PRT

<213> Enterobacter cloacae

<400> 9348

Asp Met Arg Leu Thr Ser Lys Gly Arg Tyr Ala Val Thr Ala Met Leu 1.0 Asp Val Ala Leu Asn Ser Glu Ala Gly Pro Val Pro Leu Ala Asp Ile

20 25 Ser Glu Arg Gln Gly Ile Ser Leu Ser Tyr Leu Glu Gln Leu Phe Ser

4.5 35 4 ∩ Arg Leu Arg Lys Asn Gly Leu Val Ser Ser Val Arg Gly Pro Gly Gly 55 60 50

Gly Tyr Leu Leu Gly Lys Asp Ala Gly Ser Ile Ala Val Gly Glu Val 70 75 Ile Ser Ala Val Asp Glu Ser Val Asp Ala Thr Arg Cys Gln Gly Lys

90 85 Gly Gly Cys Gln Gly Gly Asp Lys Cys Leu Thr His Ala Leu Trp Arg

110 105 100 Asp Leu Ser Asp Arg Leu Thr Gly Phe Leu Asn Asn Ile Thr Leu Gly

120 125 115 Glu Leu Val Asn Asn Gln Glu Val Leu Asp Val Ser Gly Arg Gln His 135 140 130

Ser Gln Asp Ser Gln Arg Ser Thr Arg Thr Gln Asp Ala Ile Asp Val 155 160 150 145 Lys Leu Arg Ala

165

<210> 9349 <211> 440

<212> PRT <213> Enterobacter cloacae

<400> 9349

Val Phe Arg Ile Arg Pro Gly Trp Ser His Pro Ala Tyr Ser Val Val His Pro Ala Gly Cys Leu Ile Pro Cys Ile Glu Ala Met Tyr Gly Val 20 2.5 30 Tyr Arg Ala Met Lys Leu Pro Ile Tyr Leu Asp Tyr Ser Ala Thr Thr 35 40 Pro Val Asp Pro Arg Val Ala Glu Lys Met Met Gln Cys Leu Thr Leu 55 5.0 Asp Gly Asn Phe Gly Asn Pro Ala Ser Arg Ser His Arg Phe Gly Trp

75 7.0 His Ala Glu Glu Ala Val Asp Ile Ala Arg Asn Gln Ile Ala Asp Leu 90 8.5

Val Gly Ala Asp Pro Arg Glu Ile Val Phe Thr Ser Gly Ala Thr Glu

```
105
        100
Ser Asp Asn Leu Ala Ile Lys Gly Ala Ala Asn Phe Tyr Gln Lys Lys
115 120 125
Gly Lys His Ile Ile Thr Ser Lys Thr Glu His Lys Ala Val Leu Asp
 130 135 140
Thr Cys Arg Gln Leu Glu Arg Glu Gly Phe Glu Val Thr Tyr Leu Ala
145 150 155
Pro Gln Ser Asn Gly Ile Ile Asp Leu Lys Glu Leu Glu Ala Ala Met
       165 170 175
Arg Asp Asp Thr Ile Leu Val Ser Ile Met His Val Asn Asn Glu Ile
       180 185 190
Gly Val Val Gln Asp Ile Ala Thr Ile Gly Glu Met Cys Arg Ala Arg
      195 200 205
Gly Ile Ile Tyr His Val Asp Ala Thr Gln Ser Val Gly Lys Leu Pro
      215 220
 210
Ile Asp Leu Ser Gln Leu Lys Val Asp Leu Met Ser Phe Ser Gly His
225 230 235 240
Lys Ile Tyr Gly Pro Lys Gly Ile Gly Ala Leu Tyr Val Arg Arg Lys
           245 250 255
Pro Arg Ile Arg Ile Glu Ala Gln Met His Gly Gly His Glu Arg
     260
                        265
Gly Met Arg Ser Gly Thr Leu Pro Val His Gln Ile Val Gly Met Gly
      275
                     280
                                     285
Glu Ala Tyr Arg Ile Ala Lys Glu Glu Met Glu Thr Glu Met Ala Arg
                  295 300
   290
Leu Arg Thr Leu Arg Asn Arg Lea Trp Asp Gly Val Lys Asp Met Glu
305
                            315
               310
Glu Val Tyr Leu Asn Gly Asp Leu Glu Gln Gly Ala Pro Asn Ile Leu
         325
                            330
Asn Val Ser Phe Asn Tyr Val Glu Gly Glu Ser Leu Ile Met Ala Leu
                        345
                                        350
         340
Lys Asp Leu Ala Val Ser Ser Gly Ser Ala Cys Thr Ser Ala Ser Leu
                     360 365
355
Glu Pro Ser Tyr Val Leu Arg Ala Leu Gly Met Thr Asp Glu Leu Ala
                       380
370
                  375
His Ser Ser Ile Arg Phe Ser Leu Gly Arg Phe Thr Thr Glu Glu Glu
               390
                               395
Ile Asp Tyr Thr Ile Lys Leu Val Arg Asn Ser Ile Gly Arg Leu Arg
            405 410
Asp Leu Ser Pro Leu Trp Glu Met Phe Lys Gln Gly Val Asp Leu Asn
                         425
                                         430
         420
Ser Ile Glu Trp Ser His His
      435
<210> 9350
<211> 137
<212> PRT
<213> Enterobacter cloacae
<400> 9350
Ser Val His Lys Glu Asn Ser Ile Met Ala Tyr Ser Glu Lys Val Ile
Asp His Tyr Glu Asn Pro Arg Asn Val Gly Ser Phe Asp Asn Ser Asp
         2.0
                         25
Glu Ser Val Gly Ser Gly Met Val Gly Ala Pro Ala Cys Gly Asp Val
                      40
Met Lys Leu Gln Ile Lys Val Asn Asn Glu Gly Ile Ile Glu Asp Ala
                  55
 50
Arg Phe Lys Thr Tyr Gly Cys Gly Ser Ala Ile Ala Ser Ser Ser Leu
                70
                               75
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Val Thr Glu Trp Val Lys Gly Lys Ser Leu Asp Glu Ala Gln Ala Ile

4979 85 Lvs Asn Thr Asp Ile Ala Glu Glu Leu Glu Leu Pro Pro Val Lys Ile 100 105 110 His Cys Ser Ile Leu Ala Glu Asp Ala Ile Lys Ala Ala Ile Ala Asp 115 120 Tyr Lys Ser Lys Arg Glu Ala Lys 130 <210> 9351 <211> 88 <212> PRT <213> Enterobacter cloacae <400> 9351 Pro Met Lys Ile Trp Ser Trp Ser Ser His Ala Thr Pro Ser Thr Thr 10 His Ala Ser Thr Asn Met Gly Leu Lys Trp Thr Asp Ser Arg Glu Ile Gly Glu Ala Leu Tyr Asp Ala Asn Pro Asp Leu Asp Pro Lys Thr Val 35 40 Arg Phe Thr Asp Met His Gln Trp Ile Cys Asp Leu Glu Asp Phe Asp 50 55 60 Asp Asp Pro Asn Ala Ser Asn Glu Lys Ile Leu Glu Ala Ile Leu Leu 7.0 65 Val Trp Leu Asp Glu Ala Glu 8.5 <210> 9352 <211> 436

<211> 430 <212> PRT

210

<213> Enterobacter cloacae

<400> 9352 Leu Leu Ile Arg Ile Asn Lys Met Thr Glu Ala Met Lys Ile Thr Leu 10 Ser Asn Gln Pro Ala Asp Ala Arg Trp Gly Glu Lys Ala Thr Tyr Ser 2.0 25 Ile Asn Asn Asp Gly Ile Thr Leu His Leu Thr Gly Asn Asp Asp Leu 35 40 Gly Leu Ile Gln Arg Ala Ala Arg Lys Ile Asp Gly Leu Gly Ile Lys 55 60 50 His Val Ser Leu Glu Gly Glu Gly Trp Asp Thr Asp Arg Ser Trp Ala 75 65 7.0 Phe Trp Ala Gly Tyr Lys Gly Pro Lys Gly Thr Arg Lys Ile Glu Trp 90 85 Ala Asn Leu Asp Glu Ala Gly Gln Lys Glu Leu Glu Ser Arg Leu Asn 105 100 Ile Ile Asp Trp Val Arg Asp Thr Ile Asn Ala Pro Ala Glu Glu Leu 120 125 Gly Pro Glu Gln Leu Ala Gln Arg Ala Val Asp Leu Leu Cys Gly Val 135 140 130 Ala Gly Glu Lys Met Ser Tyr Arg Ile Thr Lys Gly Glu Asp Leu Arg 160 145 155 Glu Gln Asn Tyr Met Gly Ile His Thr Val Gly Arg Gly Ser Glu Arg 175 165 170 Pro Pro Val Leu Leu Ala Leu Asp Tyr Asn Pro Thr Gly Asp Lys Glu 180 185 190 Ala Pro Val Phe Ala Cys Leu Val Gly Lys Gly Ile Thr Phe Asp Thr 195 200 205 Gly Gly Tyr Ser Leu Lys Gln Ser Ala Phe Met Asp Ser Met Lys Ser

220

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Asp Met Gly Gly Ala Ala Thr Ile Thr Gly Ala Leu Ala Phe Ala Ile
225
        230
                            235
Thr Arg Gly Leu Asn Lys Arg Val Lys Leu Tyr Leu Cys Cys Ala Asp
           245
                         250
Asn Met Val Ser Gly Asn Ala Phe Lys Leu Gly Asp Ile Ile Arg Tyr
       260 265 270
Arg Asn Gly Lys Asn Val Glu Val Met Asn Thr Asp Ala Glu Gly Arg
   275 280 285
Leu Val Leu Ala Asp Gly Leu Ile Asp Ala Ser Ala Gln Lys Pro Glu
 290 295 300
Leu Ile Ile Asp Met Ala Thr Leu Thr Gly Ala Ala Lys Thr Ala Leu
305 310 315 320
Gly Asn Asp Tyr His Ala Leu Phe Ser Phe Asp Asp Lys Leu Ala Ala
      325 330 335
Arg Leu Leu Ala Ser Ala Ala Ala Glu Asn Glu Pro Phe Trp Arg Leu
        340
                       345 350
Pro Leu Ala Glu Phe His Arg Ser Gln Leu Pro Ser Asn Phe Ala Glu
     355
                    360
                                   365
Leu Asn Asn Thr Ala Ser Ala Ala Tyr Pro Ala Gly Ala Ser Thr Ala
 370
                 375
                                380
Ala Gly Phe Leu Ser His Phe Val Glu Asn Tyr His Glu Gly Trp Leu
              390 395
His Ile Asp Cys Ser Ala Thr Tyr Arg Lys Ala Ala Val Glu Gln Trp
        405 410 415
Ser Ala Gly Ala Thr Gly Leu Gly Val Arg Thr Val Ala Asn Leu Leu
                      425
Thr Ala Glu
  435
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<211> 268 <212> PRT <213> Enterobacter cloacae

<210> 9353

<400> 9353 Gly Gly Asn Ser Thr Ser Gly Ile Thr Met Ser Glu Thr Lys Asn Glu 10 Leu Glu Thr Leu Leu Glu Gln Ala Ala Thr Glu Pro Ala His Arg Pro 20 25 Ala Phe Phe Arg Thr Leu Leu Glu Ser Thr Val Trp Val Pro Gly Thr 4.0 Ala Ala Glu Gly Glu Gln Val Val Glu Asp Ser Ala Leu Asp Leu Leu 5.5 60 His Trp Glu Lys Asp Asp Gly Thr Ser Val Ile Pro Phe Phe Thr Ser 7.0 Leu Glu Ala Leu Gln Glu Ala Val Glu Asp Glu Gln Ala Phe Val Val 90 Met Pro Val Arg Thr Leu Phe Glu Met Thr Leu Gly Gln Thr Leu Phe 100 105 Leu Asn Ala Lys Leu Pro Thr Gly Lys Glu Phe Thr Pro Arg Glu Ile 120 125 Ser His Leu Ile Gly Asp Glu Gly Asn Pro Leu Ser Thr Gln Glu Val 135 140 Leu Glu Gly Gly Glu Thr Leu Leu Leu Ser Glu Val Ala Glu Pro Pro 150 155 Ala Gln Met Ile Asp Ser Leu Thr Thr Leu Phe Lys Thr Ile Lys Pro 165 170 Val Lys Arg Ala Phe Leu Cys Ser Ile Lys Glu Ser Ala Asp Glu Lys 185 190 Pro Val Leu Leu Ile Gly Ile Glu Ala Asp Gly Asp Val Asp Glu Ile 200

<210> 9354 <211> 806 <212> PRT

<213> Enterobacter cloacae

<400> 9354 Lys Lys Thr Arg Met Arg Phe Tyr Leu Lys Glu Arg Ala Met Lys Lys Asn Lys His Gln Gly Glu Gly Leu Ile Pro Ala Ile Ser Arg Arg His Phe Ile Gln Ala Gly Ser Ala Leu Ala Ala Leu Pro Phe Val Val Lys Thr Gly Lys Val Gln Ala Gln Asp Ala Ala Val Ser Asp Ala Thr Pro Glu Glu Lys Val Val Gln Thr Cys Ser Thr Phe Asp Cys Gly Gly Lys 7.0 Cys Asp Ile Arg Ala His Val Ser Asp Gly Val Val Thr Arg Ile Ser Thr Arg Pro Asp Asn Ala Leu Asp Pro Gln Met Pro Val Met Arg Ala Cys Val Arg Gly Arg Ala Tyr Arg Lys Phe Val Tyr His Pro Asp Arg Leu Lys Tyr Pro Met Lys Arg Val Gly Lys Arg Gly Glu Gly Lys Phe Glu Arg Ile Thr Trp Asp Glu Ala Thr Thr Leu Ile Ala Asn Gln Leu Lys Thr Ile Thr Gln Lys Tyr Gly Ala Ala Ser Arg Tyr Val His Val Gly Thr Ala Val Ser Gly Gly Thr Phe Ser Gly Asp Lys Met Val Arg Arg Leu Leu Asn Leu Thr Gly Gly Tyr Leu Glu Ser Tyr His Ser Val Ser Met Gly Asn Thr Ala Ala Ala Thr Pro Tyr Thr Tyr Gly Thr Ala Ala Ser Glv Ser Ser Leu Asp Thr Leu Leu Asp Thr Lys Leu Val Ile Leu Trp Gly His Asn Pro Thr Glu Thr Ile Phe Gly His Ser Asn His Phe Tyr Gln Lys Met Lys Gln Asn Gly Thr Arg Phe Ile Val Val Asp Pro Arg Tyr Ser Asp Thr Val Ser Ser Leu Ala Asp Gln Trp Ile Pro Leu Leu Pro Ala Thr Asp Asn Ala Leu Met Asp Ala Met Met Tyr Val Ile Val Thr Glu Asn Leu His Asp Arg Asp Phe Ile Gln Arg Tyr Thr Leu Gly Phe Asp Glu Asp Ala Met Pro Glu Gly Val Pro Ala Asn Glu Ser Leu Met Ala Tyr Leu Ser Gly Ala Lys Asp Gly Val Ala Lys Thr Pro Glu Trp Ala Glu Lys Ile Thr His Val Pro Ala Gln Thr Ile Arg

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Gln Leu Ala Arg Asp Tyr Ala Thr Thr Lys Pro Ala Ala Leu Ile Gln
      375
Gly Trp Gly Pro Gln Arg His Asn Cys Gly Glu Arg Thr Ala Arg Gly
         390 395
Ser Thr Ile Leu Ala Thr Leu Tnr Gly Asn Val Gly Val Lys Gly Gly
          405 410 415
Trp Ala Ala Gly Tyr Gly Gly Cys Ala Asn Arg Lys Phe Ala Ala Gly
        420 425 430
Pro Glu Met Pro Asp Asn Pro Val Lys Ala Lys Ile Ser Val Met Asn
  435 440 445
Trp Val Gln Ala Ala Asp Asp Ala Ser Lys Val Thr Ala Glu Asp Gly
 450
      455 460
Leu Lys Asp Ala Glu Lys Leu Asp Ser Asn Ile Arg Ile Leu Phe Ser
465 470 475 480
Leu Ala Gly Asn Tyr Leu Ala Asn Gln Asn Pro Asp Leu His Gln Ala 485 \hspace{0.5cm} 490 \hspace{0.5cm} 490 \hspace{0.5cm} 495
Thr Arg Val Leu Glu Asp Glu Ser Lys Ile Glu Phe Ile Val Ala Ser
        500 505 510
Asp Leu Phe Met Thr Pro Ser Ala Arg Tyr Ala Asp Leu Leu Leu Pro
                                    525
515 520
Glu Thr Ser Phe Met Glu Arg Trp Asn Ile Gly Glu Thr Trp Gly Thr
                 535
                                 540
530
Ala Ser Tyr Leu Ile Leu Ser Glu Lys Leu Ile Glu Pro Glu Phe Glu
               550 555
545
Arg Arg Ser Asp Tyr Asp Trp Leu Arg Glu Val Ala Ala Lys Leu Gly
           565
                           570 575
Val Glu Pro Ala Phe Ser Glu Gly Arg Asp Glu Lys Ala Trp Ile Glu
                        585
                             590
         580
His Ile Trp Glu Gln Thr Arg Leu Ser Met Pro Asp Glu Asn Leu Pro
                     600 605
      595
Asp Phe Ala Thr Leu Gln Lys Thr Arg Gln His Leu Phe Lys Ser Ala
610
                  615
                                 620
Pro Tyr Val Ala Phe Glu Asp Asn Ile Arg Asp Pro Gln Asn His Pro
      630
                              635
Phe Pro Thr Pro Ser Gly Lys Ile Glu Ile Phe Ser Lys Arg Leu Tyr
                           650 655
            645
Asp Met His His Pro Glu Ile Pro Ala Leu Ser His Tyr Val Pro Ala
                        665 670
         660
His Glu Gly Pro Glu Asp Glu Leu Ala Lys Thr Phe Pro Leu Gln Leu
    675
                     680
                                     685
Ile Thr Trp Lys Gly Lys Asn Arg Ala Asn Ser Thr Gln Tyr Ala Asn
  690
                  695
                                  700
Pro Trp Leu Ile Glu Ala Gln Gln Gln Lys Leu Trp Ile Asn Pro Gln
               710
                               715
Asp Ala Gln Lys Arg Gly Ile Ala Gln Gly Asp Thr Val Arg Ile His
            725
                            730
Asn Ala Arg Gly Ile Cys Glu Ile Pro Ala Glu Val Thr Pro Arg Ile
                        745
                                        750
         740
Ile Pro Gly Val Val Ala Met Gln Ala Gly Ala Trp Trp Gln Pro Asp
                                     765
      755
                     760
Glu Gln Gly Ile Asp Lys Gly Gly Cys Ala Asn Val Leu Ser Ser Ala
                        780
                 775
Arg Ile Thr Ala Leu Ala Lys Gly Asn Ser His Gln Thr Met Leu Val
785 790
                               795
Glu Val Ala Lys Ala
            805
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<210> 9355

<211> 273 <212> PRT

<213> Enterobacter cloacae

<400> 9355 Ser Lys Arg Ile Arg Ala Gln Arg Lys Arg Gly Asn Val Met His Glu 10 Leu Pro Leu Leu Ile Phe Thr Leu Phe Leu Gln Gly Ser Val Gly Val 25 30 Thr Leu Trp Leu Ala Phe Gly Ser Thr Gln Arg Ser Val Leu Leu Pro 40 45 Ala Ala Gly Ala Phe Val Leu Ala Ser Leu Gly Leu Leu Ala Ser Ala 50 55 60 Leu His Met Gly Tyr Pro Leu Asn Ala Leu Asn Ala Leu Arg His Val 70 75 Ser Ser Ser Trp Leu Ser Arg Glu Ile Ile Phe Ala Ser Leu Tyr Leu 85 90 95 Ala Ala Leu Gly Phe Ala Thr Leu Leu Met Ile Val Lys Lys Pro Gly 100 105 110 Trp Lys Pro Leu Leu Val Val Ser Gly Leu Val Gly Leu Val Asp Val 120 125 115 Phe Cys Met Ala Gln Ile Tyr Met His Ala Ser Val Val Thr Trp Gln 130 135 140 His Val Asn Thr Leu Val Leu Phe Ile Gly Ser Val Gly Ile Ile Gly 145 150 155 160 Ser Ala Cys Met Val Val Gly Thr Arg Ser Gln Ser Thr Val Arg Ala 165 170 175 Ala Val Val Ile Ile Thr Leu Leu Val Leu Val Arg Leu Val Met Gln 185 190 180 Pro Val Trp Leu Ala Asp Ile Thr Ser Met Asp His Thr Val Val Thr 200 205 195 Phe Pro His Ala Pro Leu Gln Met Leu Glu Gln Leu Arg Thr Val His 210 215 220 Leu Leu Ser Trp Cys Val Ser Val Ala Gly Met Leu Cys Phe Ala Ala 230 225 235 Gly Gly Leu Lys Ala Ala Arg Ser Pro Ile Leu Leu Gly Gly Ala Leu 245 250 Leu Ile Val Gly Glu Leu Met Leu Arg Phe Val Phe Phe Ser Ile Gly

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<210> 9356
<211> 172
<212> PRT
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<213> Enterobacter cloacae

260

<400> 9356 Ala Met Ala Leu Leu Phe Ile Ile Arg Ala Thr Pro Tyr Ser Gly 10 15 Met Gln Lys Gln Gln Asn Ile Leu Gln Arg Leu Ser Met Ala Ile Glu Arg Thr Phe Ser Ile Ile Lys Pro Asn Ala Val Ala Lys Asn Val Ile 35 40 4.5 Gly Ser Ile Phe Ala Arg Phe Glu Ser Ala Gly Phe Lys Ile Val Gly 55 60 Thr Lys Met Leu His Leu Thr Val Glu Gln Ala Arg Gly Phe Tyr Ala 70 Glu His Glu Gly Arg Pro Phe Phe Asp Gly Leu Val Glu Phe Met Thr 85 90 Ser Gly Pro Ile Val Val Ser Val Leu Glu Gly Glu Asn Ala Val Gln 100 105 110 Arg His Arg Asp Leu Leu Gly Ala Thr Asn Pro Asp Asn Ala Leu Ala 120 125

Gly Thr Leu Arg Ala Asp Tyr Ala Asp Ser Phe Thr Glu Asn Gly Thr 130 135 140 His Gly Ser Asp Ser Val Glu Ser Ala Ala Arg Glu Ile Ala Phe Phe 145 150 155 Phe Ala Glu Gly Glu Val Cys Pro Arg Thr Arg 165 170 <210> 9357 <211> 437 <212> PRT

<213> Enterobacter cloacae

<400> 9357

Phe Arg Lys Cys Arg Val Gln Thr Trp His Pro Cys Ala Arg Leu Cys Thr Met Gln Arg Pro Gly Arg Ala Asp Cys Leu Pro Gly Arg Phe Phe 20 2.5 Ser Thr His Gln Gly Pro Gln Arg Val Thr Thr Arg Pro Glu Lys Ile 40 45 35 Met Ser Glu Leu Val Asn Thr Ser Glu Val Ala Ile Pro Ala Val Pro 55 60 Asn Lys Asn Gly Lys Ile Asn Leu Leu Asp Leu Asn Arg Gln Gln Met 70 75 Arg Glu Phe Phe Lys Glu Met Gly Glu Lys Pro Phe Arg Ala Asp Gln 8.5 90 Val Met Lys Trp Met Tyr His Tyr Cys Ser Asp Asn Phe Asp Asp Met 105 110 100 Thr Asp Ile Asn Lys Val Leu Arg Asn Lys Leu Lys Glu Val Ala Glu 120 115 Ile Arg Ala Pro Glu Val Val Glu Glu Gln Arg Ser Ser Asp Gly Thr 135 140 130 Ile Lys Trp Ala Ile Ala Val Gly Asp Gln Arg Val Glu Thr Val Tyr 150 155 160 Ile Pro Glu Asp Asp Arg Ala Thr Leu Cys Val Ser Ser Gln Val Gly 170 175 165 Cys Ala Leu Glu Cys Lys Phe Cys Ser Thr Ala Gln Gln Gly Phe Asn 185 180 190 Arg Asn Leu Arg Val Ser Glu Ile Ile Gly Gln Val Trp Arg Ala Ala 205 195 200 Lys Ile Val Gly Ala Ala Lys Val Thr Gly Thr Arg Pro Ile Thr Asn 220 Val Val Met Met Gly Met Gly Glu Pro Leu Leu Asn Leu Thr Asn Val 230 235 Val Pro Ala Met Glu Ile Met Leu Asp Asp Phe Gly Phe Gly Leu Ser 250 245 Lvs Arg Arg Val Thr Leu Ser Thr Ser Gly Val Val Pro Ala Leu Asp 270 265 Lys Leu Gly Asp Met Ile Asp Val Ala Leu Ala Ile Ser Leu His Ala 275 280 Pro Asn Asp Ala Ile Arg Asp Glu Ile Val Pro Ile Asn Lys Lys Tyr 295 300 Asn Ile Glu Thr Phe Leu Ala Gly Val Arg Arg Tyr Leu Glu Lys Ser 310 315 320 Asn Ala Asn Gln Gly Arg Val Thr Ile Glu Tyr Val Met Leu Asp His 325 Val Asn Asp Gly Thr Glu His Ala His Glu Leu Ala Glu Leu Leu Lys 340 345 350 Asp Thr Pro Cys Lys Ile Asn Leu Ile Pro Trp Asn Pro Phe Pro Gly 355 360 365 Ala Pro Tyr Gly Arg Ser Ser Asn Ser Arg Ile Asp Arg Phe Ser Lys

Val Leu Met Glu Tyr Gly Phe Thr Thr Ile Val Arg Lys Thr Arg Gly 390 395 Asp Asp Ile Asp Ala Ala Cys Gly Gln Leu Ala Gly Asp Val Ile Asp 405 410 415 Arg Thr Lys Arg Thr Leu Arg Lys Arg Met Gln Gly Glu Ser Ile Ala 420 425 430 Val Lys Thr Val 435

<210> 9358 <211> 337 <212> PRT <213> Enterobacter cloacae

<400> 9358 Arg Met Asn Thr Glu Ala Thr His Asp Gln Asn Ala Ala Leu Ser Thr Gly Val Arg Leu Arg Asn Ala Arg Glu Gln Leu Gly Leu Ser Gln Gln 20 25 Ala Val Ala Glu Arg Leu Cys Leu Lys Val Ser Thr Val Arg Asp Ile 35 4.0 Glu Glu Asp Lys Ala Pro Ala Asp Leu Ala Ser Thr Phe Leu Arg Gly 55 50 Tyr Ile Arg Ser Tyr Ala Lys Leu Val His Ile Pro Glu Asp Glu Leu 70 7.5 Leu Pro Met Met Glu Lys Gln Ala Pro Val Arg Ala Ala Lys Val Ala 85 90 Pro Met Gln Ser Phe Ser Leu Gly Lys Arg Arg Lys Lys Arg Asp Gly 100 105 110 Trp Leu Met Ser Phe Thr Trp Leu Val Leu Phe Val Val Val Gly Leu 115 120 Thr Gly Ala Trp Trp Trp Gln Asn His Lys Ala Gln Gln Glu Glu Ile 130 135 140 Thr Thr Met Ala Asp Gln Ser Ser Ala Glu Leu Asn Gln Ser Gly Asn 150 155 1.45 Asn Gly Ala Gln Ser Val Pro Leu Ser Thr Glu Gly Ala Thr Ser Ser 165 170 Glu Pro Gln Ser Ala Ala Ser Asn Thr Pro Ala Thr Glu Pro Ala Ala 180 185 190 Thr Pro Glu Ala Thr Thr Asn Thr Ala Pro Ala Thr Gln Thr Gln Asp 200 205 195 Gln Asn Ala Val Val Ser Pro Ser Gln Ala Asn Val Asp Thr Ala Pro 215 220 210 Ala Ala Thr Ala Pro Ala Glu Asn Thr Ala Ala Ser Leu Pro Thr Asp 225 230 235 Pro Ala Gly Thr Ala Ala Pro Ala Val Asp Pro Asn Ala Leu Val Met 245 250 255 Asn Phe Thr Ala Asp Cys Trp Leu Glu Val Thr Asp Ala Thr Gly Lys 265 270 Lys Leu Phe Ser Gly Leu Gln Arg Lys Asp Gly Thr Leu Asn Leu Thr 275 280 285 Gly Gln Ala Pro Tyr Lys Leu Lys Ile Gly Ala Pro Ala Ala Val Gln 295 300 Ile Gln Tyr Gln Gly Lys Pro Val Asp Leu Ser Arg Phe Ile Arg Thr 310 315 Asn Gln Val Ala Arg Leu Thr Val Asn Ala Glu Gln Ser Ala Ala Gln 325

1.30

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<211> 226
<212> PRT
<213> Enterobacter cloacae
<400> 9359
Arg Arg Met Ala Leu Arg Arg Thr Cys Ala Leu Tyr Trp Ala Lys Glu
                                   10
Lys Asp Cys Val Glu Ile Tyr Glu Asn Glu His Asp Gln Val Asp Ala
                            25
Val Lys Arg Phe Phe Ala Glu Asn Gly Lys Ala Leu Val Val Gly Val
       35
                           40
Ile Leu Gly Val Gly Ala Leu Val Gly Trp Arg Tyr Trp Asn Asn His
                       55
   50
                                           60
Gin Ala Asp Ser Ala Arg Gly Ser Ser Leu Asn Tyr Glu Asn Thr Val
                    7.0
                                       75
Ser Ala Ile Arg Ala Asp Gln Pro Gln Thr Leu Thr Ala Ala Glu Lys
                                   90
               8.5
Phe Ala Ala Asp Asn Lys Asn Thr Tyr Gly Ala Leu Ala Ala Leu Glu
                                                    110
           100
                                105
Val Ala Gln Gln Tyr Val Asp Lys Asn Glu Leu Asp Lys Ala Ala Ala
        115
                            120
                                               125
Gln Leu Ser Gln Gly Leu Ala Ala Ala Ser Asp Asp Asn Leu Lys Ala
                       135
                                            140
Val Ile Asn Leu Arg Leu Ala Arg Ile Gln Val Gln Gln Lys Lys Ala
                                        155
                   150
Asp Asp Ala Leu Lys Thr Leu Asp Thr Ile Lys Gly Glu Gly Phe Ala
                                    170
                                                        175
               165
Ala Ile Val Ala Asp Leu Arg Gly Glu Ala Leu Leu Ser Lys Gly Asp
                                                    190
            180
                                185
Lys Ala Gly Ala Arg Lys Ala Trp Gln Ala Gly Val Asp Ser Lys Ala
                                                205
                            200
Ser Pro Ala Leu Ser Glu Met Met Gln Met Lys Ile Asn Asn Leu Ser
                                            220
Val
225
<210> 9360
<211> 317
<212> PRT
<213> Enterobacter cloacae
<400> 9360
Ser Gly Glu Lys Ile Gly Ala Cys Ser Arg Val Glu Arg Gly Glu Leu
Val Gly Val Arg Lys Asn Thr Asp Asn Pro Phe Leu Arg Lys Arg Met
            20
                                25
                                                    30
Glu Ala Thr Met Ser Thr Ser Tvr Phe Val Ala Ala Asp Trp Leu Ile
        35
                            40
Glu His Gly Asp Asp Pro Glu Val Gln Ile Ile Asp Ala Arg Met Ala
Pro Pro Gly Gln Glu His Arg Asp Val Pro Ala Glu Tyr Arg Ala Gly
                                        75
                    70
His Leu Pro Gly Ala Val Phe Phe Asp Ile Glu Ala Leu Ser Asp His
                8.5
                                    90
                                                        95
Thr Ser Ser Leu Pro His Met Leu Pro Arg Pro Glu Ala Phe Ser Val
           100
                                105
Ala Met Arg Glu Leu Gly Ile Ser Lys Asp Lys His Leu Ile Val Tyr
       115
                            120
                                                125
Asp Glu Gly Asn Leu Phe Ser Ala Pro Arg Ala Trp Trp Met Leu Lys
```

135

Asn Phe Gly Val Glu Lys Val Ser Ile Leu Ala Gly Gly Leu Ala Gly

```
155
Trp Lys Arg Asp Glu Leu Pro Leu Gln Gln Gly Asp Val Thr Leu Pro 165 170 175
Glu Gly Glu Phe Asp Ala Thr Phe Asp Ala Asn Val Val Lys Arg Leu
       180 185 190
Thr Asp Val Leu Val Val Ser His Glu Asn Thr Ala Gln Ile Val Asp
     195 200 205
Ala Arg Pro Ala Pro Arg Phe Asn Ala Glu Ala Asp Glu Pro Arg Pro
210 215 220
Gly Leu Lys Arg Gly His Ile Pro Gly Ala Leu Asn Val Pro Trp Gly
225 230 235 240
Asp Leu Val Phe Glu Glu Glu Leu Lys Thr Thr Asp Glu Leu Arg Ala 245 \phantom{000}255
Ile Phe Glu Arg Gln Gly Val Asp Leu His Arg Pro Val Ile Ala Ser
      260 265
Cys Gly Ser Gly Val Thr Ala Cys Val Val Ile Leu Ala Leu Ala Thr
      275 280
Leu Asp Ala Asn Asp Val Thr Leu Tyr Asp Gly Ala Trp Ser Glu Trp
290 295
                                   300
Gly Ala Arg Asp Asp Leu Pro Val Glu Pro Ala Lys
               310
<210> 9361
<211> 451
<212> PRT
<213> Enterobacter cloacae
<400> 9361
Lys Ala Cys Arg Cys Ala Phe Gln Arg Pro Ser Phe Ser Tyr Ser Tyr
                            10
Gln Thr Phe Thr Leu Asp Thr Arg Gln Met Met Thr Thr Leu Glu Ile
                                       30
20
                        25
Pro Ser Val Leu Ser Ser Ser Gln Arg Arg Cys Gln Val Leu Leu Met
                     40
Leu Tvr Leu Pro Asp Ala Ala Val Thr Ala Gln Ser Ile Ile Ala Ala
                       60
50 55
Asn Gly Val Asp Asp Val Met Ala Arg Gln Asp Ile Ala Glu Thr Arg
        70 75
Asp Glu Ile Gln Arg Tyr His Arg Leu Asp Ile Val Thr His His Asp
                         90
Gly Cys Tyr Arg Ile Glu Gly Ser Ala Leu Asn Gln Arg Leu Cys Leu
         100
                         105
Leu His Trp Leu Arg Arg Ala Leu Arg Leu Cys Pro His Phe Val Ala
      115
                  120 125
Gln Gln Phe Thr Pro Ala Leu Lys Thr Ala Leu Lys Gln His Gly Ile
 130
                  135 140
Ala Arg Pro Leu Tyr Asp Asp Ala Asn Leu Arg Ala Leu Ile Asn Phe
              150 155
Cys Ala Arg Lys Leu Gln Arg Gln Phe Glu Ser Arg Asp Val Gln Phe
          165 170
Leu Gln Leu Tyr Leu Gln Tyr Cys Leu Ile Gln His His Leu Gly Asn
         180
                        185
                             190
Thr Pro Glu Phe Ser Pro Val Gln Arg Ser Trp Thr Leu Ser Arg Gly
 195
                      200
                                     205
Glu Tyr Phe Thr Ala Gln Glu Ile Val Arg His Trp Lys Arg Arg Val
 210
                  215
                                220
Pro Gln Gly Thr His Ser Asp Glu Gln Leu Phe Leu Ala Leu Leu Phe
               230 235
Met Met Leu Arg Thr Pro Asp Pro Val Met Asp Lys His Gln Gln Asp
           245 250
```

Gln Arg Leu Arg Arg Ala Ile Val Arg Met Ile Ala Arg Phe Arg Ala

```
260
                         265
Gin Thr Gly Met Asn Phe Ser Asp Glu Gln Gly Leu Thr Asp Gln Leu
 275 280 285
Tyr Ile His Leu Ala Gln Ala Leu Asp Arg Ser Leu Phe Asp Ile Gly
 290 295 300
Ile Asp Asn Ser Leu Pro Glu Glu Ile His Arg Leu Tyr Pro Arg Leu
305 310 315
Leu Arg Thr Thr Lys Glu Ala Leu Phe Glu Leu Glu Ala Glu Phe Gly
            325 330 335
Leu Arg Phe Ser Gly Glu Glu Met Ala Leu Val Ala Val Ile Phe Gly
         340 345
Ala Trp Leu Met Gln Glu Thr Asp Leu His Glu Lys Gln Val Val Leu
          360
      355
Leu Thr Gly Glu Asn Lys Ala Cys Glu Glu Leu Ile Glu Gln Gln Leu
 370
         375 380
Arg Glu Leu Thr Leu Leu Pro Leu Asn Ile Arg Tyr Leu Ser Leu Glu
      390 395
385
Ala Phe Lys Lys Glu Gly Ala Pro Arg Glu Ala Ala Leu Val Ile Thr
           405 410
Pro Tyr Pro Thr Ala Leu Pro Leu Phe Ser Pro Pro Leu Ile His Ala
       420
                      425
Val Glu Thr Leu Asn Thr Gln Gln Gln Glu His Ile Arg Val Met Leu
                      440
                                      445
Glu Ser
 450
<210> 9362
<211> 524
<212> PRT
<213> Enterobacter cloacae
<400> 9362
Val Arg Gly Ser Ile Arg Glu Lys Ala Met Lys Arg Ala Val Asn Ala
                             10
Leu Gln Asn Phe Gly Lys Ser Leu Tyr Gly Pro Val Leu Ile Leu Pro
 20
                        25
Ile Val Gly Leu Phe Ile Ala Phe Gly Asn Val Leu Gly Asn Gly Asn
                      4.0
                                    4.5
Leu Ala Glu Tyr Met Pro Phe Leu Gly His Pro Leu Ile Gln Ser Val
                  55
Gly Gln Leu Ile Ala Lys Ser Ala Val Ser Val Leu Val Asn Leu Ala
            70
                                7.5
Leu Val Phe Ala Val Gly Ile Pro Ile Gly Leu Ala Thr Arg Asp Lys
                             90
                                             95
            85
Gly Tyr Ala Ala Leu Ile Gly Leu Val Thr Phe Ile Val Phe Ile Asn
         1.00
                         105
                                         110
Ala Met Asn Val Thr Leu Gln Leu Gln Gly Glu Leu Ala Pro Ala Glu
 115
                      120
                                      125
Gln Met Lys Ala Ala Gly Gln Ser Met Val Leu Gly Val Gln Val Leu
                   135
                          140
Glu Met Gly Val Phe Ala Gly Ile Leu Thr Gly Ala Leu Ser Gly Tyr
                             155
145 150
Leu Tyr Asn Lys Tyr Ser Gly Val Gln Phe Asn Gly Ala Met Ala Ile
                            170
           165
Tyr Ser Gly His Cys Phe Val Ala Ile Val Met Leu Pro Val Ser Met
         180
                         185 190
Leu Leu Gly Val Ile Met Ser Glu Leu Trp Pro Tyr Ala Gln His Gly
 195 200
                                     205
```

Ile Ser Ala Leu Ala Leu Ala Ile Lys Gly Ser Gly Pro Phe Gly Val

Ala Ile Tyr Gly Phe Leu Glu Arg Ile Leu Val Pro Thr Gly Leu His

220

215

```
230
His Leu Val Tyr Thr Pro Phe Leu Tyr Thr Glu Leu Gly Gly Thr Gln
                  250
          245
Glu Val Cys Gly Thr Ala Tyr Gln Gly Ala Arg Asn Ile Tyr Phe Ala
        260 265 270
Glu Met Ala Cys Pro Asp Val Lys Gln Leu Ser Ser Thr Val Val Trp
          280 285
Asp Ala Arg Gly Ile Ser Lys Met Phe Gly Leu Pro Ala Ala Ala Leu
 290 295 300
Ala Met Tyr Met Thr Ala Lys Pro Glu Arg Lys Ala Ile Ala Lys Ala
305 310 315 320
Ile Leu Ile Pro Ala Ala Leu Thr Ser Leu Leu Val Gly Val Thr Glu
           325 330 335
Pro Ile Glu Phe Ser Phe Leu Phe Val Ala Pro Leu Leu Phe Val Val
        340 345 350
His Ala Val Leu Thr Gly Ile Gly Met Met Leu Phe Ser Leu Phe Gly
      355 360 365
Val His Ala Ile Gly Ala Asn Gly Ile Ile Asp Phe Ile Leu Tyr Asn
         375 380
   370
Leu Pro Leu Gly Thr Glu Lys Ser Asn Trp Pro Met Tyr Ile Val Val
            390
                              395
Gly Leu Ile Met Phe Ala Leu Tyr Phe Val Val Phe Arg Phe Leu Ile
            405
                           410
Leu Arg Phe Asn Met Lys Thr Pro Gly Arg Glu Asp Glu Asp Gln Glu
                        425
                            430
     420
Thr Arg Leu Tyr Ser Lys Gln Glu Tyr Gln Ala Lys Gly Asn Asn Asp
                            445
     435
                     440
Gly Leu Gly Glu Ser Ile Val Val Gly Leu Gly Gly Arg Glu Asn Ile
                  455
                                 460
Glu Val Val Asp Asn Cys Tyr Thr Arg Leu Arg Val Thr Val Lys Asp
                           475
              470
Val Ala Ile Ile Asp Glu Pro Arg Leu Lys Ala Thr Gly Ala Lys Gly
            485 490 495
Ile Ile Lys Gln Gly Asn Asn Val Gln Val Val Tyr Gly Leu His Val
                                        510
                        505
        500
Lys Lys Met Arg Glu Ala Val Glu Thr Phe Leu
```

<210> 9363 <211> 460 <212> PRT

515

<213> Enterobacter cloacae

<400> 9363 Lys Glu Leu Lys Met Phe Thr Pro Pro Phe Ile Leu Ser Ile Ala Gly 10 Glv Glv Ser Thr Tyr Thr Pro Glv Ile Val Lys Ser Leu Met Val Arg 20 Leu His Asp Phe Pro Leu Ala Glu Ile Arg Leu Tyr Asp Ile Asp Glu 3.5 Ala Arg Gln Asn Thr Ile Ala Pro Val Val Glu Lys Val Ile Arg Asp 50 55 His Ser Gln Ser Ile Lys Phe Thr Val Thr Ser Asp Pro Glu Val Ala 7.0 75 Phe Ser Gly Ala His Phe Val Phe Ala Gln Met Arg Val Gly Gln Tyr 85 90 Lys Met Arg Glu Gln Asp Glu Lys Ile Pro Leu Arg His Gly Val Val 100 105 Gly Gln Glu Thr Cys Gly Pro Gly Gly Leu Ala Tyr Gly Leu Arg Thr 120 125 115 Ile Leu Pro Met Val Glu Leu Ile Asp Leu Val Asp Arg Tyr Ala His

```
130
                                  140
Glu Lys Ala Trp Ile Val Asn Tyr Ser Asn Pro Ala Ala Ile Val Ala
         150 155
Glu Gly Val Arg Arg Leu Arg Pro Asn Ala Arg Val Leu Asn Ile Cys
         165 170 175
Asp Met Pro Val Ala Ala Met Arg Asn Met Gly Ala Ile Leu Gly Val
       180 185 190
Asp Arg His Lys Leu Glu Val Asp Tyr Phe Gly Leu Asn His Phe Gly
     195 200 205
Trp Phe Thr Arg Val Leu Val Asp Gly Glu Asp Lys Leu Pro Glu Leu
       215 220
Arg Lys His Ile Ala Lys Phe Gly Leu Leu Thr Glu Asp Ala Ala Lys 225 230 235 240
Thr Asp Pro Gln His Ser Asp Pro Ser Trp Val Lys Thr Trp Arg Asn
            245 250 255
Ile Lys Pro Ile Met Asp Asn Phe Pro Glu Tyr Leu Pro Asn Pro Tyr
        260 265 270
Leu Gln Tyr Tyr Leu Met Pro Asn Gln Ile Val Glu His Gln Asn Pro
      275 280 285
Asp Tyr Thr Arg Ala Asn Glu Val Met Asn Gly Arg Glu Lys Lys Leu
290
      295
                                  300
Phe Ala Ala Ala Glu Glu Tyr Gln Arg Thr Gly Ile Leu Pro Asp Ala
      310
                   315
305
Phe His Val Gly Val His Gly Glu Phe Ile Val Asp Val Ala Cys Ser
             325 330
                                            335
Leu Ala Phe Asn Leu Arg Ser Arg His Leu Val Met Val Glu Asn Arg
                         345
                                         350
         340
Gly Ala Ile Thr Asn Leu Pro Tyr Asp Ala Val Val Glu Val Pro Ala
      355 360
                                      365
Tyr Ile Thr Ser Glu Gly Pro Glu Pro Val Arg Val Gly Gln Val Pro
                  375
                                   380
 370
Leu Phe His Gln Thr Leu Leu Gln Gln Gln Leu Ala Ser Glu Gln Leu
             390 395
Leu Val Glu Ala Thr Ile Glu Gly Ser Tyr Glu Lys Ala Leu Gln Ala
                410
            405
Phe Thr Leu Asn Arg Thr Val Pro Thr Met Glu His Ala Lys Ala Ile
                      425 430
      420
Leu Asp Glu Met Ile Glu Ala Asn Arg Asp Tyr Trp Pro Ala Leu Gln
     435
                      440
Lys Ala Trp Gln Asp Gly Glu Ala Val Lys Lys
                   455
<210> 9364
<211> 271
<212> PRT
<213> Enterobacter cloacae
<400> 9364
Glu Arg Pro Met His Pro Met Leu Thr Ile Ala Val Arg Ala Ala Arg
                            10
Lys Ala Gly Asn Val Ile Ala Lys His Tyr Glu Thr Pro Asp Ser Val
         20
                         25
Glu Thr Ser Gln Lys Gly Ser Asn Asp Phe Val Thr Asn Val Asp Lys
     35
                      40
                                   4.5
Ala Ala Glu Ala Ile Ile Ile Glu Thr Ile Arg Lys Ser Tyr Pro Gln
```

35

```
105
         100
Arg Thr Glu Val Ala Val Val Tyr Asp Pro Met Arg Asn Glu Leu Phe
   115 120
                            125
Thr Ala Thr Arg Gly Gln Gly Ala Gln Leu Asn Gly Tyr Arg Leu Arg
      135 140
  130
Cys Ser Asn Ala Arg Asp Leu Asp Gly Thr Ile Leu Ala Thr Gly Phe
145 150 155
Pro Phe Lys Ala Lys Gln His Ala Thr Thr Tyr Met Asn Ile Leu Gly
         165 170 175
Lys Leu Phe Thr Glu Cys Ala Asp Phe Arg Arg Thr Gly Ser Ala Ala
       180 185 190
Leu Asp Leu Ala Tyr Val Ala Thr Gly Arg Val Asp Gly Tyr Phe Glu
          200 205
Leu Ser Leu Lys Pro Trp Asp Phe Ala Ala Gly Glu Leu Ile Ala Arg
   210
                   215
Glu Ala Gly Ala Ile Val Cys Asp Phe Thr Gly Gly His Asn Tyr Met
                230
                   235
Ser Thr Gly Asn Ile Val Ala Gly Asn Pro Arg Val Val Lys Ala Met
                       250 255
            245
Leu Ala Asn Met Arg Asp Glu Leu Ser Asp Ala Leu Lys Arg
        260
                          265
<210> 9365
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 9365
Asn Cys Ile Thr Phe Ile Arg His Arg Leu Lys Arg Ser Phe Ala Met
                             1.0
1
Asn Ser Leu Arg Tyr Phe Asp Phe Gly Ser Ser Arg Ser Leu Leu Leu
20
Leu Ile Ala Arg Ile Ala Ile Val Val Leu Phe Ile Ile Phe Gly Tyr
                                      4.5
35
                      40
Pro Lys Leu Thr Gly Phe Ser Gly Thr Val Gln Tyr Met Thr Ser Leu
50
                   5.5
                                 60
Gly Ala Pro Met Pro Met Leu Ala Ala Ile Ile Ala Val Val Met Glu
                                7.5
65
                70
Val Pro Ala Ala Ile Leu Ile Val Leu Gly Phe Phe Thr Arg Pro Leu
                             90
            85
Ala Val Ile Phe Val Phe Tyr Thr Leu Gly Thr Ala Val Ile Gly His
         100
                          105
                                          110
His Tyr Trp Asp Met Thr Gly Asp Ala Val Leu Pro Asn Met Ile Asn
      115
                       120
                           125
Phe Tyr Lys Asn Val Ser Ile Ala Gly Ala Phe Ile Leu Leu Ala Ile
130
                   135 140
Thr Gly Pro Gly Ala Ile Ser Leu Asp Arg Arg
              150
145
<210> 9366
<211> 261
<212> PRT
<213> Enterobacter cloacae
<400> 9366
Thr Gly Glu Ile Met Asp Asn Arg Leu Ala Thr Leu Leu Thr Arg Gly
                                       15
Ser Ser Leu Thr Arg Ala Glu Tyr Arg Val Leu Ala His Leu Thr Glu
      20
                         25
                                          30
His Pro Leu Leu Val Gly Asn Ile Thr Val Arg Glu Leu Ala Gln Ala
```

4.0

```
Thr Phe Val Ser Thr Ala Thr Ile Met Arg Leu Cys Gln Lys Leu Gly
 50
                 5.5
Phe Ser Gly Phe Ser Glu Phe Ile Trp His Cys Lys Gln Leu Leu Ser
                          7.5
             70
Asp Thr Pro His Ile Thr Val Gln Pro Glu Gln His Ala Glu Met Pro
      85 90 95
Ala Leu Phe Thr Arg Phe Val Ala Asn Tyr Gln Gln Thr Phe Gln Trp
       100 105 110
Val Thr Gln Asp Lys Arg Gln Gln Phe Ala Ser Leu Leu Arg Gln Lys
                    120 125
Glu Ser Phe Phe Leu Tyr Gly Ala Gly Phe Ser Tyr Leu Phe Ala Glu
                135 140
 130
Tyr Leu Thr Lys Lys Leu Gln Val Leu Gly Lys Thr Ala Phe Ile Ser
              150 155 160
145
Gly Ala Gly Asp Ser Arg Asn Ile Phe Leu Ser Asn Ala Ala Arg Tyr
          165 170 175
Gln Val Phe Ile Ala Val Ser Arg Ser Gly Glu Thr Glu Gln Val Leu
        180
                       185
Asp Lys Ala Arg Ile Ala Lys Asn Val Gly Met Thr Ile Val Ala Phe
     195
                   200
                                   205
Thr Arg Ala Ser Ala Asn Thr Leu Ala Gly Met Ala Asp Val His Phe
210
                 215
                                220
Ala Leu Tyr Asp Glu Ala Val His Phe Ala Ala Glu Ala Ala Gly Val
                  235 240
225
              230
Thr Ser Phe Glu Ser Asn Leu Val Leu Leu Met Asp Leu Leu Leu Leu
                         250
           245
Glu Ala Thr Glv
```

<210> 9367 <211> 149 <212> PRT

<213> Enterobacter cloacae

260

<400> 9367 Lys Met Ser Val Ser Thr Ala Arq Cys Lys His Met Ser Asn Gln Arg 10 Asn Pro Asp Asp Leu Lys Lys Asn Leu Thr Glu Met Gln Phe Tyr Val 3.0 20 25 Thr Gln Asn His Gly Thr Glu Pro Pro Phe Ser Gly Arg Leu Leu His 35 40 45 Asn Lys Arg Glu Gly Val Tyr His Cys Leu Val Cys Asp Ala Pro Leu 55 Phe Asn Ser Gln Thr Lys Tyr Asp Ser Gly Cys Gly Trp Pro Ser Phe 75 7.0 Tyr Glu Pro Val Ser Asp Asp Ala Ile Arg Tyr Leu Thr Asp Thr Ser 90 85 His Gly Met Val Arg Thr Glu Ile Arg Cys Gly Asn Cys Asp Ala His 100 105 Leu Gly His Val Phe Pro Asp Gly Pro Gln Pro Thr Gly Glu Arg Phe 115 120 125 Cys Val Asn Ser Ala Ser Met Ser Phe Thr Asp Asp Glu Asn Gly Asp 130 135 Gln Ile Lys Gly 145

<210> 9368 <211> 185 <212> PRT

<213> Enterobacter cloacae

<400> 9368 Pro Met Asp Ala Leu Glu Leu Leu Val Asn Arg Arg Ser Ala Ser Arg 1.0 Leu Ala Glu Pro Ala Pro Val Gly Glu Gln Leu Glu Asn Ile Leu Arg 25 Ala Gly Met Arg Ala Pro Asp His Gly Thr Leu Gln Pro Trp His Phe 4.5 40 Phe Ile Ile Glu Gly Glu Gly Arg Gly Arg Phe Ser Gln Leu Leu Glu 55 60 Gln Gly Ala Val Ala Ala Gly Gln Asp Glu Lys Ala Ile Asp Lys Ala 75 70 Arg Asn Ala Pro Phe Arg Ala Pro Met Ile Ile Ala Val Val Thr Lys 90 85 Cys Gln Ala Asp His Lys Val Pro Val Trp Glu Gln Glu Met Ser Ala 105 100 Gly Cys Ala Val Met Ala Met Gln Met Ala Ala Val Ala Gln Gly Phe 120 Asn Gly Ile Trp Arg Thr Gly Pro Leu Thr Glu Ser Ser Val Val Arg 140 130 135 Asp Gly Phe Ala Cys Gly Glu His Asp Lys Ile Val Gly Phe Leu Tyr 150 155 Leu Gly Thr Pro Gln Leu Lys Ala Ser Ser Thr Ile Ser Val Pro Asp 170 165

Thr Thr Pro Phe Val Ser Arg Phe

<210> 9369 <211> 642 <212> PRT

<213> Enterobacter cloacae

<400> 9369 Leu Arg Ser Val Asn Ser Met Arg Leu Phe Ile Ala Glu Lys Pro Ser 10 Leu Ala Arg Ala Ile Ala Asp Val Leu Pro Lys Pro His Arg Lys Gly 30 25 Asp Gly Phe Ile Glu Cys Gly Asn Gly Gln Val Val Thr Trp Cys Ile 35 40 45 Gly His Leu Leu Glu Gln Ala Gln Pro Asp Val Tyr Asp Ser Arg Tyr 55 60 Ala Arg Trp Asn Leu Asn Asp Leu Pro Ile Val Pro Glu Lys Trp Arg 75 Leu Gln Pro Arg Pro Ser Val Thr Lys Gln Leu Asn Val Ile Lys Arg 90 8.5 Phe Leu His Glu Ala Thr Glu Val Val His Ala Gly Asp Pro Asp Arg 100 105 Glu Gly Gln Leu Leu Val Asp Glu Val Leu Asp Tyr Leu Glu Leu Ala 125 120 115 Pro Glu Lys Arg Gln Gln Val Gln Arg Cys Leu Ile Asn Asp Leu Asn 135 140 Pro Gln Ala Val Glu Arg Ala Ile Ser Arg Leu Arg Ala Asn Ser Glu 150 155 Phe Ile Pro Leu Cys Val Ser Ala Leu Ala Arg Ala Arg Ala Asp Trp 170 165 Leu Tyr Gly Ile Asn Met Thr Arg Ala Tyr Thr Ile Leu Gly Arg Asn 180 185 190 Ala Gly Tyr Gln Gly Val Leu Ser Val Gly Arg Val Gln Thr Pro Val 200 205 195 Leu Gly Leu Val Val Arg Arg Asp Glu Glu Ile Glu Asn Phe Val Ala 220 215 Lys Asp Phe Phe Glu Val Lys Ala His Ile Val Thr Pro Lys Asp Glu

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230
                           235
Arg Phe Thr Ala Val Trp Gln Pro Ser Asp Ala Cys Glu Ser Tyr Gln
      245 250 255
Asp Glu Glu Gly Arg Leu Leu His Arg Pro Leu Ala Glu His Val Val
       260 265 270
Asn Arg Ile Thr Gly Gln Pro Ala Ile Val Thr Ser Tyr Asn Asp Lys
    275 280 285
Arg Glu Ser Glu Pro Ala Pro Leu Pro Phe Ser Leu Ser Ala Leu Gln
290 295 300
Ile Glu Ala Ala Lys Lys Phe Gly Leu Ser Ala Gln Asn Val Leu Asp
305 310 315 320
Ile Cys Gln Lys Leu Tyr Glu Thr His Lys Leu Ile Thr Tyr Pro Arg
          325 330 335
Ser Asp Ser Arg Tyr Leu Pro Glu Glu His Phe Ala Gly Arg His Ser
       340 345 350
Val Met Asn Ala Ile Gly Val His Ala Pro Asp Leu Leu Pro Gln Pro
     355
                   360 365
Ala Val Asn Pro Asp Thr His Asn Arg Cys Trp Asp Asp Lys Lys Val
      375 380
Asp Ala His His Ala Ile Ile Pro Thr Ala Arg Thr Ser Asn Val Asn
385 390 395 400
Leu Thr Asp Asn Glu Ala Lys Val Tyr Asn Leu Ile Ala Arg Gln Tyr
          405 410 415
Leu Met Gln Phe Cys Pro Asp Ala Val Phe Arg Lys Cys Val Ile Glu
420 425
                                   430
Leu Asp Ile Ala Lys Gly Lys Phe Ile Ala Lys Ala Arg Phe Leu Ala
435
                                 445
                   440
Glu Ala Gly Trp Arg Tnr Leu Leu Gly Asn Lys Glu Arg Asp Glu Glu
              455
450
                               4.60
Asn Asp Gly Thr Pro Leu Pro Val Val Ala Lys Gly Asp Glu Leu Leu
           470 475
Cys Glu Lys Gly Glu Val Val Glu Arg Gln Thr Gln Pro Pro Arg His
                        490 495
           485
Phe Thr Asp Ala Thr Leu Leu Ser Ala Met Thr Gly Ile Ala Arg Phe
   500 505
                                     510
Val Gln Asp Lys Asp Leu Lys Lys Ile Leu Arg Ala Thr Asp Gly Leu
515
                  520
                                  525
Gly Thr Glu Ala Thr Arg Ala Gly Ile Ile Glu Leu Leu Phe Lys Arg
                535
                              540
Gly Phe Leu Glu Lys Lys Gly Arg Tyr Ile His Ser Thr Glu Pro Gly
                                          560
                            555
545
             550
Arg Ala Leu Ile His Ser Leu Pro Glu Leu Ala Ala Arg Pro Asp Met
          565 570 575
Thr Ala His Trp Glu Ser Val Leu Thr Gln Ile Ser Glu Lys Gln Cys
        580 585
                                    590
Arg Tyr Gln Asp Phe Met Gln Pro Leu Val Gly Thr Leu Tyr Gln Leu
                600
                                605
Ile Asp Gln Ala Arg Ser Thr Pro Val Lys Arg Phe Arg Gly Met Val
 610
              615
Ala Pro Gly Ala Gly Ala Lys Lys Pro Phe Lys Lys Lys Ser Ala
625
                            635
Ala
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<210> 9370 <211> 212 <212> PRT <213> Enterobacter cloacae

<400> 9370

Leu Ile Ala Lys Asn Asp Ile Leu Ser Cys Pro Ser Lys Glu Ser Ser

His Gln Glu Asn Gln Val Lys Glu Ile Ser Ala Trp Val Ala Pro Met 20 25 Glu Thr Leu Pro Val Ser Leu Ser Pro Ile Ala Ala Met Gln Lys Lys 35 40 His Phe Gly Ala Val Leu Asn Pro Thr Arg Trp Trp Gly Arg Met Pro 55 Arg Leu Phe Trp Leu Val Ala Leu Phe Val Gly Tyr Leu Glu Arg Arg 75 70 Lys Ala Arg Leu Thr Pro Val Leu Arg Ser Leu Leu Met Thr Arg Val 85 90 Ser Gln Ile Cys His Cys Ala Phe Cys Ile Asp Ala Asn Ser Leu Arg 100 105 110 Leu Ala Glu Arg Ser Gly Ala Leu Asp Lys Val Gln Ala Val Ser Asp 120 115 Trp Gln Asn Ser Thr Leu Phe Ser Glu Glu Glu Arg Ala Ala Leu Ala 140 130 135 Tyr Ala Glu Ala Val Thr Ala Thr Pro Pro Glu Val Asp Glu Asn Ile 150 155 Lys Ser Leu Leu Lys Arg His Phe Thr Glu Glu Thr Ile Thr Glu Met 165 170 175 Thr Ala Leu Ile Ala Phe Gln Asn Leu Ser Ala Arg Phe Asn Ala Ala 180 185 Leu Asp Ile Pro Thr Gln Gly Leu Cys Ala Thr Phe Lys Gly Lys Pro 195 His Ala Gly 210 <210> 9373 <211> 417 <212> PRT <213> Enterobacter cloacae <400> 9371 Thr Thr Phe Tyr Leu Pro Asp Glu Val Ala Met Ser Leu Ser Val Thr 10 Arg Glu Asn Phe Asp Glu Trp Met Met Pro Val Tyr Ala Pro Ala Ala 25 20 Phe Ile Pro Val Arg Gly Glu Gly Ser Arg Leu Trp Asp Gln Gln Gly 35 4.0 Lys Glu Tyr Ile Asp Phe Ala Gly Gly Ile Ala Val Asn Ala Leu Gly 55 60 His Ala Asn Pro Ala Leu Arg Gln Ala Leu Asn Asp Gln Ala Ala Lys 70 7.5 Phe Trp His Thr Gly Asn Gly Tyr Thr Asn Glu Pro Ala Leu Arg Leu 90 85 Ala Lys Lys Leu Ile Asp Ala Thr Phe Ala Glu Lys Val Phe Phe Cys 100 105 Asn Ser Glv Ala Glu Ala Asn Glu Ala Ala Leu Lys Leu Ala Arg Lys 125 120 Tyr Ala His Asp Lys Phe Gly Ala His Lys Ser Gly Ile Val Ala Phe 140 135 Lys Asn Ala Phe His Gly Arg Thr Leu Phe Thr Val Ser Ala Gly Gly 160 150 155 Gln Pro Ser Tyr Ser Gln Asp Phe Ala Pro Leu Pro Pro Asp Ile Arg 170 165 His Ala Ala Tyr Asn Asp Leu His Ser Ala Ser Glu Leu Ile Asp Asp 185 190 180

Thr Thr Cys Ala Val Ile Val Glu Pro Met Gln Gly Glu Gly Val

Met Pro Ala Gln Lys Ala Phe Leu Gln Gly Leu Arg Glu Leu Cys Asp

205

200

210 215 Arg His Asn Ala Val Leu Ile Phe Asp Glu Val Gln Thr Gly Val Gly 230 235 Arg Thr Gly Glu Leu Tyr Ala Tyr Met His Tyr Gly Val Thr Pro Asp 245 250 Val Leu Ser Thr Ala Lys Ala Leu Gly Gly Gly Phe Pro Val Gly Ala 260 265 270 Met Leu Thr Thr Glu Lys Phe Ala Ser Val Met Thr Val Gly Thr His 275 280 285 Gly Thr Thr Tyr Gly Gly Asn Pro Leu Ala Thr Ala Val Ala Gly Gln 290 295 300 Val Leu Asp Ile Ile Asn Thr Pro Glu Val Leu Asn Gly Val Lys Gln 305 310 315 320 Arg His Gln Trp Phe Val Glu Arg Leu Thr Ala Ile Asn Ser Lys Thr 325 330 335 Gly Leu Phe Lys Glu Ile Arg Gly Leu Gly Leu Leu Ile Gly Cys Glu 340 345 350 Leu Ala Pro Glu Phe Ala Gly Lys Ala Lys Leu Ile Ser Gln Glu Ala 355 360 365 Ala Lys Gln Gly Val Met Val Leu Ile Ala Gly Ala Asn Val Val Arg 370 375 380 Phe Ala Pro Ala Leu Ile Val Ser Glu Glu Glu Val Arg Thr Gly Leu 385 390 395 400 Asp Arg Phe Ala Leu Ala Cys Glu Gln Val Lys Ser Gly Val Ser Ser 405 410

<210> 9372 <212> PRT

<213> Enterobacter cloacae

<400> 9372 Leu Lys Val Arg Lys Asp Ile Met Arg Lys Leu Thr Ala Leu Phe Val 10 Ala Ser Thr Leu Ala Leu Gly Ala Thr Ser Met Ala Phe Ala Ala Asp 25 3.0 20 Thr Ala Thr Thr Thr Ala Ala Pro Thr Glu Gly Lys Met Met His 35 45 40 His Lys Gly Lys Pro Gly Met His His Glu Met Met Met Phe Lys Asp 55 60 Leu Asn Leu Thr Asp Ala Gln Lys Gln Gln Ile Arg Asp Ile Met Lys 70 75 80 Ser Gln Arg Asp Gln Met Lys Arg Pro Pro Leu Glu Glu Arg Arg Ala 85 90 Met His Asp Ile Ile Ala Ser Asp Ser Phe Asp Lys Ala Lys Ala Glu 105 110 100 Ala Gln Ile Asp Lys Met Ala Glu Gln His Lys Ala Arg Met Leu Ala 125 115 120 His Met Glu Thr Gln Asn Lys Ile Tyr Asn Ile Leu Thr Pro Glu Gln 130 135 140 Lys Lys Gln Phe Asn Ala Asn Phe Glu Lys Arg Leu Thr Glu Arg Ala 145 150 155 Ala Pro Glu Gly Lys Met Pro Ala Pro Thr Glu

<210> 9373 <211> 113

<212> PRT

<213> Enterobacter cloacae

<400> 9373 Pro Asn Lys Arg Glu Val Ile Met Glu Lys Lys His Ile Tyr Leu Phe Cys Ser Ala Gly Met Ser Thr Ser Leu Leu Val Ser Lys Met Arg Ala 20 Gln Ala Glu Lys Tyr Glu Val Pro Val Val Ile Glu Ala Phe Pro Glu 3.5 40 4.5 Thr Leu Ala Gly Glu Lys Gly Gln Thr Ala Asp Val Ile Leu Leu Gly 5.5 60 Pro Gln Ile Ala Tyr Met Leu Pro Glu Ile Gln Arg Leu Leu Pro Asn 75 70 Lys Pro Val Glu Val Ile Asp Ser Val Leu Tyr Gly Lys Ile Asp Gly 8.5 90 95 Leu Gly Val Leu Lys Ala Ala Val Ala Ala Ile Lys Lys Ala Ala Asn 105

<210> 9374 <211> 458 <212> PRT <213> Enterobacter cloacae

<400> 9374 Tyr Ala Lys Gly Asp Ile Met Gln Gln Lys Leu Lys Val Val Thr Ile 10 Gly Gly Gly Ser Ser Tyr Thr Pro Glu Leu Leu Glu Gly Phe Leu Lys 25 Arg Tyr His Glu Leu Pro Val Ser Glu Leu Trp Leu Val Asp Val Glu 35 40 Glu Gly Gln Glu Lys Leu Asn Ile Ile Phe Glu Leu Cys Lys Arg Met 5.5 Val Glu Lys Ala Gly Val Pro Leu Thr Met His Lys Thr Leu Asp Arg 70 75 Arg Leu Ala Leu Lys Asp Ala Asp Phe Val Thr Thr Gln Leu Arg Val 90 8.5 Gly Gln Leu Lys Ala Arg Glu Leu Asp Glu Arg Ile Pro Leu Ser His 105 100 Gly Tyr Leu Gly Gln Glu Thr Asn Gly Ala Gly Gly Leu Phe Lys Gly 125 120 Leu Arg Thr Ile Pro Val Ile Phe Asp Ile Ile Lys Asp Val Glu Glu 135 140 130 Ile Cys Pro Asn Ala Trp Val Ile Asn Phe Thr Asn Pro Ala Gly Met Val Thr Glu Ala Val Tyr Arq His Thr Gly Phe Lys Arg Phe Ile Gly 170 175 1.65 Val Cys Asn Ile Pro Ile Gly Met Lys Met Phe Ile Arg Asp Val Leu 190 180 185 Glu Leu Thr Glu His Asp Asp Leu Ser Ile Asp Leu Phe Gly Leu Asn 200 195 205 His Met Val Phe Ile Lys Asp Val Ile Val Asn Gly Gln Ser Arg Phe 210 215 220 Ala Glu Leu Leu Asp Gly Val Ala Ser Gly Arg Leu Thr Ala Ala Ser 225 230 235 Val Lys Asn Ile Phe Asp Leu Pro Phe Ser Glu Gly Leu Ile Arg Ser 245 250 255 Leu Asn Leu Leu Pro Cys Ser Tyr Leu Leu Tyr Tyr Phe Lys Gln Lys 260 265 270 Glu Met Leu Ala Ile Glu Met Gly Glu Tyr Tyr Lys Gly Gly Ala Arg 280 285

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Ala Gln Val Val Gln Lys Val Glu Lys Gln Leu Phe Asp Leu Tyr Lys
                    295
                            300
Asp Pro Asn Leu Asn Val Lys Pro Lys Glu Leu Glu Gln Arg Gly Gly
305 310 315
Ala Tyr Tyr Ser Asp Ala Ala Cys Glu Val Ile Asn Ala Ile Tyr Asn
             325 330 335
Asp Lys Gln Ala Glu His Tyr Val Asn Val Pro His His Gly His Ile
         340 345 350
Asp Asn Ile Pro Ala Asp Trp Ala Val Glu Met Thr Cys Ile Leu Gly
      355 360 365
Arg Glu Gly Ala Lys Pro His Pro Arg Ile Thr His Phe Asp Asp Lys
                    375
Val Met Gly Leu Ile His Thr Ile Lys Gly Phe Glu Val Ala Ala Ser
    390 395
Asn Ala Ala Leu Ser Gly Glu Leu Asn Asp Val Leu Leu Ala Leu Asn
             405
                              410
                                               415
Leu Ser Pro Leu Val His Ser Asp Arg Asp Ala Glu Lys Leu Ala Ser
          420 425
                                430
Glu Met Ile Leu Ala His Glu Lys Trp Leu Pro Asn Phe Ala Ala Thr
     435 440
Val Glu Lys Leu Lys Leu Thr His Arg
  450
                 455
<210> 9375
<211> 190
<212> PRT
<213> Enterobacter cloacae
<400> 9375
Ala Gln Ile Thr Arg Leu Tyr Glu Glu Glu Leu Met Thr Tyr Gln Gln
                                                15
Ala Gly Arg Ile Ala Val Les Lys Arg Val Ala Gly Trp Val Ile Phe
          20
                           25
                                            30
Ile Pro Ala Leu Ile Ser Thr Leu Ile Ser Val Leu Lys Phe Met Tyr
      35
                        4.0
Asp His Ser Glu Lys Gln Pro Gly Ile Asn Ala Val Met Leu Asp Phe
                                     60
Ala His Val Met Ile Glu Met Met Arg Pne Asn Thr Pro Phe Leu Asn
                                 75
                70
Val Phe Trp Phe Asn Ser Pro Thr Pro Asp Phe His His Gln Leu Asn
             85
                              9.0
Val Gly Phe Trp Ile Ile Tyr Ala Leu Ile Phe Ile Ala Met Ala Leu
          100
Gln Ala Ser Gly Ala Arg Met Ser Arg Gln Thr Arg Phe Leu Arg Glu
                        120
      115
                                         125
Gly Phe Glu Asp Gln Leu Ile Leu Glu Lys Ala Lys Gly Pro Asp Gly
   130
                    135
Met Ser Arg Glu Gln Ile Glu Ser Arg Ile Val Val Pro Arg His Thr
                150
                                  155
Ile Phe Val Gln Phe Phe Pro Leu Tyr Ile Leu Pro Val Ile Ile Ile
             165
                              170
Val Ala Gly Tyr Phe Phe Phe Thr Leu Leu Gly Phe Leu
          180
                           185
<210> 9376
<211> 312
<212> PRT
<213> Enterobacter cloacae
<400> 9376
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Asn Lys Thr Arg Phe Gly Ile Val Leu Ile Gln Lys Met Lys Glu Glu

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1.0
Asn Ile Ala Met Leu Phe Ala Ala Phe Tyr Asn Leu Leu Pro Phe Tyr
                      25
Gly Arg Leu Val Ile Asp Pro Gln Glu Ser Phe Arg Asp Arg Asp Gly
                  40
Leu Phe Leu Cys Cys Thr Asp Ser Leu Asn Lys Met Lys Leu Leu Lys
                                       60
                  55
Thr Val Pro Ala Ala Leu Met Leu Ala Gly Gly Val Phe Ala Ser Leu
                       75
               70
Asn Ala Thr Ala Asp Asp Thr Val Phe Thr Val Met Asp Asp Pro Ser
                   90 95
              85
Thr Ala Lys Lys Pro Phe Glu Gly Asn Val Asn Ala Gly Tyr Leu Ala
                 105
Gln Ser Gly Asn Thr Lys Ser Ser Ser Leu Thr Ala Asp Ser Thr Leu
                         120
       115
Thr Trp Tyr Gly Asn Thr Thr Ala Trp Ser Leu Trp Gly Asn Ala Ser
                      135
Asn Thr Ser Ala Asn Asp Gln Arg Ser Ser Glu Lys Tyr Ala Val Gly
                                    155
Gly Arg Ser Arg Tyr Asn Met Thr Asp Tyr Asp Tyr Leu Phe Gly Gln
               165
                                170
Ala Ser Trp Leu Thr Asp Arg Tyr Asn Gly Tyr Arg Gln Arg Asp Val
                           185
Val Thr Ala Gly Tyr Gly Arg Gln Phe Leu Asn Gly Pro Val His Ser
                         200
                                 205
       195
Leu Arg Phe Glu Phe Gly Pro Gly Val Arg Tyr Asp Glu Tyr Thr Asn
                      215
                                         220
Gly Glu Asp Glu Thr Gln Pro Leu Gly Tyr Ala Ser Gly Thr Tyr Ala
                  230
                                    235
225
Trp Gln Met Thr Asp Asn Ala Lys Phe Thr Gln Gly Val Ser Val Phe
                              250
               245
Gly Ala Glu Asp Thr Thr Leu Asn Ser Glu Ser Ala Leu Asn Val Ala
                          265
           260
Ile Asn Glu His Phe Gly Leu Lys Val Ala Tyr Asn Val Thr Trp Asn
                       280
       275
Ser Ser Pro Pro Asp Ser Ala Pro Glu His Thr Asp Arg Arg Thr Thr
                      295
                                         300
Ile Ser Leu Gly Tyr Lys Met
<210> 9377
<211> 646
<212> PRT
<213> Enterobacter cloacae
<400> 9377
Gly Tyr Lys Met Pro Val Ile Thr Leu Pro Asp Gly Ser Gln Arg His
Phe Asp His Ala Val Ser Pro Met Asp Val Ala Leu Asp Ile Gly Pro
                                                 30
                              25
Gly Leu Ala Lys Ala Thr Ile Ala Gly Arg Val Asn Gly Glu Leu Val
                                            45
      35
Asp Ala Ser Asp Leu Ile Glu Ser Asp Ala Thr Leu Ala Ile Ile Thr
                       55
Ala Lys Asp Glu Glu Gly Leu Glu Ile Ile Arg His Ser Cys Ala His
                                     75
                   70
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Leu Leu Gly His Ala Ile Lys Gln Leu Trp Pro Asn Thr Lys Met Ala

Ile Gly Pro Val Ile Asp Asn Gly Phe Tyr Tyr Asp Val Asp Leu Asp 105

His Thr Leu Thr Gln Glu Asp Ile Asp Ala Leu Glu Lys Arg Met His

85

100

115 120 Glu Leu Ala Glu Thr Asn Tyr Asp Val Ile Lys Lys Lys Val Ser Trp 130 135 140 His Glu Ala Arg Glu Thr Phe Val Lys Arg Gly Glu Ser Tyr Lys Val 150 155 160 Ser Ile Leu Asp Glu Asn Ile Ala His Asp Asp Lys Pro Gly Leu Tyr 165 170 His His Gln Glu Tyr Val Asp Met Cys Arg Gly Pro His Val Pro Asn 185 190 Met Arg Phe Cys His His Phe Lys Leu Met Lys Ile Ala Gly Ala Tyr 195 200 205 Trp Arg Gly Asp Ser Asn Asn Lys Met Leu Gln Arg Ile Tyr Gly Thr 210 215 220 Ala Trp Ala Asp Lys Lys Ala Leu Asn Ala Tyr Leu Gln Arg Leu Glu 225 230 235 240 Glu Ala Ala Lys Arg Asp His Arg Lys Ile Gly Lys Gln Leu Asp Leu 245 250 255 Tyr His Met Gln Glu Glu Ala Pro Gly Met Val Phe Trp His Asn Asp 260 265 270 Gly Trp Thr Ile Phe Arg Glu Leu Glu Thr Phe Val Arg Ser Lys Leu 285 275 280 Lys Glu Tyr Gln Tyr Gln Glu Val Lys Gly Pro Phe Met Met Asp Arg 290 295 300 Val Leu Trp Glu Lys Thr Gly His Trp Asp Asn Tyr Lys Asp Ala Met 305 310 315 320 Phe Thr Thr Ser Ser Glu Asn Arg Glu Tyr Cys Ile Lys Pro Met Asn 325 330 Cys Pro Gly His Val Gln Ile Phe Asn Gln Gly Leu Lys Ser Tyr Arg \$340\$ \$345\$Asp Leu Pro Leu Arg Met Ala Glu Phe Gly Ser Cys His Arg Asn Glu 355 360 365 Pro Ser Gly Ala Leu His Gly Leu Met Arg Val Arg Gly Phe Thr Gln 370 375 380 Asp Asp Ala His Ile Phe Cys Thr Glu Asp Gln Val Arg Glu Glu Val 390 395 Asn Ala Cys Ile Arg Met Val Tyr Asp Met Tyr Ser Thr Phe Gly Phe 405 410 Glu Lys Ile Val Val Lys Leu Ser Thr Arg Pro Glu Lys Arg Ile Gly 420 425 Ser Asp Glu Thr Trp Asp Arg Ala Glu Ala Asp Leu Ala Val Ala Leu 435 440 445 Glu Glu Asn Gly Ile Pro Phe Glu Tyr Gln Leu Gly Glu Gly Ala Phe 450 455 460 Tyr Gly Pro Lys Ile Glu Phe Thr Leu Tyr Asp Cys Leu Asp Arg Ala 465 470 475 480 Trp Gln Cys Gly Thr Val Gln Leu Asp Phe Ser Leu Pro Gln Arg Leu 485 490 495 Ser Ala Ser Tyr Val Gly Glu Asp Asn Glu Arg Gln Val Pro Val Met 500 505 510 Ile His Arg Ala Ile Leu Gly Ser Leu Glu Arg Phe Ile Gly Ile Leu 515 520 525 Thr Glu Glu Phe Ala Gly Phe Phe Pro Thr Trp Leu Ala Pro Val Gln 535 540 Val Val Val Met Asn Ile Thr Asp Ser Gln Ala Asp Tyr Val Lys Glu 550 555 Leu Thr Gln Lys Leu Gln Asn Ala Gly Ile Arg Val Lys Ala Asp Leu 565 570 575 Val Pro Tyr Met Leu Val Cys Gly Asp Lys Glu Val Glu Ala Gly Lys 600

Val Ala Val Arg Thr Arg Arg Gly Lys Asp Leu Gly Ser Leu Asp Val 615 Ser Glu Val Ile Glu Lys Leu Gln Gln Glu Ile Arg Ser Arg Ser Leu 630 635 Gln Gln Leu Glu Glu

<210> 9378 <211> 107 <212> PRT

<213> Enterobacter cloacae

<400> 9378

Gly Ile Lys Gly Gly Lys Arg Val Gln Thr Ala Arg Pro Asn Arg Ile 10 Asn Gly Glu Ile Arg Ala Gln Glu Val Arg Leu Thr Gly Leu Glu Gly 25 3.0

Glu Gln Leu Gly Ile Val Ser Leu Arg Glu Ala Ile Glu Lys Ala Glu 45

Glu Ala Gly Val Asp Leu Val Glu Ile Ser Pro Asn Ala Glu Pro Pro 55

Val Cys Arg Ile Met Asp Tyr Gly Lys Phe Leu Tyr Glu Lys Ser Lys 70 7.5 Ser Ser Lys Glu Gln Lys Lys Gln Lys Val Ile Gln Val Lys Glu 8.5 90

Ile Lys Phe Arg His Val Phe Thr Ser Arg 100

<210> 9379 <211> 235

<212> PRT <213> Enterobacter cloacae

<400> 9379 Leu Pro Phe Arg Ile Phe Pro Pro Ala Leu Thr Pro Arg Trp Ile Ser

Arg Leu Arg Gly Cys Ala Pro Arg Leu Lys Val Asn His Met Leu Asp 20 25

Lys His Leu His Pro Arg Leu Lys Pro Gly Leu Asn Gln Leu Ala Ala 35 40 45 Ala Leu Asp Lys Pro Phe Ile Thr Pro Asp Gly Leu Thr Leu Ala Gly

55 Phe Ala Ile Gly Val Leu Ala Leu Pro Phe Leu Ala Leu Gly Trp Tyr

70 75 Pro Ala Ala Leu Ile Ala Ile Val Leu Asn Arg Leu Leu Asp Gly Leu 85 90

Asp Gly Ala Leu Ala Arg Arg Arg Gly Leu Thr Asp Ala Gly Gly Phe 100 105 110

Leu Asp Ile Ala Leu Asp Phe Leu Phe Tyr Ala Leu Val Pro Phe Gly 115 120

Phe Ala Leu Ala Ala Pro Ala Asp Asn Ala Ile Ala Ala Ala Trp Leu 135 140

Leu Phe Ala Phe Met Gly Thr Gly Ser Ser Phe Leu Ala Phe Ala Ala 150 1.5.5

Leu Ala Gly Lys His Asp Ile Asp Asn Pro Gly Tyr Ala His Lys Ser 165 170 175

Leu Tyr Tyr Ile Gly Gly Leu Thr Glu Gly Thr Glu Thr Ile Ala Leu 185 190 Phe Val Leu Cys Ser Leu Phe Pro Ala His Phe Ala Leu Phe Ala Trp 200

205 Val Phe Gly Ala Leu Cys Trp Leu Thr Thr Thr Thr Arg Ile Trp Ser



215 Gly Tyr Ile Thr Leu Lys Ser Leu Pro Arg 230 <210> 9380 <211> 500 <212> PRT <213> Enterobacter cloacae <400> 9380 Gly Glu Asn Ser Met Thr Leu Trp Ile Asn Gly Asp Trp Val Thr Gly 10 Glu Gly Asp Ala Arg Thr Lys Thr Asn Pro Val Gly Gln Glu Val Leu 2.5 Trp Ser Gly Asn Asp Ala Ser Ala Gly Gln Val Glu Gln Ala Cys Gln 40 4.5 Ala Ala Arg Arg Ala Phe Pro Ala Trp Ala Lys Arg Pro Phe Ser Glu 55 60 Arg Gln Ala Leu Val Glu Lys Phe Ala Ala Leu Leu Glu Ala Asn Lys 70 75 Ala Glu Leu Thr Arg Ile Ile Ala Cys Glu Thr Ser Lys Pro Arg Trp 8.5 90 95 Glu Ala Thr Thr Glu Val Thr Ala Met Ile Asn Lys Ile Ala Ile Ser 100 105 110 Val Lys Ala Tyr His Thr Arg Thr Gly Glu Gln His Thr Glu Met Pro 115 120 Asp Gly Ala Ala Thr Leu Arg His Arg Pro His Gly Val Leu Ala Val 130 135 140 Phe Gly Pro Tyr Asn Phe Pro Gly His Leu Pro Asn Gly His Ile Val 150 Pro Ala Leu Leu Ala Gly Asn Thr Val Ile Phe Lys Pro Ser Glu Leu 170 165 Thr Pro Leu Thr Gly Glu Ala Val Val Lys Leu Trp Glu Gln Ala Gly 180 185 190 Leu Pro Pro Gly Val Leu Asn Leu Val Gln Gly Gly Arg Glu Thr Gly 195 200 205 Gln Ala Leu Ser Ala Leu Ser Asp Ile Asp Gly Leu Leu Phe Thr Gly 210 215 220 Ser Ala Gly Thr Gly Tyr Gln Leu His Arg Gln Leu Ala Gly Gln Pro 230 235 Glu Lys Ile Leu Ala Leu Glu Met Gly Gly Asn Asn Pro Leu Ile Val 245 250 Glu Asp Pro Glu Asp Ile Asp Ala Ala Val His Leu Thr Ile Gln Ser 260 265 Ala Phe Ile Thr Ala Gly Gln Arg Cys Thr Cys Ala Arg Arg Leu Leu 280 285 Val Lys Arg Gly Ala Gln Gly Asp Ala Phe Leu Lys Arg Leu Val Glu 290 295 300 Val Ser Ala Arg Leu Val Pro Ala Lys Trp Asp Ala Glu Pro Gln Pro 310 315 Phe Ile Gly Gly Leu Ile Ser Gly Gln Ala Ala Leu Asn Val Leu Lys 325 330 Ala Trp Gln Glu His Val Ala Arg Gly Ala Lys Thr Leu Leu Glu Pro 340 345 350 Lys Leu Val Gln Pro Gly Thr Ser Leu Leu Thr Pro Gly Ile Ile Asp 360 365 Met Ser Ala Thr Ser Asn Val Pro Asp Glu Glu Val Phe Gly Pro Leu 375 380 Leu Cys Val Trp Arg Tyr Asp Asp Phe Glu Ser Ala Ile Glu Met Ala 385 390 395 400

Asn Asn Thr Arg Tyr Gly Leu Ser Ser Gly Leu Ile Ser Pro His Arg

```
410
                                               415
Glu Lys Phe Asp Gln Leu Leu Glu Ala Arg Ala Gly Ile Val Asn
      420 425 430
Trp Asn Lys Pro Leu Thr Gly Ala Ala Ser Thr Ala Pro Phe Gly Gly
    435 440 445
Val Gly Ala Ser Gly Asn His Arg Ala Ser Ala Trp Tyr Ala Ala Asp
 450 455 460
Tyr Cys Ala Trp Pro Met Ala Ser Leu Glu Thr Pro Ala Leu Thr Leu
465 470 475 480
Pro Glu Thr Leu Asn Pro Gly Leu Asp Phe Thr Glu Gly Asp Ala His
          485
                             490
Glu Ser Ala
         500
<210> 9381
<211> 120
<212> PRT
<213> Enterobacter cloacae
<400> 9381
Thr Arg Gly Arg Asn Met Asn Lys Asn Val Ala Gly Ile Leu Ser Ala
                              1.0
Ala Ala Val Leu Thr Met Leu Ala Gly Cys Thr Ala Tyr Asp Arg Thr
20
                          25
Lys Asp Gln Phe Thr Gln Pro Val Val Lys Asp Val Lys Lys Gly Met
                       4.0
Thr Arg Ser Gln Val Ala Ala Ile Ala Gly Lys Pro Ser Ser Glu Val
                   5.5
                        - 60
Thr Met Ile His Ala Arg Gly Thr Cys Gln Thr Tyr Ile Leu Gly Gln
              70
Arg Asp Gly Lys Ala Glu Thr Tyr Phe Val Ala Leu Asp Asp Thr Gly
                           90
His Val Ile Asn Ser Gly Tyr Gln Thr Cys Ala Glu Tyr Asp Thr Asp
       100
                          105
Pro Gln Ala Pro Lys Ala Gln
     115
<210> 9382
<211> 97
<212> PRT
<213> Enterobacter cloacae
<400> 9382
Lys Gly Glu Ile Met Asn Ile Asp Asp Met Ile Ala Gly Met Thr Pro
                        10
Glu Val Tyr Gln Arg Leu Val Thr Ala Val Glu Leu Gly Lys Trp Pro
          20
                          25
                                            30
Asp Gly Val Ala Leu Thr Pro Glu Gln Lys Glu Asn Ser Leu Gln Leu
   35
                    40
Val Met Leu Trp Gln Ala Arg His Asn Thr Asp Ala Gln His Met Thr
                 55
Ile Asp Thr Asn Gly Gln Met Val Met Lys Ser Lys Arg Glu Leu Lys
                70
                                 75
Glu Asp Phe Gly Ile Thr Pro Lys Pro Ile Ala Thr Met Lys Met Gln
             8.5
                             90
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<210> 9383 <211> 352 <212> PRT

<213> Enterobacter cloacae

```
<400> 9383
Gln Glu Thr Ser Met Ser Glu Gln Thr Ile Arg Leu Thr Gln Tyr Ser
                             10
His Gly Ala Gly Cys Gly Cys Lys Ile Ser Pro Lys Val Leu Glu Thr
       20
                        25
Ile Leu His Ser Glu Gln Ala Lys Phe Val Asp Pro Asn Leu Leu Val
 35
         40
                           45
Gly Asn Glu Thr Arg Asp Asp Ala Ala Val Tyr Asp Leu Gly Asn Gly
                   55
                                  60
Thr Ser Ile Ile Ser Thr Thr Asp Phe Phe Met Pro Ile Val Asp Asn
            7.0
                     75
Pro Phe Asp Phe Gly Arg Ile Ala Ala Thr Asn Ala Ile Ser Asp Ile
           8.5
                 90
Phe Ala Met Gly Gly Lys Pro Ile Met Ala Ile Ala Ile Leu Gly Trp
       100
                          105
Pro Ile Asn Asn Leu Pro Pro Glu Ile Ala Arg Asp Val Ile Glu Gly
      115
           120
                                       125
Gly Arg Phe Ala Cys Gln Gln Ala Gly Ile Ala Leu Ala Gly Gly His
       135
                                    140
Ser Ile Asp Ala Pro Glu Pro Ile Phe Gly Leu Ala Val Thr Gly Val
145 150
                                 155
Val Pro Thr Glu Arg Val Lys Arg Asn Ser Thr Ala Gln Pro Gly Cys
            165 170
Lys Leu Phe Leu Thr Lys Pro Leu Gly Ile Gly Val Leu Thr Thr Ala
                       185
   180
                                           190
Glu Lys Lys Ser Leu Leu Lys Pro Glu His Ile Gly Leu Ala Thr Glu
195
                      200
                                        205
Val Met Cys Gln Met Asn Leu Ala Gly Ala Ala Phe Ala Asn Ile Asp
 210
                   215
                                    220
Gly Val Lys Ala Met Thr Asp Val Thr Gly Phe Gly Leu Leu Gly His
                230
                                 235
Leu Ser Glu Val Cys Gln Gly Ala Gly Val Gln Ala Gln Val Arg Tyr
             245
                              250
Gln Asp Val Pro Lys Leu Pro Gly Val Glu Glu Tyr Ile Ala Gln Gly
       260
                          265
                                           270
Ala Leu Pro Gly Gly Thr Gln Arg Asn Phe Ala Ser Tyr Gly His Leu
    275
                       280
                                        285
Met Gly Glu Met Pro Glu Ala Trp Arg Asn Leu Leu Cys Asp Pro Gln
                    295
                                    300
Thr Ser Gly Gly Leu Leu Ala Val Thr Pro Glu Ala Glu Ala Asp
                310
                                 315
Val Gln Ala Thr Ala Ala Glu Phe Gly Ile Thr Leu Thr Ala Ile Gly
                              330
             325
Glu Leu Val Thr Ala Arg Gly Gly Arg Pro Met Ile Glu Ile Arg
          340
                          345
```

<210> 9384 <211> 114 <212> PRT

<213> Enterobacter cloacae

Ala Gln Pro Cys Asn Gln Cys Cys Ile Tyr Gln Asp Gln Asn Tyr Ser 70 7.5 Glu Gly Ala Val Val Arg Ala Asp Gly Val Leu Leu Gln Cys Gln Arg 85 90 Asp Glu Arg Thr Leu Ser Thr Asn Pro Leu Val Trp Arg Arg Val Lys 100 105 Glu

<210> 9385 <211> 380 <212> PRT

<213> Enterobacter cloacae

<400> 9385 Arg Gly Ala Leu Cys Pro Cys Ala Asp Arg Gln Arg Gly Arg Gly Gln 10 Asn Trp Leu Arg Ser Phe Cys Ala Gly Leu Arg Thr Gly Glu Val Arg 20 25 Gly Val Ile Met Met Val Ile Arg Pro Val Ala His Gly Asp Leu Ala 40 Gly Leu Met Gln Leu Ala Gly Lys Thr Gly Gly Gly Leu Thr Ser Leu 55 60 Pro Ala Asp Glu Lys Thr Leu Ser Ala Arg Ile Glu Arg Ala Leu Gln 75 7.0 8.0 Thr Trp Gln Gly Thr Leu Pro Lys Ser Glu Gln Gly Tyr Val Phe Val 85 90 Leu Glu Asp Thr Asp Thr Gly Thr Val Ala Gly Ile Cys Ala Ile Glu 100 105 110 Val Ala Val Gly Leu Asn Asp Pro Trp Tyr Asn Tyr Arg Val Gly Thr 115 120 125 Met Val His Ala Ser Lys Glu Leu Asn Val Tyr Asn Ala Leu Pro Thr 135 140 Leu Phe Leu Cys Asn Asp His Thr Gly Ala Ser Glu Leu Cys Thr Leu 150 155 160 Phe Leu Asp Pro Asp Trp Arg Lys Glu Gly Asn Gly Tyr Leu Leu Ser 165 170 Lys Ser Arg Phe Met Phe Met Ala Ala Phe Arg Asp Arg Phe Asn Glu 180 185 190 Lys Val Val Ala Glu Met Arg Gly Val Ile Asp Glu Thr Gly Tyr Ser 195 200 205 Pro Phe Trp Glu Ser Leu Gly Glu Arg Phe Phe Ser Met Glu Phe Ser 210 215 220 Arg Ala Asp Tyr Leu Cys Gly Thr Gly Gln Lys Ala Phe Ile Ala Glu 225 230 235 Leu Met Pro Lys His Pro Ile Tyr Thr His Phe Leu Thr Pro Glu Ala 245 250 255 Gln Ala Val Ile Gly Glu Val His Pro Gln Thr Ala Pro Ala Arg Ala 260 265 Val Leu Glu Lys Glu Gly Phe Arg Tyr Arg Asn Tyr Val Asp Ile Phe 275 280 Asp Gly Gly Pro Thr Leu Glu Cys Asp Ile Asp Arg Val Arg Ala Ile 295 290 300 Arg Lys Ser Arg Leu Val Glu Val Ser Glu Cys Gln Pro Ala Pro Gly 305 310 315 Glu Trp Pro Ala Cys Leu Val Ser Asn Glu Asn Tyr Thr Asn Phe Arg 330 325 335 Ala Met Leu Val Arg Thr Asn Pro Ser Cys Glu Arg Leu Val Leu Thr 345 Ala Ala Gln Leu Asp Ala Leu Lys Cys Asn Ala Gly Asp Thr Val Arq

Leu Val Arg Leu Cys Pro Glu Glu Lys Thr Ala <210> 9386 <211> 453 <212> PRT <213> Enterobacter cloacae <400> 9386 Ile Arg Gly Trp Ile Leu Leu Arg Val Thr Pro Met Lys Ala Arg Glu 4.5

Val Asn Phe Asp Gly Leu Val Gly Leu Thr His His Tyr Ala Gly Leu Ser Phe Gly Asn Glu Ala Ser Thr Lys His Arg Phe Gln Val Ser Asn Pro Lys Leu Ala Ala Lys Gln Gly Leu Leu Lys Met Lys Ala Leu Ser Asp Ala Gly Phe Pro Gln Ala Val Ile Pro Pro Gln Glu Arg Pro Asn 7.0 Val Ala Val Leu Arg Gln Leu Gly Phe Ser Gly Thr Asp Glu Gln Val Val Glu Lys Ala Gly Thr Gln Thr Pro His Leu Leu Ser Ala Ala Ser Ser Ala Ser Ser Met Trp Val Ala Asn Ala Ala Thr Val Ala Pro Ser Ala Asp Thr Leu Asp Gly Lys Val His Leu Thr Val Ala Asn Leu Asn Asn Lys Phe His Arg Ala Ser Glu Ala Glu Thr Thr Gly Arg Val Leu Arg Ala Ile Phe Asn His Asp Ala His Phe Glu Val His Ser Ala Leu Pro Gln Val Ala Met Phe Gly Asp Glu Gly Ala Ala Asn His Asn Arg Leu Gly Gly Asp Tyr Gly Glu Pro Gly Leu Gln Leu Phe Ile Tyr Gly Arg Glu Glu Gly Gly His Ala Ala Pro Val Arg Tyr Pro Ala Arg Gln Thr Leu Ala Ala Ser Gln Ala Val Ala Arg Leu Asn Gln Val Asn Pro Ser Gln Val Ile Phe Ala Gln Gln Asn Pro Gln Val Ile Asp Gln Gly Val Phe His Asn Asp Val Ile Ala Val Ser Asn Arg Gln Val Leu Phe 265 270 Cys His Glu Gln Ala Phe Ala His Gln Glu Lys Leu Leu Ala Thr Leu 280 285 Arg Glu Arg Val Pro Gly Phe Met Pro Ile Gln Val Pro Thr Gln Ala Val Ser Val Gln Asp Ala Val Glu Thr Tyr Leu Phe Asn Ser Gln Leu Leu Ser Arg Asp Asp Gly Ser Met Met Leu Val Leu Pro Gln Glu Ser Arg Asn His Gln Gly Val Trp Arg Tyr Leu Ser Glu Leu Val Gln Ala Asp Asn Pro Ile Asp Glu Leu Arg Val Phe Asp Leu Arg Glu Ser Met Ala Asn Gly Gly Gly Pro Ala Cys Leu Arg Leu Arg Val Val Leu Thr Pro Glu Glu Leu Gln Ala Val Asn Pro Ala Val Met Met Asn Asp Thr

Leu Phe Asn Thr Leu Asn Asp Trp Val Asp Arg Tyr Tyr Arg Asp Arg

405 410 415

Leu Val Gln Ala Asp Leu Val Asp Pro Gln Leu Leu Arg Glu Gly Arg
420 425 430

Glu Ala Leu Asp Ala Leu Ser Thr Ile Leu Gln Leu Gly Ser Val Tyr
435

Pro Phe Gln Arg
450

<210> 9387 <211> 325 <212> PRT <213> Enterobacter cloacae

4400- 0003

<400> 9387 Gly Asp Asp Met Glu Asn Leu Leu Ala Leu Thr Leu Ala Glu Glu Thr 1.0 Pro Glu Arg Gln Glu Gly Ala Gly Pro Ser Phe His Trp Arg Trp Leu 2.0 25 30 Gly Pro Gly Val Leu Glu Leu Thr Pro Thr Gly Lys Tyr Asn Leu Ser 4.0 45 Leu Leu Ser Thr Gly Ile His Gly Asn Glu Thr Ala Pro Val Glu 55 60 Ile Val Glu Leu Leu Arg Ala Leu Tyr Arg Ala Glu Phe Thr Leu 7.0 75 8.0 His Cys Arg Leu Leu Val Val Leu Gly Asn Pro Pro Ala Leu Ala Gln 85 90 Asn Lys Arg Tyr Leu Val Ser Asp Ile Asn Arg Met Phe Gly Gly Arg 100 105 Trp Ala Gln Phe Pro Gln Ser Asp Glu Thr Thr Arg Ala Gln Trp Leu 115 120 Glu Lys Val Val Thr Ala Phe Phe Ala Gly Ala Gly Glu Thr Arg Trp 130 135 140 His Leu Asp Leu His Thr Ala Ile Arg Ala Ser Tyr His Val Arg Phe 145 150 155 Gly Val Leu Pro Gln Arg His Gln Pro Trp Asp Glu Ala Phe Leu Thr 165 170 Trp Leu Gly Asp Ala Gly Leu Glu Ala Leu Val Phe His Gln Thr Pro 180 185 190 Gly Gly Thr Phe Thr His Phe Thr Cys Glu Asn Val Gly Ala Leu Ser 205 195 200 Cys Thr Leu Glu Leu Gly Lys Ala Leu Pro Phe Gly Gln Asn Asp Leu 215 220 Thr Arg Phe Thr Pro Thr His Gln Ala Leu Arg Ala Leu Leu Ala Gly 225 230 235 Val Ala Pro Glu Pro Thr Arg Glu Pro Val Val Arg Tyr Arg Val Val 245 250 255 Gln Gln Ile Thr Arg Gln Ser Glu Ala Phe Gln Leu His Met Ala Pro 260 265 His Thr Leu Asn Phe Thr Pro Phe Arg Gln Gly Val Leu Leu Ala Glu 280 285 Asp Gly Glu Thr Arg Tyr Ala Val Gln Lys Ser Thr Glu Tyr Val Leu 290 295 300 Phe Pro Asn Pro Ser Val Ala Phe Gly Leu Arg Ala Gly Leu Met Leu 305 310 315 Glu Lys Met Pro

325

<210> 9388 <211> 236 <212> PRT

<213> Enterobacter cloacae

```
<400> 9388
Asp Arg Arg Ala Pro Val Tyr Lys Ser Glu Asn Ala Val Asp Arg Thr
                            10
Gly Gly Phe Ser Phe Ile Pro Cys Leu Arg Ser Gly Leu Thr Ala Ala
    20
                         25
Asp Asn Thr Ser Val Lys Met Pro Trp Arg Thr Val Arg Pro Ser Gly
                      40
                                       45
Val Val Met Glu Phe Phe Asp Ile Arg Lys Met Pro Val Ser Leu Trp
       55
                                   60
Arg Asn Gly Ala Gly Glu Thr Arg Glu Ile Cys Cys Phe Pro Pro Ala
                70
                                75
Thr Arg Asp Phe Phe Trp Arg Ala Ser Ile Ala Ser Ile Ala Ser Asn
          8.5
                            90
Gly Glu Phe Ser Ala Phe Pro Gly Val Asp Arg Val Ile Thr Leu Leu
         100
                         105
Glu Gly Gly Glu Val Thr Leu Asp Ala Gly Arg Ala Phe Cys His Thr
      115
                       120
Leu Lys His His Gln Pro Tyr Arg Phe Ala Gly Asp Leu Ala Val Lys
 130
                   135
                                    140
Ala Val Leu Thr Glu Gly Gln Met Ser Met Asp Phe Asn Ile Met Thr
145
                150
                                155
Arg Arg Asp Cys Cys Gln Ala Lys Val Arg Val Ala Thr Arg Thr Phe
           165
                             170
Thr Thr Phe Ala Ser Arg Gly Gly Val Val Phe Val Leu Ser Gly Ala
                         185
         180
Trp Gln Leu Gly Asp Lys Leu Leu Thr Ala Asp Gln Gly Ala Ser Trp
195
                      200
                          205
Glu Ala Gly Ser His Thr Leu Arg Leu Leu Glu Thr Lys Gly Ser Leu
210
                215 220
Leu Phe Ser Glu Ile Thr Trp Leu Pro Gly His
225
               230
```

<210> 9389 <211> 457 <212> PRT

<213> Enterobacter cloacae

165

<400> 9389 Gly Tyr Phe Pro Met Ser Lys Val Ile Ala Ser Leu Glu Lys Val Leu 10 Leu Pro Phe Ala Val Lys Ile Gly Lys Gln Pro His Val Asn Ala Ile 20 25 Lys Asn Gly Phe Ile Lys Leu Met Pro Leu Thr Leu Ala Gly Ala Met 35 4.0 4.5 Phe Val Leu Ile Asn Asn Val Phe Leu Ser Phe Gly Glu Gly Ser Phe Phe Tyr Ser Leu Gly Ile Arg Leu Asp Ala Ser Thr Ile Glu Thr Leu 70 7.5 Asn Gly Leu Lys Ala Ile Gly Gly Asn Val Tyr Asn Gly Thr Leu Gly 8.5 95 Ile Met Ser Leu Met Ala Pro Phe Phe Ile Gly Met Ala Leu Ala Glu 100 105 Glu Arg Lys Val Asp Pro Leu Ala Ala Gly Leu Leu Ser Ile Ala Ala 115 120 Phe Met Thr Val Thr Pro Tyr Ser Val Gly Asp Ala Tyr Ala Val Gly 130 135 Ala Asn Trp Leu Gly Gly Ala Asn Ile Ile Ser Gly Ile Ile Ile Gly 145 150 155 Leu Val Val Ala Glu Met Phe Thr Phe Ile Ile Arg Arg Asn Trp Val

```
Ile Arg Leu Pro Asp Ser Val Pro Ala Ser Val Ser Arg Ser Phe Ser
   180
                    185
Ala Leu Ile Pro Gly Phe Ile Ile Leu Ser Ile Met Gly Ile Ile Ala
 195
                   200 205
Trp Ala Leu Ser His Trp Gly Thr Asn Phe His Gln Ile Ile Met Asp
 210 215 220
Ser Ile Ser Thr Pro Leu Ala Ser Met Gly Asn Val Val Gly Trp Ala
225 230 235
Tyr Val Ile Phe Thr Ser Leu Leu Trp Phe Phe Gly Val His Gly Ser
     245 250 255
Leu Ala Leu Ala Ala Leu Asp Ser Gly Ile Met Thr Pro Trp Ala Leu
 260 265 270
Glu Asn Val Ala Leu Tyr Gln Gln Tyr Gly Ser Val Asp Ala Ala Leu
275 280 285
Ala Ala Gly Lys Thr Phe His Val Trp Ala Lys Pro Met Leu Asp Ser
 290 295
                               300
Tyr Ile Phe Leu Gly Gly Thr Gly Ala Thr Leu Gly Leu Ile Ile Ala
305 310
                            315
Val Phe Ile Val Ser Arg Arg Ala Asp His Arg Gln Val Ala Lys Leu
         325
                         330
                                        335
Ala Leu Pro Ser Gly Ile Phe Gln Ile Asn Glu Pro Ile Leu Phe Gly
       340
                      345
                           350
Leu Pro Ile Ile Met Asn Pro Val Met Phe Ile Pro Phe Ile Leu Val
355 360
                                  365
Gln Pro Leu Leu Ala Ala Ile Thr Leu Thr Ala Tyr Tyr Leu Gly Ile
370
                375
                               380
Ile Pro Pro Val Thr Asn Ile Ala Pro Trp Thr Met Pro Ala Gly Leu
             390
                            395
Gly Ala Phe Phe Asn Thr Asn Gly Ser Val Ala Ala Phe Leu Leu Ala
           405
                         410 415
Ile Phe Asn Leu Gly Ile Ala Thr Leu Leu Tyr Met Pro Phe Val Ala
                          430
  420
                       425
Ile Ala Asn Lys Ala Ala Thr Val Ile Asp Glu Glu Glu Ser Glu Glu
435 440
Asp Ile Ala Leu Ala Leu Lys Phe
 450
                455
```

<210> 9390 <211> 117 <212> PRT

<213> Enterobacter cloacae

<400> 9390

Lys Met Leu Asp Leu Glu Ser Ile Val Ala Glu Glu Thr Ala Glu Asn 1 5 10 15
Asp Leu Glu Glu Val Val Met Gly Leu Ile Ile Asn Ser Gly Gln Ala 20 25 30
Arg Ser Leu Ala Tyr Ala Ala Leu Lys Gln Ala Lys Gln Gly Asp Phe 35 40 45
Val Ala Ala Lys Thr Met Met Glu Gln Ser Arg Thr Ala Leu Asn Glu 50 55 60
Ala His Leu Val Gln Thr Lys Leu Ile Glu Ser Asp Gln Gly Glu Gly G5 70 75 80
Lys Met Lys Val Ser Leu Val Leu Val His Ala Gln Asp His Leu Met 85 90
Thr Ser Met Leu Ala Arg Glu Leu Val Ala Glu Leu Ile Glu Leu His

105

Glu Lys Met Gln 115

<210> 9391

```
<211> 278
<212> PRT
<213> Enterobacter cloacae
<400> 9391
Gln Glu Val Ser Thr Met Glu Ile Lys Thr Ala His Glu Gln Gln Leu
           5
                               1.0
Phe Asn Gly Lys Asn Phe His Val Val Ile Tyr Asn Lys Thr Glu Ser
         20
                         25
Ala Ser Gly Leu His Gln His Asp Tyr Tyr Glu Phe Thr Ile Val Leu
 35
                     40
                                   4.5
Thr Gly Arg Tyr Tyr Gln Glu Ile Asn Gly Lys Arg Val Leu Leu Glu
                   5.5
Arg Gly Asp Phe Val Phe Leu Pro Met Gly Ser Tyr His Gln Ser Phe
       70 75
Tyr Glu Phe Gly Ala Thr Arg Ile Leu Asn Val Gly Val Ser Arg Arg
                     90
Phe Phe Glu Lys His Tyr Leu Pro Leu Val Pro Phe Cys Phe Val Ala
         100 105
                                           110
Ser Gln Val Tyr Arg Val Lys Asn Glu Phe Met Thr Trp Ile Glu Thr
      115
                        120
                                          125
Val Ile Ala Ser Leu Asn Phe Arg Asp Asn Glu Phe Asp Glu Phe Ile
                  135
                                     140
Glu Thr Val Thr Phe Tyr Val Met Asn Arg Leu Arg His His Arg Glu
              150 155
Glu Gln Gln Val Val Asp Asp Ile Pro Gln Trp Leu Arg Ser Thr Val
             165 170
Glu Leu Met His Asp Lys Gly Gln Phe Ser Asp Asn Ala Leu Glu Asn
       180
                           185
                                              190
Met Val Ala Leu Ser Gly Lys Ser Gln Glu Tyr Leu Thr Arg Ala Thr
    195
                       200
                                          205
Gln Arg Tyr Tyr Arg Lys Thr Pro Val Gln Ile Ile Asn Glu Ile Arg
                    215
                                       220
 210
Ile Asn Phe Ala Lys Lys Gln Leu Glu Ile Thr Asn Tyr Ser Val Thr
                 230
                                   235
Asp Ile Ala Tyr Glu Ser Gly Tyr Ser Ser Pro Ser Leu Phe Ile Lys
             245
                               250
Thr Phe Lys Lys Leu Thr Ser Phe Thr Pro Asn Ser Tyr Arg Lys Asn
          260
                           265
Leu Thr Val Ile Asn
       275
<210> 9392
<211> 262
<212> PRT
<213> Enterobacter cloacae
<400> 9392
Glu Thr Glu Thr His Thr Pro Leu Arg Gly Gly Ala Met Glu Asn Leu
                               10
Leu Ile Val Asn Ala Asp Asp Phe Gly Leu Ser Lys Gly Gln Asn Tyr
          20
                           25
                                              30
Gly Ile Ile Glu Ala Cys Arg Arg Gly Val Val Thr Ser Thr Thr Ala
                        40
                                          45
Leu Ile Asn Gly Glu Ala Val Glu His Ala Ala Gln Leu Ser Arg Glu
 50
                    55
Leu Pro Glu Leu Gly Val Gly Met His Phe Val Leu Thr Leu Gly Leu
                 70
65
Pro Leu Ser Pro Met Pro Gly Leu Thr Arg Glu Gly Lys Leu Gly Lys
             8.5
                               90
```

Trp Ile Trp Glu Met Ala Glu Gln Asp Ala Leu Pro Leu Asp Glu Ile

Gln

```
105
Ala Arg Glu Leu Glu Cys Gln Phe Asn Arg Phe Val Asp Val Phe Gly
  115
              120
                             125
Arg Glu Pro Thr His Ile Asp Ser His His His Val His Met Ile Pro
 130
       135
                       140
Ala Ile Phe Pro Leu Val Ala Glu Phe Ala Gln Arg Lys Gly Val Ala
145 150 155
Met Arg Val Asp Arg Glu Val Arg Gly Leu Pro Asp Val Ala Val Thr
         165 170 175
Ser Thr Glu Gly Phe Ser Ser Ala Phe Tyr Gly Asp Glu Ile Asp Glu
    180 185 190
Ala Leu Phe Leu Lys Val Leu Asp Asp Ser Ala Ala Lys Gly Glu Arg
 195 200 205
Ser Leu Glu Val Met Ala His Pro Ala Phe Val Asp Glu Ile Val Arg
 210 215 220
Lys Ser Ala Tyr Cys Trp Pro Arg Leu Ala Glu Leu Asp Val Leu Thr
225 230 235 240
Ser Ala Ser Leu Lys Tyr Ala Ile Ala Glu Arg Gly Tyr Arg Leu Gly
      245
                            250
Thr Phe Arg Asp Leu
         260
<210> 9393
<211> 89
<212> PRT
<213> Enterobacter cloacae
<400> 9393
Glu Phe Ala Leu Val Asn Pro Ser Leu Met Lys Pro Leu Arg Gln Gln
1 5
                           1.0
Asn Arg Gln Val Ile Ser Tyr Val Pro Arg Val Glu Pro Ala Pro Pro
                         25
                                         3.0
Asp His Ala Leu Lys Val Asp Gly Phe Arg Asp Val Trp Met Leu Arg
35
                    40
Gly Lys Tyr Val Ala Phe Val Leu Ile Gly Glu His Phe Arg Arg Ser
50 55
                            60
Pro Ala Phe Thr Val Pro Glu Ser Ala Gln Arg Trp Ala Met Gln Thr
               7.0
                               75
Arg Gln Asp Glu Glu Val Glu Glu
            85
<210> 9394
<211> 98
<212> PRT
<213> Enterobacter cloacae
<400> 9394
Ile Met Ser Ser Gly Asp Ile Thr Arg Tyr Val Val Thr Val Asn Ile
His Glu Ala Ser Leu Thr Glu Leu Asn Glu Leu Asn Asn Ala Phe Thr
. 20
                       25
Arg Ala Asn Phe Leu Leu Thr Leu Thr Asp Asp Glu Gly Asn Ile His
                    40
                                   4.5
Asp Leu Gly Ser Leu Ala Phe Gly Leu Ile Ser Pro Leu Ser Gln Glu
Glu Val Lys Ala Leu Ala Ser Ser Leu Val Glu Ser Val Thr Asp Lys
            70
                                75
Ala Thr Glu Ile Asp Val Asp Ser Trp Glu Asn Trp His Lys Lys Glu
            85
                            90
```

```
<210> 9395
<211> 296
<212> PRT
<213> Enterobacter cloacae
<400> 9395
Ser Gly Arg Gln His Gly Arg Asp Ile Met Trp Gln Ala Ile Ser His
                                 10
Leu Leu Ser Glu Gln Leu Gly Glu Gly Glu Ile Glu Leu Arg Asn Glu
         20
                               25
                                                   30
Leu Pro Gly Gly Glu Ile His Ala Ala Trp His Leu Arg Tyr Ala Gly
                           40
Arg Asp Leu Phe Val Lys Cys Asp Glu Arg Glu Leu Leu Pro Ile Phe
                        55
                                           60
Thr Ala Glu Ala Asp Gln Leu Glu Leu Leu Ser Arg Ser Lys Thr Val
                 7.0
                                    7.5
                                                           80
Thr Val Pro Gln Val Leu Ala Val Gly Ser Asp Arg Asp Tyr Ser Phe
               8.5
                                   90
Leu Val Met Asn Tyr Leu Pro Ala Arg Pro Leu Asp Ala His Asn Ala
           100
                               105
                                       110
Phe Ile Leu Gly Gln Gln Thr Ala Arg Leu His Gln Trp Ser Asp Gln
        115
                           120
                                               125
Pro Gln Phe Gly Leu Asp Phe Asp Asn Asp Leu Ser Thr Thr Pro Gln
  130
                                          140
Pro Asn Ala Trp Gln Arg Arg Trp Ser Thr Phe Phe Ala Glu Gln Arg
145
                   150
Ile Gly Trp Gln Leu Glu Leu Ala Ala Glu Lys Gly Leu Ala Phe Gly
                165
                                   170
                                                       175
Asn Ile Asp Ala Ile Val Glu His Ile Gln Gln Arg Leu Ala Ser His
           180
                               185
                                                   190
Gln Pro Gln Ala Ser Leu Leu His Gly Asp Leu Trp Ser Asn Asn Cys
       195
                                               205
Ala Leu Gly Pro Asp Gly Pro Tyr Ile Tyr Asp Pro Ala Cys Tyr Trp
 210
                                           220
Gly Asp Arg Glu Cys Asp Leu Ala Met Leu Pro Leu His Pro Glu Gln
225
                   230
                                                           240
Pro Pro Gln Ile Tyr Asp Gly Tyr Gln Ser Val Ser Pro Leu Pro Ala
                245
                                   250
Gly Phe Leu Asp Arg Gln Pro Val Tyr Gln Leu Tyr Thr Leu Leu Asn
            260
                               265
Arg Ala Ile Leu Phe Gly Gly Ser His Leu Val Asn Ala Gln Arg Ala
                           280
Leu Asp Arg Ile Leu Ala Ala
   290
<210> 9396
<211> 205
<212> PRT
<213> Enterobacter cloacae
<400> 9396
Ile Asp Ser Leu Pro Gly Phe Ile Met Thr Ala Glu Gly His Leu Leu
Phe Ser Leu Ala Cys Ala Val Phe Ala Lys Asn Ala Glu Leu Thr Pro
           20
                               25
                                                  3.0
Val Leu Ala Gln Gly Asp Trp Trp His Ile Val Pro Ser Ala Val Leu
                           40
                                              45
Thr Cys Leu Leu Pro Asp Ile Asp His Pro Lys Ser Phe Leu Gly Gln
                                          60
Arg Leu Lys Trp Ile Ser Lys Pro Ile Ala Arg Ala Phe Gly His Arg
```

```
7.5
Gly Phe Thr His Ser Leu Leu Ala Val Phe Gly Leu Leu Thr Leu Phe
          85
                    90
Tyr Leu Lys Val Pro Glu Ser Trp Ile Val Pro Ala Asp Ala Ile Gln
       100
             105 110
Gly Met Val Leu Gly Tyr Leu Ser His Ile Leu Ala Asp Met Leu Thr
  115 120 125
Pro Ala Gly Val Pro Leu Leu Trp Pro Cys Arg Trp Arg Phe Arg Leu
 130 135 140
Pro Ile Leu Val Pro Gln Lys Gly Asn Gln Leu Glu Arg Val Leu Cys
      150 155
Met Ala Leu Phe Ala Tyr Ala Val Trp Met Pro Gln Thr Leu Pro Glu
         165 170 175
Asn Gly Ala Val Arg Trp Ser Ser Gln Met Ile Asn Ser Leu Gln Phe
             185
      180
Gln Phe Asn Arg Phe Ile Asn His Gln Ile Glu His
                       200
<210> 9397
<211> 761
<212> PRT
<213> Enterobacter cloacae
<400> 9397
Gly Phe Gln Glu Arg Thr Lys Glu Asn Arg Ala Met Ser Asn Asn Asp
Lys Pro His Gln Ser Pro Ile His Gly Thr Glu Glu Ser Gln Pro Gly
 20
Met Asp Ser Leu Ala Pro Ala Asp Gly Ser His Lys Pro Ser Pro Gly
35
                   40
Leu Ser Ala Pro Gly Glu Gln Pro Thr Ala Pro Gly Ser Met Lys Ser
50
               55
Pro Asp Ala Asp Asn Glu Lys Leu Lys Ser Leu Asp Pro His Arg Lys
      70
                                75
Gly Gly Glu Gly Tyr Ala Leu Thr Thr Asn Gln Gly Val Arg Ile Ala
           8.5
                             90
Asp Asp Gln Asn Ser Leu Arg Ala Gly Thr Arg Gly Pro Thr Leu Leu
        100
Glu Asp Phe Ile Leu Arg Glu Lys Ile Thr His Phe Asp His Glu Arg
      115
                      120
                                       125
Ile Pro Glu Arg Ile Val His Ala Arg Gly Ser Ala Ala His Gly Tyr
                   135
                                    140
Phe Gln Pro Tyr Lys Ser Leu Lys Glu Ile Thr Lys Ala Asp Phe Leu
               150
                                155
Ser Asp Pro Asn Lys Ile Thr Pro Val Phe Val Arg Phe Ser Thr Val
            165
                             170
Gln Gly Gly Ala Gly Ser Ala Asp Thr Val Arg Asp Ile Arg Gly Leu
         180
                         185
                                         190
Ala Thr Lys Phe Tyr Thr Glu Glu Gly Ile Phe Asp Leu Val Gly Asn
      195
                      200
                                      205
Asn Thr Pro Val Phe Phe Ile Gln Asp Ala His Lys Phe Pro Asp Phe
                  215
                                   220
Val His Ala Val Lys Pro Glu Pro His Trp Ala Ile Pro Gln Gly Gln
                               235
      230
Ser Ala His Asp Thr Phe Trp Asp Tyr Val Ser Leu Gln Pro Glu Thr
            245
                            250 255
Leu His Asn Val Met Trp Ala Met Ser Asp Arg Gly Ile Pro Arg Ser
        260
                265
Tyr Arg Thr Met Glu Gly Phe Gly Ile His Thr Phe Arg Leu Ile Asn
                             285
      275
               280
```

Ala Glu Gly Lys Ala Thr Phe Val Arg Phe His Trp Lys Pro Val Ala

```
295
                             300
Gly Lys Ala Ser Leu Val Trp Asp Glu Ala Gln Lys Leu Thr Gly Arg
     310 315
Asp Pro Asp Phe His Arg Arg Glu Leu Trp Glu Ser Ile Glu Ala Gly
     325 330 335
Asp Phe Pro Glu Tyr Glu Leu Gly Leu Gln Leu Ile Pro Glu Glu Asp
 340 345 350
Glu Phe Lys Phe Asp Phe Asp Leu Leu Asp Pro Thr Lys Leu Ile Pro
355 360 365
Glu Glu Leu Val Pro Val Gln Leu Val Gly Lys Met Val Leu Asn Arg
370 375 380
Asn Pro Asp Asn Phe Phe Ala Glu Asn Glu Gln Ala Ala Phe His Pro
385 390 395 400
Gly His Ile Val Pro Gly Leu Asp Phe Thr Asn Asp Pro Leu Leu Gln
       405 410 415
Gly Arg Leu Phe Ser Tyr Thr Asp Thr Gln Ile Ser Arg Leu Gly Gly
   420 425
                                   430
Pro Asn Phe His Glu Ile Pro Ile Asn Arg Pro Thr Cys Pro Tyr His
435 440 445
Asn Phe Gln Arg Asp Gly Met His Arg Gln Asp Ile Asp Thr Asn Pro
450 455 460
Ala Asn Tyr Glu Pro Asn Ser Ile Asn Asp Asn Trp Pro Arg Glu Thr
465 470 475
Pro Pro Gly Pro Lys Arg Gly Gly Phe Glu Ser Tyr Gln Glu Arg Val
         485 490
Asp Gly Thr Lys Ile Arg Glu Arg Ser Pro Ser Phe Gly Glu Tyr Tyr
 500
                     505
Ala Gln Pro Arg Leu Phe Trp Asn Ser Gln Thr Pro Ile Glu Gln Gln
515 520 525
His Ile Ile Gly Gly Phe Ser Phe Glu Leu Ser Lys Val Val Arg Thr
530 535
                              540
Tyr Ile Arg Glu Arg Val Val Asp His Leu Ala His Ile Asp Ile Gln
545 550 555
Leu Ala Gln Gly Val Ala Asn Asn Leu Gly Ile Thr Leu Thr Asp Glu
          565 570 575
Gln Cys His Ala Ala Pro Pro Lys Asp Val Asn Gly Leu Lys Lys Asp
   580 585 590
Pro Ser Leu Ser Leu Tyr Ala Val Pro Gly Gly Ser Ile Lys Gly Arg
595 600
Val Val Ala Ile Leu Leu Asn Asp Lys Pro Arg Ala Ser Asp Val Leu
610 615
                             620
Gly Ile Met Arg Ala Leu Lys Thr Gln Gly Val His Ala Lys Leu Leu
625 630
                          635
Tyr Ser Arg Met Gly Glu Val Thr Ala Asp Asp Gly Ser Val Leu Pro
          645
                        650
Ile Ala Ala Thr Phe Ala Gly Ala Pro Ser Leu Thr Val Asp Ala Val
           665 670
Ile Met Pro Cys Gly Asp Val Glu Ser Leu Leu Gly Asn Gly Asp Ala
     675 680 685
Ala Tyr Tyr Leu Leu Glu Ala Tyr Lys His Leu Lys Pro Ile Ala Leu
690 695
                   700
Ala Gly Asp Ala Arg Lys Phe Lys Thr Leu Leu Lys Val Pro Asp Gln
     710 715
705
Gly Glu Glu Gly Ile Val Glu Gly Asp Asn Val Asp Asp Ala Phe Met
                        730 735
Thr Arg Leu Phe Asp Leu Leu Ala Ala His Arg Val Trp Ser Arg Ser
           745
Ser Lys Ile Asp Gln Ile Pro Ala
```

```
<211> 317
<212> PRT
<213> Enterobacter cloacae
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<400> 9398 Pro Pro Pro Gly Ser Phe Leu Thr Thr Glu His Leu Leu His Cys Met 10 Pro Glu Gln Tyr Met Glu Gln Tyr Val Ser Arg Arg Gln Ser Ala Pro 20 25 Arg Leu Glu Phe Glu Ala Ala Ile Tyr Glu Tyr Pro Glu His Leu 4.0 Arg Pro Trp Leu Glu Ala Leu Pro Lys Gln Pro Gly Val Tyr Phe Phe 55 His Gly Asp Ser Asp Thr Met Pro Leu Tyr Ile Gly Lys Ser Val Asn 7.0 75 Ile Arg Ser Arg Val Met Ser His Leu Arg Thr Pro Asp Glu Ala Ser 85 90 Met Leu Arg Gln Ser Arg Arg Ile Thr Trp Ile Glu Thr Ala Gly Glu 100 105 110 Leu Gly Ala Leu Leu Glu Ala Arg Leu Ile Lys Glu Gln Gln Pro 115 120 125 Leu Phe Asn Lys Arg Leu Arg Arg Asn Arg Gln Leu Cys Ser Leu Gln 130 135 140 Val Asn Ala Gly Lys Pro Gln Val Val Tyr Ala Arg Glu Val Asp Phe 145 150 155 Ser His Glu Pro Asn Leu Tyr Gly Leu Phe Ala Asn Lys Arg Ala Ala 165 170 Leu Gln Thr Leu Gln Ser Leu Ala Asp Glu Leu Gln Leu Cys Tyr Gly 180 185 Leu Leu Gly Leu Glu Ala Thr Thr Arg Gly Arg Ala Cys Phe Arg Ser 195 205 Ala Leu Lys Arg Cys Ala Gly Ala Cys Cys Gly Lys Glu Ser Val Glu 210 215 220 Glu His His Ala Arg Phe Met Ala Gly Leu Ala Ser Ile Ser Val Asn 230 235 240 Cys Trp Pro Trp Glu Gly Ala Val Ala Leu Lys Glu Thr Arg Asp Ala 245 250 Met Thr His Tyr His Ile Ile Arg Asn Trp Leu Trp Leu Glv Ala Val 260 265 Glu Ser Leu Asp Asp Ala Thr Ala Leu Leu Arg Thr Pro Ala Gly Phe 275 280 285 Asp Gln Asp Gly Tyr Lys Ile Leu Cys Lys Pro Leu Leu Thr Gly Lys 295 300 Tyr Glu Ile Ile Val Leu Ser Asp Pro Ala Ala Arg 305 310

<210> 9399 <211> 161 <212> PRT <213> Enterobacter cloacae

<210> 9400 <211> 515 <212> PRT <213> Enterobacter cloacae

<400> 9400 Arg Pro Gly Ala Gly Met Ala Ser Pro Leu Arg Asn Pro Leu Ser Gly Leu Val Trp Ala Ala Met Ala Val Ile Tyr Leu Pro Leu Leu Pro Ala Ser Gly Met Leu Leu Ala Pro Ala Phe Ser Pro Gly Asn Trp Ala Thr 3.5 Leu Phe Ala Asp Pro Gln Leu Pro Gln Ala Leu Ala Ala Thr Leu Val Ser Ala Leu Ile Ala Thr Leu Gly Ser Leu Phe Ile Ala Leu Thr Leu Leu Ala Leu Leu Trp Pro Gly Glu Gly Trp Gln Arg Leu Ser Thr Arg Leu Pro Trp Leu Leu Ala Val Pro His Val Ala Phe Ala Thr Ser Ala Leu Leu Phe Ala Glu Gly Gly Gln Phe Tyr Arg Ile Cys Thr Val Cys Ser Pro Gln Leu Asp Arg Tyr Gly Ile Gly Leu Gly Leu Thr Leu Ala Val Lys Glu Ser Ala Phe Val Leu Trp Thr Ile Tyr Ala Ala Leu Pro Glu Lys Arg Leu Val Gln Gln Lys Ile Val Leu His Thr Phe Gly Tyr Gly Arg Met Gln Ala Leu Asn Trp Leu Ile Leu Pro Ala Ile Ala Pro Ala Leu Gly Ala Val Met Leu Ala Val Leu Ala Trp Ser Leu Ser Val Val Asp Val Ala Ile Val Leu Gly Pro Gly Asn Pro Pro Thr Leu Ala Val Leu Ala Trp Gln Trp Leu Thr Gln Gly Asp Ala Gln Gln Gln Thr Lys Gly Thr Leu Leu Cys Leu Val Leu Leu Leu Leu Leu Ala Ala Leu Ala Ala Val Gly Tyr Gly Phe Trp Thr Ala Trp Arg Arg Ala Gln Pro Ala Pro Ser Gly Val Arg Arg Ala Ser His Ser Ala Leu Pro Ala Arg Thr Leu Gly Gly Leu Leu Pro Leu Cys Gly Val Leu Cys Ala Leu Val Leu Leu Met Leu Ala Arg Arg Asp Asp Ile Gly Pro Val Ser Asp

Ser Leu Ser Leu Gly Leu Leu Ser Ser Leu Thr Ala Leu Ala Ile Leu

325 Met Ile Trp Leu Glu Trp Gly Pro Gln Arg Gly Ala Val Trp Ile Trp 340 345 350 Leu Pro Leu Ala Leu Pro Ala Leu Pro Leu Val Ser Gly Gln Tyr Ala 355 360 365 Val Ala Leu Trp Leu Gly Ile Asp Gly Gln Tyr Ala Ala Val Leu Trp 375 380 Ser His Met Leu Trp Val Leu Pro Trp Met Leu Leu Val Leu Gln Pro 385 390 395 400 Ala Trp Arg Arg Leu Asp Pro Arg Leu Ile Leu Thr Ala Arg Thr Leu 405 410 415 Gly Trp Arg Arg Ala Lys Ile Phe Trp Leu Val Lys Cys Pro Leu Met 420 425 430 Val Arg Pro Ala Leu Leu Ala Phe Ala Thr Gly Phe Ser Val Ser Met 435 440 445 Ala Gln Tyr Met Pro Thr Leu Trp Leu Gly Ala Gly Arg Phe Thr Thr 450 455 460 Leu Thr Thr Glu Ala Val Ala Leu Ser Ser Gly Gly Ser Ile Pro Ile 470 475 Leu Ala Ser Arg Ala Leu Gly Leu Leu Leu Thr Ser Ser Val Phe 490 485 Ala Leu Ala Ala Leu Leu Ser Arg Leu Val Gly Arg His Arg Gln Gly 500 505 510 Leu Arg 515 <210> 9401 <211> 468 <212> PRT <213> Enterobacter cloacae <400> 9401 Leu Arg Phe Leu Ala Gly Asn Asn Val Leu Thr Gln Cys Phe Trp Leu 1.0 Gln Glu Arg Arg Gln Cys Pro Pro Leu Leu Met Thr Ser Glv Phe Ser 20 25 Met Lys Arg Val Ser Gln Leu Thr Ala Leu Ala Leu Ile Cys Gly Leu 35 40 4.5 Ala Ser Leu Ser Ser Thr Ala Ala Asp Met Pro His Ser Leu Thr Leu 55 Ala Gln Leu Gln Thr Gln Asn Gly Ala Val Ile Asp Thr Arg Ile Ser 70 Ala Phe Tyr Asn Gly Trp Pro Gln Thr Leu Ser Gly Thr Ser Gly His 85 90 Glu Pro Ala Ala Leu Asn Leu Ser Ala Ser Trp Leu Gly Ala Met Ser 100 105 Asp Glu Gln Leu Ser Gly Trp Ala Lys Gln His Arg Leu Thr Pro Asp 120 125 Met Pro Val Ala Leu Tyr Gly Asn Asp Asn Asp Asn Gln Thr Val Lys 135 140 Thr Arg Leu Glu Lys Ala Gly Phe Thr His Val Ser Thr Leu Ser Asp 150 155 Ala Leu Gln Gln Ser Asp Arg Leu Gln Arg Leu Ala His Phe Glu Gln 170 165 Leu Val Tyr Pro Gln Trp Ile Arg Gln Leu Gln Gln Gly Lys Pro Val 180 185 190 Thr Ala Ala Pro Ala Gly Glu Trp Lys Val Ile Glu Ala Gly Trp Gly 195 200 205 Thr Pro Lys Leu Tyr Leu Leu Ser His Ile Pro Asp Ala Gly Tyr Ile 210 215 220 Asp Thr Asn Glu Val Glu Ser Glu Pro Leu Trp Asn Lys Val Ser Asp

```
230
Glu Lys Leu Lys Ala Met Leu Ala Lys His Gly Ile Arg His Asp Thr
           245
                          250
                                   255
Thr Val Ile Leu Tyr Gly Arg Asp Val Tyr Ala Ala Ala Arg Val Ala
        260
                      265
Gln Ile Met Leu Tyr Ala Gly Val Arg Asp Val Arg Ile Leu Asp Gly
     275 280 285
Gly Trp Lys Ala Trp Ser Asp Ala Ser Leu Pro Val Glu Arg Gly Thr
  290
       295 300
Pro Ala Asn Val Lys Pro Ala Pro Asp Phe Gly Ala Pro Ile Pro Gly
305 310 315
Gln Pro Gln Leu Met Val Asp Met Glu Gln Ala Arg Gly Met Leu His
         325 330
Arg Gln Asp Ala Ser Leu Val Ser Ile Arg Ser Trp Pro Glu Phe Ile
        340 345 350
Gly Glu Thr Ser Gly Tyr Ser Tyr Ile Lys Pro Lys Gly Glu Ile Ala
     355 360 365
Gly Ala Arg Trp Gly His Ala Gly Ser Asp Ala Thr His Met Glu Asp
                 375
                                 380
Phe His Asn Pro Asp Gly Thr Met Arg Ser Ala Asp Asp Ile Ala Ala
              390
                              395
Met Trp Lys Thr Trp Asn Ile Leu Pro Glu Gln His Val Ala Phe Tyr
            405 410
Cys Gly Thr Gly Trp Arg Ala Ser Glu Ala Phe Met Tyr Ala Arg Ala
      420
                      425 430
Met Gly Trp Gln Asn Val Ala Val Tyr Asp Gly Gly Trp Tyr Glu Trp
435
                     440
                          445
Ser Ser His Pro Gln Asn Pro Val Ser Thr Gly Glu Arg Gly Pro Glu
450
                  455
                                 4.60
Ser Ala Arq
465
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<212> PRT <213> Enterobacter cloacae

<210> 9402 <211> 143

<400> 9402 Leu Leu Thr Asn Met Leu Lys Thr Leu Asp Val Val Ala Ala Ile Leu Glu Asn Glu Gly Lys Ile Leu Leu Ala Gln Arg Pro Glu His Ala Asp 20 2.5 3.0 Gln Pro Gly Met Trp Glu Pne Ala Gly Gly Lys Val Glu Ala Gly Glu 35 40 Thr Gln Pro Glu Ala Leu Ile Arg Glu Leu Arg Glu Glu Leu Gly Ile 55 60 Glu Ala Val Pro Ala Arg Tyr Val Ala Ser His Gln Arg Glu Val Ser 70 75 Gln Arg Leu Ile His Leu His Ala Trp His Val Pro Glu Phe Ser Gly 85 90 Glu Leu Lys Ala His Tyr His Ser Ala Leu Val Trp Cys Thr Pro Glu 100 105 Asp Ala Phe Thr Tyr Asp Leu Ala Pro Ala Asp Ile Pro Leu Leu Glu 115 120 Ala Phe Ile Leu Leu Arg Asp Ala Arg Pro Ala Gly Leu Tyr 130 135

<210> 9403 <211> 308

<211> 308 <212> PRT

<213> Enterobacter cloacae

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Arg Ile Asp Cys Pro Pro Ser Ala Trp Gly Val Thr Leu Phe Gln Ala
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            5
Ala Ser Ala Ala Cys Pro Ala Lys Ser Lys Gln Arg Phe Thr Leu Phe
 20
                       25
Ala Phe Leu Ile Pro Asp Ser Tyr Ser Tyr Val Gln Asn Asp Asn Asn
                      4.0
                                    4.5
Leu Thr Ser Glu Ala Arg Met Ile Leu Asp Ala Phe Thr Leu Ala Gly
                  5.5
                                   60
Lys Val Ala Met Val Thr Gly Cys Asp Thr Gly Leu Gly Gln Gly Met
               70 75
Ala Ile Ala Leu Ala Glu Ala Gly Cys Asp Ile Val Gly Val Asn Arg
           85
                           90
Lys Val Pro Asp Glu Thr Ala Ala Arg Val Thr Ala Leu Gly Arg Arg
         100
                         105
                                         110
Phe Ile Ala Ile Arg Ala Asp Leu Gly Lys Gln Glu Ser Ile Gln Ser
      115
                      120
                                       125
Val Val Asp Thr Ala Val Ala Glu Met Gly Arg Ile Asp Ile Leu Val
 130
                   135
                                   140
Asn Asn Ala Gly Thr Ile Arg Arg Ala Asp Ala Leu Glu Phe Ser Glu
               150
                                155
Lys Asp Trp Asp Glu Val Ile Asp Leu Asn Leu Lys Ser Val Phe Phe
            165 170
Leu Ser Gln Ala Val Ala Lys Gln Phe Ile Ala Gln Gly Gln Gly Gly
         180
             185
                                          190
Lys Ile Ile Asn Ile Ala Ser Met Leu Ser Phe Gln Gly Gly Ile Arg
195
                      200
                                      205
Val Pro Ser Tyr Thr Ala Ser Lys Ser Gly Val Leu Gly Leu Thr Arg
 210
                   215
                                   220
Leu Leu Ala Asn Glu Trp Ala Thr Leu Gly Ile Asn Val Asn Ala Ile
225 230
                                235
Ala Pro Gly Tyr Met Val Thr Asn Asn Thr Arg Gln Leu Arg Asp Asp
   245 250
                                             255
Glu Gln Arg Ser Gln Ala Ile Leu Asp Arg Ile Pro Ala Gly Arg Trp
         260
                         265
Gly Leu Pro Glu Asp Leu Gln Gly Pro Val Val Phe Leu Ala Ser Arg
   275 280
                                       285
Ala Ser Asp Tyr Val Asn Gly His Thr Leu Ala Val Asp Gly Gly Trp
 290
                295
                                    300
Leu Ala Arg
305
<210> 9404
<211> 469
<212> PRT
<213> Enterobacter cloacae
<400> 9404
Ile Arg Arg Thr Gly Met Asn Phe Pro Leu Ile Ala Asn Ile Val Val
                            10
Phe Val Val Leu Leu Leu Leu Ala Gln Ala Arg His Lys Gln Trp
         20
                          25
Ser Leu Ala Lys Lys Val Leu Val Gly Leu Val Met Gly Val Val Phe
     35
                      40
                                       45
Gly Leu Ala Leu His Ala Ile Tyr Gly Ser Asp Ser Pro Val Leu Lys
Asp Ser Ile Gln Trp Phe Asn Ile Val Gly Asn Gly Tyr Val Gln Leu
65
                70
                                75
Leu Gln Met Ile Val Met Pro Leu Val Phe Ala Ser Ile Leu Ser Ala
```

90

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Val Ala Arg Leu His Asn Ala Ser Gln Leu Gly Lys Ile Ser Phe Leu
              105
         100
Thr Ile Gly Thr Leu Leu Phe Thr Thr Leu Ile Ala Ala Leu Val Gly
     115
          120
                                       125
Val Leu Val Thr Asn Leu Phe Gly Leu Thr Ala Glu Gly Leu Val Gln
 130
       135 140
Gly Ser Ala Glu Thr Ala Arg Leu Thr Ala Ile Glu Thr Asn Tyr Val
145 150 155
Gly Lys Val Ala Asp Leu Thr Val Pro Gln Met Val Leu Ser Phe Ile
       165 170 175
Pro Lys Asn Pro Phe Ala Asp Leu Thr Gly Ala Ser Pro Thr Ser Ile
         180 185 190
Ile Ser Val Val Ile Phe Ala Ala Phe Leu Gly Val Ala Ala Leu Lys
  195 200 205
Leu Leu Lys Asp Asp Ala Pro Lys Gly Glu Arg Val Leu Thr Ala Ile
                   215
                                    220
Asp Thr Leu Gln Ser Trp Val Met Lys Leu Val Arg Leu Val Met Gln
225 230 235 240
Leu Thr Pro Tyr Gly Val Leu Ala Leu Met Thr Lys Val Val Ala Gly
            245
                             250
Ser Asn Leu Gln Asp Ile Ile Lys Leu Gly Ser Phe Val Ile Ala Ser
         260
                          265
                                           270
Tyr Leu Gly Leu Gly Ile Met Phe Val Val His Gly Ile Leu Leu Gly
 275
                      280
                                        285
Val Asn Gly Val Gly Pro Leu Lys Tyr Phe Arg Lys Val Trp Pro Val
                   295
                                    300
Leu Thr Phe Ala Phe Thr Ser Arg Ser Ser Ala Ala Ser Ile Pro Leu
                310
                                 315
Asn Val Glu Ala Gln Thr Arg Arg Leu Gly Val Pro Glu Ser Ile Ala
             325
                             330
                                              335
Ser Phe Ser Ala Ser Phe Gly Ala Thr Ile Gly Gln Asn Gly Cys Ala
         340
                          345
                                           350
Gly Leu Tyr Pro Ala Met Leu Ala Val Met Val Ala Pro Thr Val Gly
355
                       360
                                        365
Ile Asn Pro Leu Asp Pro Val Trp Ile Ala Thr Leu Val Gly Ile Val
                   375
                                     380
Thr Ile Ser Ser Ala Gly Val Ala Gly Val Gly Gly Ala Thr Phe
385
                390
                                 395
Ala Ala Leu Ile Val Leu Pro Ala Leu Gly Leu Pro Val Thr Leu Val
             405
                             410
Ala Leu Leu Ile Ser Val Glu Pro Leu Ile Asp Met Gly Arg Thr Ala
         420
                          425
                                           430
Leu Asn Val Ser Gly Ser Met Thr Ala Gly Thr Leu Thr Ser Gln Trp
 435 440
                                        445
Leu Lys Gln Thr Asp Lys Thr Ile Leu Asp Ser Glu Asp Asp Ala Glu
 450
                455
Leu Ala His Arg
465
<210> 9405
<211> 294
<212> PRT
<213> Enterobacter cloacae
<400> 9405
Leu Gly Glu Ala Asp Asn Arg Arg Arg Lys Phe Cys Tyr His Pro Cys
                             10
Thr Ile His Leu Ala Leu Ala Ala Thr Met Lys Phe Val Ser Phe Asn
                          25
Ile Asn Gly Leu Arg Ala Arg Pro His Gln Leu Glu Ala Ile Val Glu
      35
                       4.0
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Gln His Gln Pro Asp Val Ile Gly Leu Gln Glu Thr Lys Val His Asp 60 Asp Met Phe Pro Leu Glu Glu Val Ala Lys Leu Gly Tyr Asn Val Phe 7.0 7.5 Tyr His Gly Gln Lys Gly His Tyr Gly Val Ala Leu Leu Thr Lys Asp 85 90 95 Thr Pro Val Ser Val Arg Arg Gly Phe Pro Gly Asp Gly Glu Glu Ala 100 105 110 Gln Arg Arg Ile Ile Met Ala Glu Ile Pro Ser Ala Leu Gly Asn Val 115 120 125 Thr Val Ile Asn Gly Tyr Phe Pro Gln Gly Glu Ser Arg Asp His Glu 135 140 Thr Lys Phe Pro Ala Lys Ala Lys Phe Tyr Gln Asp Leu Gln Asn Tyr 145 150 155 160 Leu Thr Thr Glu Leu Lys Lys Glu Asn Pro Val Leu Ile Met Gly Asp 165 170 175 Met Asn Ile Ser Pro Thr Asp Leu Asp Ile Gly Ile Gly Glu Glu Asn 180 185 190 Arg Lys Arg Trp Leu Arg Thr Gly Lys Cys Ser Phe Leu Pro Glu Glu 200 205 Arg Glu Trp Met Glu Arg Leu Leu Gly Trp Gly Leu Val Asp Thr Phe 210 215 220 Arg Thr Ala Asn Pro Glu Thr Gln Asp Arg Phe Ser Trp Phe Asp Tyr .225 230 235 Arg Ser Lys Gly Phe Asp Asp Asp Arg Gly Leu Arg Ile Asp Leu Leu 245 250 Leu Ala Ser Ala Pro Leu Ala Glu Arg Cys Ile Glu Thr Gly Ile Asp 260 265 270 Tyr Asp Ile Arg Ser Met Glu Lys Pro Ser Asp His Ala Pro Val Trp 275 280

Ala Thr Phe Lys Leu 290

<210> 9406 <211> 230 <212> PRT

<213> Enterobacter cloacae

165

<400> 9406

Thr Ser Val Asn Ile Lys Lys Ile Ser Leu Leu Cys Ala Leu Leu Gly 10 Ala Phe Val Leu Ile Val Val Leu Leu Pro Pro Gly Met Leu Ser Leu 20 25 Asp Thr Leu Lys Ile His Gln Gln Thr Leu Leu Ala Arg Val Glu Gln 35 40 4.5 Ala Pro Leu Gln Ser Ala Leu Phe Tyr Phe Ala Val Tyr Val Leu Leu 5.5 Ser Ala Leu Ser Ile Pro Gly Ala Ala Leu Leu Thr Leu Leu Gly Gly 7.0 75 Ala Leu Phe Ser Leu Trp Glu Ala Thr Leu Leu Val Ser Phe Ala Ser 90 8.5 Thr Leu Gly Ala Thr Leu Ala Met Leu Val Ser Arg Tyr Leu Leu Arg 105 110 Asp Trp Val Gln Arg Arg Phe Ala Ala Gln Met Asn Thr Ile Asp Ala 120 Gly Met Asp Arg Asp Gly Ala Arg Tyr Leu Phe Ala Leu Arg Leu Met Pro Leu Phe Pro Phe Phe Leu Val Asn Leu Leu Met Gly Leu Thr Arg 145 150 155 Leu Arg Val Arg His Tyr Trp Trp Val Ser Gln Leu Ala Met Leu Pro 170

Ala Thr Val Ile Tyr Leu Asn Ala Gly Arg Glu Leu Gly Lys Leu Thr Ser Leu Arg Asp Ile Leu Ser Pro Gly Leu Leu Phe Ala Phe Thr Leu 200 205 Leu Gly Leu Leu Pro Leu Val Thr Arg Trp Leu Phe Ser Arg Tyr Ile 210 215 Pro Ser Ile Lys Lys <210> 9407 <211> 392 <212> PRT <213> Enterobacter cloacae <400> 9407 Gly Ile Met Arg Arg Val Arg Phe Cys Ala Phe Leu Thr Ser Leu Leu 1.0 Leu Ala Thr Ser Ala Phe Ala Ala Glu Ser Trp Gln Ser Ile Gln Gln Gln Ala Thr Gly Gln Thr Val Trp Phe Asn Ala Trp Gly Gly Asp Glu Ala Val Asn Arg Tyr Leu Asp Trp Val Ser Gly Glu Met Lys Thr His Tyr Ala Ile Asn Leu Lys Ile Val His Leu Ala Asp Ala Ala Asp Ala Val Lys Arg Ile Gln Thr Glu His Ala Ala Gly Arg Ser Ser Asn Gly Ser Val Asp Leu Leu Trp Val Asn Gly Glu Asn Phe Arg Asn Leu Lys Ala Ala Asn Leu Leu Thr Gly Trp Ala Gln Thr Leu Pro Asn Trp Arg Tyr Val Asp Thr Arg Lys Pro Val Thr Glu Asp Phe Ala Ile Pro Thr Asp Gly Ala Glu Ser Pro Trp Gly Gly Ala Gln Leu Thr Phe Ile Ala Arg Lys Ala Ser Thr Pro Thr Pro Pro Ala Asp Pro His Ala Leu Leu Val Tyr Ala Arg Gln His Pro Gly Lys Val Ser Tyr Pro Arg Pro Pro Asp Phe Thr Gly Thr Ala Phe Leu Glu Gln Leu Leu Leu Ala Leu Thr Ala His Pro Glu Ala Leu Lys Asn Ala Pro Asp Ser Thr Phe Ala Gln Val Thr Ala Pro Leu Trp Asp Tyr Leu Asp Thr Leu His Pro Leu Leu Trp Arg Glu Gly Asn Asp Phe Pro Pro Ser Pro Ala Arg Met Asp Thr Leu Leu Ala Ser Gly Ser Leu Asn Leu Ser Leu Thr Phe Asn Pro Ala His Ala Met Gln Lys Val Ala Ser Gly Glu Leu Pro Ala Asp Ser Tyr Ser Phe Gly Phe Leu Lys Gly Met Ile Gly Asn Val His Phe Val Ala Ile Pro Ala Asn Ala Ser Ala Ser Ala Gly Ala Lys Val Val Ala Asn Phe Leu Leu Ser Pro Gln Ala Gln Ile Arg Lys Ala Asn Pro Ala 330 335 Val Trp Gly Asp Pro Ser Val Leu Asp Gly Glu Lys Leu Pro Ala Lys Ala Ala Lys Gln Leu Arg Ala Phe Thr Pro Ser Gly Thr Pro Asp Val

Leu Pro Glu Pro His Ala Ala Trp Val Asn Ala Leu Glu Gln Glu Trp 370 375 Leu Arg Arg Tyr Gly Thr Arg <210> 9408 <211> 453 <212> PRT <213> Enterobacter cloacae <400> 9408 Glu Val Leu Ile Ser Met Asp Gln Thr Arg Ser Leu Glu Ser Phe Leu 1.0 Ala His Val Gln Gln Arg Asp Pro His Gln Ser Glu Phe Ala Gln Ala 20 25 3.0 Val Arg Glu Val Met Thr Thr Leu Trp Pro Phe Leu Glu Glu Asn Pro 35 40 Arg Tyr Arg Gln Met Ala Leu Leu Glu Arg Leu Val Glu Pro Glu Arg 5.5 50 Val Ile Gln Phe Arg Val Ala Trp Val Asp Asp Arg Asn Gln Val Gln 70 75 Val Asn Arq Ala Trp Arq Val Gln Phe Asn Ser Ala Ile Gly Pro Phe 85 90 Lys Gly Gly Met Arg Phe His Pro Ser Val Asn Leu Ser Ile Leu Lys 100 105 Phe Leu Gly Phe Glu Gln Thr Phe Lys Asn Ala Leu Thr Thr Leu Pro Met Gly Gly Lys Gly Gly Ser Asp Phe Asp Pro Lys Gly Lys Ser 130 135 Glu Gly Glu Val Met Arg Phe Cys Gln Ala Leu Val Thr Glu Leu Tyr 150 155 160 Arg His Leu Gly Pro Asp Thr Asp Val Pro Ala Gly Asp Ile Gly Val 165 170 Gly Gly Arg Glu Val Gly Phe Met Ala Gly Met Met Lys Lys Leu Ser 180 185 190 Asn Asn Ser Ala Cys Val Phe Thr Gly Lys Gly Leu Ser Phe Gly Gly 195 Ser Leu Ile Arg Pro Glu Ala Thr Gly Tyr Gly Leu Val Tyr Phe Thr 210 215 Glu Ala Met Leu Lys Arg His Gly Leu Ser Phe Glu Gly Met Arg Val 235 Ala Val Ser Gly Ser Gly Asn Val Ala Gln Tyr Ala Ile Glu Lys Ala 245 250 255 Met Ala Phe Gly Ala Arg Val Val Thr Ala Ser Asp Ser Ser Gly Thr 260 265 Val Val Asp Glu Ala Gly Phe Thr Ala Glu Lys Leu Ala Arg Leu Cys 275 280 Glu Ile Lys Ala Ser Arg Asp Gly Arg Val Ala Asp Tyr Ala Arg Glu 290 295 300 Phe Gly Leu Thr Tyr Leu Glu Gly Lys Gln Pro Trp Gly Val Pro Val 305 310 315 320 Asp Ile Ala Leu Pro Cys Ala Thr Gln Asn Glu Leu Asp Val Asp Ala 325 330 335 Ala Arg Thr Leu Ile Ser Asn Gly Val Lys Ala Val Ala Glu Gly Ala 345 Asn Met Pro Thr Thr Ile Asp Ala Thr Asp Leu Phe Leu Asp Ala Gly 355 360 365 Val Leu Phe Ala Pro Gly Lys Ala Ala Asn Ala Gly Gly Val Ala Thr 375 380 Ser Gly Leu Glu Met Ala Gln Asn Ala Ala Arg Met Ser Trp Lys Ala

390

Glu Lys Val Asp Ala Arg Leu His His Ile Met Leu Asp Ile His His Ala Cys Val Glu Tyr Gly Gly Glu Ala Ser Gln Thr Asn Tyr Val Arg 425 430 Gly Ala Asn Ile Ala Gly Phe Val Lys Val Ala Asp Ala Met Ile Gly 4.35 Gln Gly Val Ile <210> 9409 <211> 376 <212> PRT <213> Enterobacter cloacae <400> 9409 Ser Thr Glu Pro Leu Arg Val Leu Pro Asp Leu Arg Glu Arg Ala Leu Lys Thr Val Pro Ser Ser Arg Glu Glu Gly Ile Phe Ser Phe Glu Glu Gln Glu Leu Ile Thr Met Gln Lys Lys Ser Ile Tyr Val Ala Tyr Thr 3.5 Gly Gly Thr Ile Gly Met Gln Arg Ser Glu Asn Gly Tyr Ile Pro Val Ser Gly His Leu Gln Arg Gln Leu Ala Leu Met Pro Glu Phe His Arg 8.0 Pro Glu Met Pro Asp Phe Thr Ile His Glu Tyr Glu Pro Leu Met Asp Ser Ser Asp Met Thr Pro Glu Asp Trp Gln His Ile Ala Asp Asp Ile Lys Ala His Tyr Asp Gln Tyr Asp Gly Phe Val Ile Leu His Gly Thr Asp Thr Met Ala Phe Thr Ala Ser Ala Leu Ser Phe Met Leu Glu Asn Leu Ser Lys Pro Val Ile Val Thr Gly Ser Gln Ile Pro Leu Ala Glu Leu Arg Ser Asp Gly Gln Ile Asn Leu Leu Asn Ser Leu Tyr Val Ala Ala Asn Tyr Pro Ile Asn Glu Val Thr Leu Phe Phe Asn Asn Arg Leu Tyr Arg Gly Asn Arg Thr Thr Lys Ala His Ala Asp Gly Phe Asp Ala Phe Ala Ser Pro Asn Leu Gln Pro Leu Leu Glu Ala Gly Ile His Ile Arg Arg Leu Gly Thr Pro Pro Ala Pro Asn Thr Ala Gly Glu Leu Ile Val His Pro Ile Thr Pro Gln Pro Ile Glv Val Val Thr Ile Tvr Pro Gly Ile Ser Ala Asp Val Val Arg Asn Phe Leu Arg Gln Pro Val Lys Ala Leu Ile Leu Arg Ser Tyr Gly Val Gly Asn Ala Pro Gln Asn Gly Glu Phe Leu Lys Glu Leu Gln Glu Ala Ser Asp Arg Gly Ile Val Val Val Asn Leu Thr Gln Cys Met Ser Gly Lys Val Asn Met Gly Gly Tyr Ala Thr Gly Asn Ala Leu Ala His Ala Gly Val Ile Ser Gly Phe Asp Met Thr Val Glu Ala Thr Leu Thr Lys Leu His Tyr Leu Leu Ser Gln Asp Leu Asp Ile Asp Ser Ile Arg Arg Ala Met Met Gln Asn Leu Arg

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Gly Glu Leu Thr Pro Asp Glu
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<210> 9410
<211> 217
<212> PRT
<213> Enterobacter cloacae
<400> 9410
Gly Asp Pro Met Lys Gln Arg Ala Leu Leu Leu Val Asp Leu Gln Asn
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Asp Phe Cys Ala Gly Gly Ala Leu Ala Val Ala Glu Gly Asp Ser Thr
                              25
Val Asp Val Ala Asn Ser Leu Ile Ala Trp Cys Lys Ala Arg Gly Glu
      3.5
                         40
Ala Val Val Ala Ser Gln Asp Trp His Pro Ala Asn His Gly Ser Phe
                    55
                                         60
Ala Ser Gln His Asn Val Glu Pro Phe Ser Gln Gly Glu Leu Asp Gly
               70
                                      75
                                                         80
Leu Ala Gin Thr Phe Trp Pro Asp His Cys Val Gln Gln Thr Glu Gly
                                  90
              85
Ala Glu Leu His Pro Leu Leu Asn Gln Lys Ala Ile Asp Ala Val Phe
          100
                              105
                                                 110
His Lys Gly Glu Asn Pro Thr Ile Asp Ser Tyr Ser Ala Phe Phe Asp
       115
Asn Gly His Arg Gln Lys Thr Ala Leu Asp Ala Trp Leu Arg His His
                      135
                           140
130
Glu Ile Thr Glu Leu Ile Val Leu Gly Leu Ala Thr Asp Tyr Cys Val
                  150
                                     155
                                                         160
Lys Phe Thr Val Leu Asp Ala Leu Gln Leu Gly Tyr Thr Val Asn Val
               165
                                 170
Ile Thr Asp Gly Cys Arg Gly Val Asn Ile Gln Pro Gln Asp Ser Ala
                                   190
           180
                              185
Gln Ala Phe Met Asp Met Ala Ala Glu Gly Ala Thr Leu Tyr Thr Leu
                          200
 195
Ala Asp Trp Met Glu Thr Gln Ala
   210
<210> 9411
<211> 455
<212> PRT
<213> Enterobacter cloacae
<400> 9411
Thr Pro Ser His His Lys Arg Asn Gly Asp Ala Ile Leu Ser Arg Leu
                                  10
                                                   15
Phe Phe Arg His Ala Phe Ser Val Ala Trp Leu Phe Leu Phe Ser Gln
Arg Gly Asn Tyr Met Lys Arg Leu Pro Leu Leu Ala Ala Leu Pro Leu
                          4.0
Leu Cys Ala Ser Leu Ala Ser Ala Ala Pro Leu Met Ser Val Gly Tyr
                      55
                                         60
Phe Asn Gly Gly Gly Asp Val Thr Ala Gly Pro Gly Gly Asp Ile His
                  7.0
                                      7.5
                                                         8.0
Lys Leu Asp Val Arg Gln Ile Thr His Leu Asn Tyr Ser Phe Gly Leu
            85
                                  90
Val Tyr Asn Asn Glu Lys Asp Glu Thr Asn Ala Ala Leu Lys Asp Pro
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Ala Lys Leu His Gln Ile Trp Leu Ser Pro Lys Val Ala Ser Asp Leu

Ala Leu Leu Pro Gln Leu Arg Lys Gln Asn Pro Asn Leu Lys Val Leu

120

105 110

125

100

```
130
                135
Leu Ser Val Gly Gly Trp Gly Ala Arg Gly Phe Ser Gly Ala Ala Ala
      150
                  155 160
Thr Lys Glu Ser Arg Ala Val Phe Ile Arg Ser Ala Gln Glu Ile Val
      165 170 175
Ser Gln Tyr Gly Leu Asp Gly Ile Asp Leu Asp Trp Glu Phe Pro Val
       180 185 190
Asn Gly Ala Trp Gly Leu Val Glu Ser Thr Pro Ala Asp Arg Asp Asn
195 200 205
Phe Thr Ala Leu Leu Lys Glu Met Arg Asp Ala Phe Gly Lys Lys
210 215 220
Leu Val Thr Ile Ala Val Gly Ala Asn Ala Glu Ser Pro Lys Ser Trp
                           235
Val Asp Val Lys Ala Ile Ala Pro Leu Leu Asp Tyr Ile Asn Leu Met
           245 250 255
Thr Tyr Asp Met Ala Tyr Gly Thr Gln Tyr Phe Asn Ala Asn Leu Tyr
        260 265
                           270
Asp Ser Ser Asp Trp Pro Thr Val Ala Ala Ala Asp Lys Tyr Ser Val
     275 280 285
Asp Phe Val Val Asn Asn Tyr Leu Ala Ala Gly Leu Lys Pro Gln Gln
      295
                               300
Met Asn Leu Gly Ile Gly Phe Tyr Gly Arg Val Pro Lys Arg Ala Val
           310
                           315
Glu Pro Gly Ile Asp Trp Ser Lys Pro Asp Ala Gln Asn Asn Pro Val
              330 335
           325
Thr Gln Pro Tyr Phe Gly Pro Gln Glu Leu Ser Leu Phe Lys Ser Leu
   340 345
                          350
Gly Tyr Asp Leu Thr Lys Asp Thr Tyr Val Lys Tyr Asn Asp Ile Val
     355 360
                                365
Arg Lys Leu Leu Asn Asp Pro Gln Lys Arg Phe Thr Glu His Trp Asp
370
                375 380
Glu Gln Ala Lys Val Pro Trp Leu Ser Val Lys Ser Ala Asp Gly Lys
   390 395
Ala Leu Phe Ala Ile Ser Tyr Glu Asn Pro Arg Ser Val Ala Ile Lys
         405 410 415
Ala Asp Tyr Ile Lys Glu Lys Gly Leu Ala Gly Ala Met Phe Trp Glu
                      425
Tyr Gly Ala Asp Asp Glu Asn Gln Leu Ala Lys Gln Leu Ala Glu Ser
                   440
Leu Gly Ile Leu His Gln
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<210> 9412 <211> 315 <212> PRT

<213> Enterobacter cloacae

<400> 9412 Lys Glu Val Met Met Ala Ser Ile Tyr Thr Leu Thr Leu Ser Pro Ser Leu Asp Ser Ala Thr Met Thr Pro Gln Ile Tyr Pro Glu Gly Lys Leu 25 Arg Cys Ser Ala Pro Val Phe Glu Pro Gly Gly Gly Gly Ile Asn Val 35 4.0 45 Ala Arg Ala Ile Thr His Leu Gly Gly Lys Ala Thr Ala Ile Phe Pro 5.5 Ala Gly Gly Ala Thr Gly Glu His Leu Val Ala Leu Leu Ala Asp Glu 75 7.0 Gln Val Ala Val Asp Thr Val Asp Ala Lys Asp Trp Thr Arg Gln Asn 8.5 90 Leu His Val His Val Glu Ser Ser Gly Glu Gln Tyr Arg Phe Val Met

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100
                          105
Pro Gly Ala Lys Leu Thr Asp Asp Glu Phe Arg Gln Leu Glu Glu Lys
            120 125
 115
Val Leu Thr Ile Glu Ser Gly Ser Leu Leu Val Ile Ser Gly Ser Leu
 130 135 140
Pro Pro Gly Val Lys Thr Glu Lys Leu Thr Ala Leu Val Gln Ala Ala
     150 155
Leu Gln Arg Gly Ile Arg Cys Ile Val Asp Ser Ser Gly Glu Ala Leu
            165 170 175
Lys Ala Ala Leu Glu Pro Gly Gln Leu Glu Leu Val Lys Pro Asn Gln
         180 185
                                           190
Lys Glu Leu Ser Ala Leu Val Asn Arg Glu Leu Ser Gln Pro Asp Asp
                       200
                                        205
Val Arg Thr Ala Ala Glu Glu Leu Val Arg Thr Gly Lys Ala His Arg
          215
   210
                                     220
Val Val Val Ser Leu Gly Pro Gln Gly Ala Leu Ala Val Asp Lys Thr
                                 235
               230
Gly Phe Val Gln Val Val Pro Pro Pro Met Lys Ser Gln Ser Thr Val
            245
                              250
Gly Ala Gly Asp Ser Met Val Gly Ala Met Val Leu Lys Leu Ala Gln
          260
                          265
                                         270
Gly Ala Ser Leu Leu Glu Met Ala Arg Tyr Gly Val Ala Ala Gly Ser
      275
                       280
Ala Ala Thr Ile Asn Gln Gly Thr Arg Leu Cys Ser Leu Ala Asp Thr
290
          295
Gln Lys Ile Val Asp Tyr Leu Glu Arg Ser
<210> 9413
<211> 228
<212> PRT
<213> Enterobacter cloacae
<400> 9413
Gly Asp Val Val Met Ser Thr Pro Arg Lys Ile Leu Ala Ala Ile Phe
Asp Met Asp Gly Leu Leu Ile Asp Ser Glu Pro Leu Trp Asp Arg Ala
         20
                           25
                                            30
Glu Leu Asp Val Met Ala Ser Leu Gly Val Asp Ile Ser Arg Asn
 35
                       4.0
                                        45
Glu Leu Pro Asp Thr Leu Gly Leu Arg Ile Asp Met Val Val Asp Leu
 50
                   55
Trp Tyr Ala His Gln Pro Trp Val Gly Pro Asp Arg Asp Glu Val Thr
                70
                               75
Ala Arg Ile Ile Asn Arg Ala Ile Ser Leu Val Glu Glu Tyr Lys Pro
             8.5
                              90
Leu Leu Pro Gly Val Arg Asp Ala Ile Ala Leu Cys Lys Ala Gln Gly
          100
                           105
Leu Lvs Val Glv Leu Ala Ser Ala Ser Pro Leu His Met Leu Glu Lvs
                       120
Val Leu Thr Met Phe Gly Leu Arg Asp Ser Phe Asp Ala Leu Ala Ser
                    135
                                    140
Ala Glu Lys Leu Pro Tyr Ser Lys Pro His Pro Gln Val Tyr Met Asp
        150
                                 1.5.5
Cys Ala Ala Lys Leu Gly Leu Asp Pro Leu Thr Cys Val Ala Leu Glu
            165
                              170
                                              175
```

Asp Ser Val Asn Gly Met Val Ala Ser Lys Ala Ala Arg Met Arg Ser

Ile Val Val Pro Ala Glu Glu Gly Arg His Asp Pro Arg Phe Ala Leu

Ala Asp Val Arg Leu Thr Ser Leu Glu Glu Leu Thr Ala Arg His Leu

200

185

190

205

180

```
210
                    215
                                      220
Arg Gly Glu
225
<210> 9414
<211> 312
<212> PRT
<213> Enterobacter cloacae
<400> 9414
Ile Ala Val Lys Gln Tyr Thr Gln Asn Cys Asp Pro Cys Arg Phe Pro
                               1.0
Asp Lys Gly Leu Val Leu Thr Asp His Thr Phe Cys Leu Val Leu His
                            25
                                               3.0
Arg Glu Gly Val Met Ala Leu Gln Gln Glu Ile Ile Gln Ala Leu Gly
   35
                 40
Ala Lys Pro Ala Ile Asp Ala Asn Glu Glu Ile Arg Arg Ser Val Asp
 50
                    55
Phe Leu Lys Ala Tyr Leu Ser Ala His Pro Phe Leu Lys Thr Leu Val
                  70
Leu Gly Ile Ser Gly Gly Gln Asp Ser Thr Leu Ala Gly Lys Leu Ser
              85
                     90
Gln Met Ala Ile Ser Glu Leu Arg Asp Glu Thr Gly Asp Thr Ala Leu
          100
                            105
Gln Phe Ile Ala Val Arg Leu Pro Tyr Gly Val Gln Ala Asp Glu Gln
Asp Cys Gln Asp Ala Ile Ala Phe Ile Gln Pro Asp Arg Val Leu Thr
 130
                     135
                                       140
Val Asn Ile Lys Gly Ser Val Leu Ala Ser Glu Gln Ala Leu Arq Glu
                 150
                                 155
Ala Gly Ile Glu Leu Ser Asp Phe Val Arg Gly Asn Glu Lys Ala Arg
              165
                                170 175
Glu Arg Met Lys Ala Gln Tyr Ser Ile Ala Gly Met Thr Lys Gly Val
          180
                            185
                                           190
Val Val Gly Thr Asp His Ala Ala Glu Ala Ile Thr Gly Phe Phe Thr
       195
                        200
                                           205
Lys Tyr Gly Asp Gly Gly Thr Asp Ile Asn Pro Leu Phe Arg Leu Asn
   210
                     215
                                       220
Lys Arg Gln Gly Lys Gln Leu Leu Ala Ala Leu Gly Cys Pro Glu His
                 230
                                   235
Leu Tyr Lys Lys Ala Pro Thr Ala Asp Leu Glu Asp Asp Arg Pro Ser
              245
                               250
Leu Pro Asp Glu Ala Ala Leu Gly Val Thr Tyr Asp Asn Ile Asp Asp
                            265
Tyr Leu Glu Gly Lys Thr Leu Asp Glu Gly Thr Ala Asn Ile Ile Glu
                        280
                             285
Gly Trp Tyr Leu Lys Thr Glu His Lys Arg Arg Pro Pro Ile Thr Val
                 295
Phe Asp Asp Phe Trp Lys Lys
<210> 9415
<211> 381
<212> PRT
<213> Enterobacter cloacae
<400> 9415
Val Gly Thr Pro Ala Arg Arg Gly Val Asp Leu Ala Ala Ala Cys Pro
                             10
Pro Gly Ala Ala Pro Arg Val Arg Ala Val Cys Arg Gly Ala Val Ala
```

```
Gly His Arg Arg Pro Val Arg Cys Gly Ala Leu Glu Pro Tyr Ala Leu
      3.5
                        4.0
Gly Pro Pro Val Asp Ala Pro Gly Ala Ala Thr Gly Leu Ala Pro Ala
                  5.5
                                      60
Arg Ser Pro Ala Tyr Pro His Cys Gln Asn Ala Gly Leu Ala Ala Gly
       70 75
Glu Asn Phe Leu Ala Ser Glu Met Pro Ile Asp Gly Ser Ser Gly Pro
                 90
            8.5
Ala Gly Leu Cys His Arg Leu Phe Arg Glu His Gly Pro Val His Ala
         100 105
Tyr Pro Leu Ala Gly Gly Gly Tar Phe His His Pro Asp Asp Gly Gly
      115
           120 125
Gly Arg Pro Gln Gln Arg Arg Gln His Ser Asp Pro Arg Gln Pro Gly
 130 135
                                      140
Ala Gly Ser Val Val Val Asp Gln Gln Arg Ile Cys Pro Cys Arg Ala
                 150
                                   155
Ala Leu Pro Ala Arg Gly Pro Ser Gln Thr Arg Ile Thr Leu Met Leu
              165
                               170
Thr Val Lys Asn Leu Thr Ile Ala Pro Leu Leu His Glu Val Asn Phe
          180
                            185
                                             190
Arg Val Pro Ala Gly Glu Ile Val Thr Leu Met Gly Pro Ser Gly Ser
 195
                        200
                                          205
Gly Lys Ser Thr Leu Phe Ala Trp Met Val Gly Ala Leu Ser Ala Asp
  210
                     215
                                       220
Phe Lys Ala His Gly Glu Leu Trp Leu Asn Asp Arg Arg Cys Asp Met
                 230
                                   235
Leu Pro Val Glu Thr Arg Gly Ile Gly Ile Leu Phe Gln Asp Ala Leu
              245
                                250
Leu Phe Asp Ala Phe Ser Val Gly Gin Asn Leu Met Leu Ala Leu Pro
          260
                            265
Ala His Ile Val Gly Arg Ala Arg Arg Asn Ala Val Glu Gln Ala Leu
      275
                        280
                                        285
Glu Thr Ala Gly Leu Ala Asn His Tyr Thr Ser Asp Pro Ala Thr Leu
                                       300
 290
                    295
Ser Gly Gly Glu Arg Ala Arg Val Ser Leu Leu Arg Ala Leu Leu Ala
                 310
                                   315
Gln Pro Gln Ala Leu Leu Leu Asp Glu Pro Phe Ser Arg Leu Asp Lys
              325
                               330 335
Thr Leu Arg Ala Ser Phe Arg Ala Trp Val Phe Glu Val Thr Arg Gln
          340
                            345
Arg Arg Ile Pro Val Val Leu Val Thr His Asp Glu Asp Asp Ile Pro
                        360
Pro Gly Gly Glu Val Ile Glu Ile Ser Arg Trp Gln
```

<210> 9416

<211> 87 <212> PRT

<213> Enterobacter cloacae

<400> 9416

Ala Trp Arg Arg Trp Gly 85

<210> 9417 <211> 622 <212> PRT <213> Enterobacter cloacae <400> 9417 Gly Glu Tyr Met Arg Thr Leu Trp Arg Ile Ile Ala Gly Phe Phe Lys Trp Thr Trp Arg Leu Leu Asn Phe Val Arg Asn Leu Val Met Asn Ile 25 Phe Phe Ile Leu Leu Val Leu Val Cys Ala Gly Ile Trp Met His Ile 40 Ser Asn Ala Asn Gln Ser Gln His Ser Thr Arg Gly Ala Leu Leu Leu 55 Asp Ile Thr Gly Val Ile Val Asp Lys Pro Ser Thr Ser Asn Arg Leu 75 70 Gly Val Ile Gly Arg Gln Leu Phe Gly Ala Thr Ser Asp Arg Leu Gln 8.5 90 Glu Asn Ser Leu Phe Asp Ile Val Asp Thr Ile Arg Gln Ala Lys Asp 100 105 110 Asp Arg Asn Ile Thr Gly Ile Val Leu Asp Leu Lys Asp Phe Ala Gly 120 125 Ala Asp Gln Pro Ser Met Gln Tyr Ile Gly Lys Ala Leu Arg Glu Phe 130 135 140 Arg Asp Ser Gly Lys Pro Val Ile Ala Ile Gly Asp Ser Tyr Thr Gln 150 155 145 Gly Gln Tyr Tyr Leu Ala Ser Phe Ala Asn Lys Ile Trp Leu Ser Pro 165 170 Gln Gly Thr Val Asp Leu His Gly Phe Ala Thr Asn Gly Leu Tyr Tyr 190 185 180 Lys Ser Leu Leu Asp Lys Leu Lys Val Thr Thr His Val Phe Arg Val 200 205 195 Gly Thr Tyr Lys Ser Ala Val Glu Pro Phe Ile Arg Asp Asp Met Ser 215 220 210 Pro Ala Ala Arg Glu Ala Asp Ser Arg Trp Ile Gly Glu Leu Trp Gln 230 235 Asn Tyr Leu Gly Thr Ile Ala Ala Asn Arg Gln Ile Thr Ala Glu Gln 250 245 Val Phe Pro Gly Ala Arg Gly Val Leu Asp Gly Leu Arg Lys Val Asp 260 265 270 Gly Asp Thr Ala Lys Tyr Ala Leu Asp Asn Lys Leu Val Asp Gln Leu

310 315 Ala Lys Lys Ser Asp Asp Ser Gly Asp Ser Ile Ala Val Val Phe Ala 330 325 Asn Gly Ala Ile Met Asp Gly Glu Glu Thr Pro Gly Asn Val Gly Gly 350 340 345 Asp Thr Thr Ala Ser Gln Ile Arg Asp Ala Arg Leu Asp Pro Lys Val 355 360

280

Gly Ser Ser Ala Glu Ile Glu Lys Ala Leu Thr Lys Gln Phe Gly Trp 295

Ser Lys Glu Asp Lys Asn Tyr Ser Ala Ile Ser Met Tyr Asp Tyr Ala

285

300

Lys Ala Ile Val Leu Arg Val Asn Ser Pro Gly Gly Ser Val Ser Ala 375 380 Ser Glu Val Ile Arg Ala Glu Leu Ala Ala Ala Arg Ala Ala Gly Lys 390 395

Pro Val Val Val Ser Met Gly Gly Met Ala Ala Ser Gly Gly Tyr Trp

```
Ile Ser Thr Pro Ala Asn Tyr Ile Val Ala Asn Pro Ser Thr Leu Thr
         420
                          425
Gly Ser Ile Gly Ile Phe Gly Val Ile Asn Thr Val Glu Asn Ser Leu
                            445
              440
Asp Tyr Leu Gly Val His Thr Asp Gly Val Ser Thr Ser Pro Leu Ala
        455 460
 450
Asp Val Ser Val Thr Lys Ser Leu Pro Pro Glu Val Ser Glu Met Met
                470 475
465
Gln Leu Ser Ile Glu Ser Gly Tyr Lys Arg Phe Ile Thr Leu Val Ala
             485
                             490 495
Asp Ser Arg Lys Lys Thr Pro Asp Gln Ile Asp Gln Ile Ala Gln Gly
          500 505
His Val Trp Thr Gly Gln Asp Ala Lys Ser Asn Gly Leu Val Asp Ser
      515
                       520
                                        525
Leu Gly Asp Phe Asp Asp Ala Val Lys Lys Ala Ala Glu Leu Ala Lys
                    535
                                     540
  530
Leu Lys Gln Trp His Val Asp Tyr Tyr Gln Asp Glu Pro Thr Phe Phe
                550
                                  555
545
Asp Met Val Met Asp Ser Met Ser Gly Ser Val Arg Ala Met Leu Pro
             565
                              570
Asp Ala Leu Gln Ala Tyr Leu Pro Ala Pro Val Ala Thr Ala Ala Lys
                                  590
          580
                           585
Ala Met Lys Ala Glu Ser Asp Lys Leu Ala Ala Phe Asn Asp Pro Gln
 595
                      600
Ser Arg Tyr Ala Phe Cys Leu Thr Cys Ala Asn Val Arg
```

615

<210> 9418 <211> 525

<212> PRT

<213> Enterobacter cloacae

<400> 9418 Pro Met Ser Gln Gln Val Val Ile Phe Asp Thr Thr Leu Arg Asp Gly Glu Gln Ala Leu Gln Ala Ser Leu Ser Val Lys Glu Lys Leu Gln Ile 3.0 20 Ala Leu Ala Leu Glu Arg Met Gly Val Asp Val Met Glu Val Gly Phe 35 40 45 Pro Val Ser Ser Pro Gly Asp Phe Glu Ser Val Gln Thr Ile Ala Arg 55 Thr Ile Lys Asn Ser Arg Val Cys Gly Leu Ala Arg Cys Val Glu Lys 75 8.0 70 Asp Ile Asp Val Ala Ala Glu Ser Leu Lys Val Ala Glu Ala Phe Arg 90 95 Ile His Thr Phe Ile Ala Thr Ser Pro Met His Ile Ala Thr Lys Leu 105 Arg Ser Thr Leu Asp Glu Val Ile Glu Arg Ala Val Tyr Met Val Lys 115 120 125 Arg Ala Arg Asn Tyr Thr Asp Asp Val Glu Phe Ser Cys Glu Asp Ala 130 135 140 Gly Arg Thr Pro Ile Asp Asp Leu Ala Arg Val Val Glu Ala Ala Ile 145 150 155 Asn Ala Gly Ala Arg Thr Ile Asn Ile Pro Asp Thr Val Gly Tyr Thr 165 170 175 Met Pro Phe Glu Phe Ser Asn Ile Ile Thr Gly Leu Tyr Asp Arg Val 180 185 190 Pro Asn Ile Asp Lys Ala Ile Ile Ser Val His Thr His Asp Asp Leu 195 200 205 Gly Leu Ala Val Gly Asn Ala Ile Ala Ala Val His Ala Gly Ala Arg 210 215

```
Gln Val Glu Gly Ala Met Asn Gly Ile Gly Glu Arg Ala Gly Asn Cys
      230
                               235
Ser Leu Glu Glu Val Ile Met Ala Ile Lys Val Arg Lys Asp Ile Met
         245 250 255
Asn Val His Thr Arg Ile Asn His Asn Glu Ile Trp Arg Thr Ser Gln
             265
         260
Thr Val Ser Gln Ile Cys Asn Met Pro Ile Pro Ala Asn Lys Ala Ile
          280 285
Val Gly Ala Gly Ala Phe Ala His Ser Ser Gly Ile His Gln Asp Gly
                   295 300
Val Leu Lys Asn Arg Glu Asn Tyr Glu Ile Met Thr Pro Glu Ser Ile
                310 315
305
Gly Leu Asn Gln Val Gln Leu Asn Leu Thr Ser Arg Ser Gly Arg Ala
            325
                             330 335
Ala Val Lys His Arg Met Glu Glu Met Gly Tyr Lys Asp Ser Asp Tyr
                          345
         340
Asn Met Asp Gln Leu Tyr Asp Ala Phe Leu Lys Leu Ala Asp Lys Lys
                      360
      355
                                       365
Gly Gln Val Phe Asp Tyr Asp Leu Glu Ala Leu Ala Phe Ile Asn Lys
   370
                   375
                                    380
Gln Glu Glu Pro Glu His Phe Arg Leu Asp Tyr Phe Thr Val Gln
        390
                                                 400
                                395
Ser Gly Ser Ser Asp Ile Ala Thr Ala Ser Val Lys Leu Ala Cys Gly
            405
                             410
Asp Glu Ile Lys Ala Glu Ala Ala Asn Gly Asn Gly Pro Val Asp Ala
                          425
                                  430
         420
Ile Tyr Gln Ala Ile Asn Arg Val Thr Glu Tyr Asp Val Glu Leu Val
                      440
435
Lys Tyr Asp Leu Thr Ala Lys Gly His Gly Lys Asp Ala Leu Gly Gln
 450
                   455
                                   460
Val Asp Ile Val Val Asn Tyr Asn Gly Arg Arg Phe His Gly Val Gly
                470
                                 475
                                                 480
Leu Ala Thr Asp Ile Val Glu Ser Ser Ala Lys Ala Met Val His Val
             485
                             490
                                              495
Leu Asn Asn Ile Trp Arg Ala Ala Glu Val Glu Lys Glu Leu Gln Arg
        500
             505
Lys Ala Gln Asn Lys Glu Asn Asn Lys Glu Thr Val
```

<210> 9419 <211> 507 <212> PRT

<213> Enterobacter cloacae

<400> 9419 His Ile Lys Asp Thr Ile Met Thr Ile Pne Asn Asn Tyr Glu Val Trp 10 Phe Val Ile Gly Ser Gln His Leu Tyr Gly Pro Glu Ala Leu Gln Gln 20 25 3.0 Val Thr Lys His Ala Glu His Val Val Asn Ala Leu Asn Ala Glu Ala 35 40 Lys Leu Pro Cys Lys Leu Val Leu Lys Pro Leu Gly Thr Thr Pro Asp 55 Glu Ile Thr Asn Ile Cys Arg Asp Ala Asn Tyr Asp Asp Lys Cys Ala 70 75 Gly Leu Val Val Trp Leu His Thr Phe Ser Pro Ala Lys Met Trp Ile 8.5 90 Asn Gly Leu Ala Ile Leu Asn Lys Pro Leu Leu Gln Phe His Thr Gln 100 105 110 Phe Asn Ala Ser Leu Pro Trp Asp Ser Ile Asp Met Asp Phe Met Asn 120

```
Leu Asn Gln Thr Ala His Gly Gly Arg Glu Phe Gly Phe Ile Gly Ala
                     140
 130 135
Arg Met Arg Gln Gln His Ala Val Val Thr Gly His Trp Gln Asp Gly
145 150 155 160
Gln Ala Gln Lys Arg Ile Gly Ser Trp Met Arg Gln Ala Val Ser Lys
          165 170 175
Gln Asp Thr Arg His Leu Lys Val Val Arg Phe Gly Asp Asn Met Arg
        180 185 190
Glu Val Ala Val Thr Asp Gly Asp Lys Val Ala Ala Gln Ile Lys Phe
 195 200 205
Gly Phe Ser Val Asn Thr Trp Ala Val Gly Asp Leu Val Gln Val Val
 210 215 220
Asn Asp Ile Ser Asp Gly Asp Val Asn Ala Leu Val Asp Glu Tyr Glu
     230 235
Ser Ser Tyr Arg Leu Thr Pro Ala Ala Gln Ile Asn Gly Asp Lys Arg
           245
                          250 255
Gln Asn Val Leu Asp Ala Ala Arg Ile Glu Leu Gly Met Lys Arg Phe
                       265 270
         260
Leu Glu Gln Gly Gly Phe His Ala Phe Thr Thr Thr Phe Glu Asp Leu
                    280
                                    285
His Gly Leu Lys Gln Leu Pro Gly Leu Ala Val Gln Arg Leu Met Gln
                                 300
 290
                  295
Gln Gly Tyr Gly Phe Ala Gly Glu Gly Asp Trp Lys Thr Ala Ala Leu
              310
                              315
Leu Arg Ile Met Lys Val Met Ser Thr Gly Leu Gln Gly Gly Thr Ser
                           330 335
           325
Phe Met Glu Asp Tyr Thr Tyr His Phe Glu Asn Gly Asn Asp Leu Val
                        345
                           350
         340
Leu Gly Ser His Met Leu Glu Val Cys Pro Ser Ile Ala Val Glu Glu
     355
                     360
                                    365
Lys Pro Ile Leu Asp Val Gln Tyr Leu Gly Ile Gly Gly Lys Ala Asp
                 375
                                 380
 370
Pro Ala Arg Leu Ile Phe Asn Thr Arg Thr Gly Pro Ala Ile Asn Ala
                              395
               390
Ser Leu Ile Asp Leu Gly Asp Arg Phe Arg Leu Leu Val Asn Cys Val
                           410 415
           405
Asp Ala Val Glu Thr Pro His Ser Leu Pro Lys Leu Pro Val Ala Asn
                       425 430
        420
Ala Leu Trp Lys Ala Gln Pro Asp Leu Pro Thr Ala Ser Glu Ala Trp
     435
                     440 445
Ile Leu Ala Gly Gly Ala His His Thr Val Phe Ser His Ala Leu Asp
                  455
                                 460
 450
Leu Asn Asp Met Arg Gln Phe Ala Glu Leu His Asp Ile Glu Leu Thr
              470
                              475
Val Ile Asp Asn Asp Thr Arg Leu Pro Ala Phe Lys Asp Ala Leu Arg
         485
               490
Trp Asn Glu Val Tyr Tyr Gly Ser Lys Arg
```

<210> 9420 <211> 973 <212> PRT

<213> Enterobacter cloacae

<400> 9420

Ser Arg Thr Thr Met Pro Phe Thr Leu Gly Gln Arg Trp Ile Ser Asp 1 5 10 15 Thr Glu Ser Glu Leu Gly Leu Gly Thr Val Val Ala Val Asp Ala Arg 20 25 30 Met Val Thr Phe Leu Phe Pro Ala Thr Gly Glu Asn Arg Leu Tyr Ala Arg Asn Asp Ser Pro Val Thr Arg Val Met Phe Asn Pro Gly Asp Thr 5.5 Val Thr Ser His Glu Gly Trp Gln Leu Lys Val Glu Asp Val Lys Glu 70 7.5 Glu Asn Gly Leu Leu Ala Tyr Ile Gly Thr Arg Leu Asp Thr Asp Glu 85 90 Thr Asn Val Ile Leu Arg Glu Val Leu Leu Asp Ser Lys Leu Val Phe 100 105 Ser Lys Pro Gln Asp Arg Leu Phe Ala Gly Gln Ile Asp Arg Met Asp 115 120 Arg Phe Ser Leu Arg Tyr Arg Ala Arg Lys Phe Gln Ser Glu Gln Tyr 135 140 Arg Met Pro Trp Ser Gly Leu Arg Gly Gln Arg Thr Ser Leu Ile Pro 150 155 His Gln Leu Asn Ile Ala His Asp Val Gly Arg Arg His Ala Pro Arg 170 165 Val Leu Leu Ala Asp Glu Val Gly Leu Gly Lys Thr Ile Glu Ala Gly 185 180 Met Ile Leu His Gln Gln Leu Leu Ser Gly Ala Ala Glu Arg Val Leu 195 200 205 Ile Val Val Pro Glu Thr Leu Gln His Gln Trp Leu Val Glu Met Leu 215 220 Arg Arg Phe Asn Leu Arg Phe Ser Leu Phe Asp Asp Glu Arg Tyr Ala 225 230 235 Glu Ala Gln His Asp Ala Asp Asn Pro Phe Glu Thr Glu Gln Leu Val 245 250 Ile Cys Ser Leu Asp Phe Val Arg Arg Ser Lys Gln Arg Leu Glu His 260 265 Leu Cys Asp Ala Glu Trp Asp Leu Met Val Val Asp Glu Ala His His 275 280 285 Leu Val Trp Ser Glu Asp Ala Pro Ser Arg Glu Tyr Met Ala Ile Glu 290 295 300 Gln Leu Ala Glu Arg Val Pro Gly Val Leu Leu Leu Thr Ala Thr Pro 310 315 Glu Gln Leu Gly Leu Glu Ser His Phe Ala Arg Leu Arg Leu Leu Asp 325 330 Pro Asn Arg Phe His Asp Phe Glu Gln Phe Val Glu Glu Gln Lys Asn 340 345 Tyr Arg Pro Val Ala Asp Ala Val Ala Leu Leu Leu Ala Gly Asn Arg 360 355 365 Leu Ser Asn Asp Glu Leu Asn Thr Leu Ser Asp Leu Ile Gly Glu Gln 375 380 Asp Ile Glu Pro Leu Leu Gln Ala Ala Asn Ser Asp Ser Asp Asn Ala 390 395 Gly Ser Ala Arg Lys Glu Leu Ile Asp Met Leu Met Asp Arg His Gly 405 410 Thr Ser Arg Val Leu Phe Arg Asn Thr Arg Asn Gly Val Lys Gly Phe 420 425 Pro Lys Arg Glu Leu His Thr Ile Lys Leu Pro Leu Pro Thr Gln Tyr 440 Gln Thr Ala Ile Lys Val Ser Gly Ile Met Gly Thr Arg Lys Ser Ala 455 460 Glu Asp Arg Ala Arg Asp Met Leu Tyr Pro Glu Gln Ile Tyr Gln Glu 470 475 Phe Glu Gly Asp Thr Gly Thr Trp Trp Asn Phe Asp Pro Arg Val Glu 485 490 Trp Leu Met Gly Tyr Leu Thr Ala His Arg Ser Arg Lys Val Leu Val 505 500 Ile Cys Ala Lys Ala Ala Thr Ala Leu Gln Leu Glu Gln Val Leu Arg 520 Glu Arg Glu Gly Ile Arg Ala Ala Val Phe His Glu Gly Met Ser Ile

```
540
               535
Ile Glu Arg Asp Arg Ala Ala Ala Trp Phe Ser Glu Glu Asp Ser Gly
        550 555 560
545
Ala Gln Val Leu Leu Cys Ser Glu Ile Gly Ser Glu Gly Arg Asn Phe
              570 575
        565
Gln Phe Ala Ser Asn Leu Val Met Phe Asp Leu Pro Phe Asn Pro Asp
       580 585 590
Leu Leu Glu Gln Arg Ile Gly Arg Leu Asp Arg Ile Gly Gln Ala His
595 600 605
Asp Ile Gln Ile His Val Pro Tyr Leu Glu Lys Thr Ala Gln Ser Val
610 615 620
Leu Val Arg Trp Tyr His Glu Gly Leu Asp Ala Phe Glu His Thr Cys
625 630 635
Pro Thr Gly Arg Thr Ile Tyr Asp Gln Val His Ala Asp Leu Ile Gly
         645 650 655
Tyr Leu Ala Ala Pro Glu Asn Thr Glu Gly Phe Asp Glu Leu Ile Lys
     660 665 670
Ser Cys Arg Glu Lys His Asp Ala Leu Lys Ala Gln Leu Glu Gln Gly
   675 680
                      685
Arg Asp Arg Leu Leu Glu Ile His Ser Asn Gly Gly Glu Lys Ala Gln
690 695 700
Gin Leu Ala Glu Ser Ile Glu Glu Gin Asp Asp Asp Thr Ser Leu Ile
705 710 715
Ser Phe Ser Met Asn Leu Phe Asp Ile Val Gly Ile Asn Gln Asp Asp
              730 735
     725
Arg Gly Glu Asn Met Ile Val Leu Thr Pro Ser Asp His Met Leu Val
   740 745
                         750
Pro Asp Phe Pro Gly Leu Pro Glu Asp Gly Cys Thr Ile Thr Phe Glu
755 760 765
Arg Asp Val Ala Leu Ser Arg Glu Asp Ala Gln Phe Ile Thr Trp Glu
770
                775 780
His Pro Leu Ile Arg Asn Gly Leu Asp Leu Ile Leu Ser Gly Asp Thr
785
             790 795
                                         800
Gly Ser Ser Thr Ile Ser Leu Leu Lys Asn Lys Ala Leu Pro Val Gly
           805 810 815
Thr Leu Leu Val Glu Leu Ile Tyr Val Val Glu Ala Gln Ala Pro Lys
   820 825
                                    830
Gln Leu Gln Leu Asn Arg Phe Leu Pro Pro Thr Pro Val Arg Leu Leu
 835 840 845
Leu Asp Lys Asn Gly Thr Asn Leu Ala Gly Gln Val Glu Phe Glu Ser
850 855 860
Phe Asn Arg Gln Leu Ser Ala Val Asn Arg His Thr Gly Ser Lys Leu
865 870
                           875
Val Asn Ala Val Gln Gln Asp Val His Ala Ile Leu Gln Leu Gly Glu
                        890
                                      895
Ala Gln Ala Glu Lvs Ala Ala Arg Glu Leu Ile Asp Ala Ala Arg Ser
     900
                      905
                                    910
Glu Ala Asp Glu Lys Leu Ser Ala Glu Leu Ser Arg Leu Glu Ala Leu
                   920
     915
                                 925
Lys Ala Val Asn Pro Asn Ile Arg Asp Asp Glu Leu Ala Ala Ile Glu
                     940
                935
Ser Asn Arg Gln Gln Val Leu Glu Ser Leu Asn Gln Ala Gly Trp Arg
945 950
                           955
Leu Asp Ala Leu Arg Leu Ile Val Val Thr His Gln
           965
```

<210> 9421

<211> 167 <212> PRT

<213> Enterobacter cloacae

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<220>
<221>UNSURE
<222>(157)
<220>
<221>UNSURE
<222>(167)
<400> 9421
Ala Glu Arg Lys Met Val Met Glu Pro Tyr Asn Pro Pro Met Asp Pro
Trp Leu Val Ile Leu Tyr Gln Asp Glu His Ile Met Val Val Asn Lys
          2.0
                           2.5
Pro Ser Gly Leu Leu Ser Val Pro Gly Arg Leu Glu Glu His Lys Asp
                         40
Ser Val Met Thr Arg Ile Gln Arg Asp Tyr Pro Gln Ala Glu Ser Val
 5.0
                  5.5
His Arg Leu Asp Met Ala Thr Ser Gly Val Ile Val Val Ala Leu Asn
               70
                                    75
Lys Ala Ala Glu Arg Glu Leu Lys Arg Gln Phe Arg Glu Arg Glu Pro
                                90
             8.5
Lys Lys Gln Tyr Val Ala Arg Val Trp Gly His Pro Ala Gln Ala Glu
          100
                           105 110
Gly Leu Val Asp Leu Pro Leu Ile Cys Asp Trp Pro Asn Arg Pro Lys
      115 120
Gln Lys Val Cys Tyr Glu Thr Gly Lys Ala Ala Gln Thr Glu Tyr Glu
 130
       135
                                140
Val Leu Glu Tyr Ala Arg His Asn Val Phe Ile Thr Xaa Arg Gln Ile
145 150
                                                      160
Arg His Asn Leu Thr Gln Xaa
```

<211> 471 <212> PRT <213> Enterobacter cloacae

<210> 9422

165

<400> 9422 Arg Gly Val Ile Met Ala Lys Thr Leu Tyr Glu Lys Leu Phe Asp Ala His Val Val Tyr Glu Ala Pro Asn Gla Thr Pro Leu Leu Tyr Ile Asp 20 25 30 Arg His Leu Val His Glu Val Thr Ser Pro Gln Ala Phe Asp Gly Leu 35 Arg Ala His Lys Arg Pro Val Arg Gln Pro Gly Lys Thr Phe Ala Thr 55 60 Met Asp His Asn Val Ser Thr Gln Thr Lys Asp Ile Asn Ala Ser Gly 75 70 8.0 Glu Met Ala Arg Ile Gln Met Gln Glu Leu Ile Lys Asn Cys Asn Glu 90 Phe Gly Val Glu Leu Tyr Asp Leu Asn His Pro Tyr Gln Gly Ile Val 105 110 100 His Val Met Gly Pro Glu Gln Gly Ile Thr Leu Pro Gly Met Thr Ile 1.20 115 125 Val Cys Gly Asp Ser His Thr Ala Thr His Gly Ala Phe Gly Ala Leu 130 135 140 Ala Phe Gly Ile Gly Thr Ser Glu Val Glu His Val Leu Ala Thr Gln 150 155 Thr Leu Lys Gln Gly Arg Ala Lys Thr Met Lys Ile Glu Val Lys Gly 165 170 Lys Ala Ala Pro Gly Ile Thr Ala Lys Asp Ile Val Leu Ala Ile Ile

```
185
Gly Lys Thr Gly Ser Ala Gly Gly Thr Gly His Val Val Glu Phe Cys
   195
              200
                             205
Gly Asp Ala Ile Gln Ala Leu Ser Met Glu Gly Arg Met Thr Leu Cys
         215
                       220
Asn Met Ala Ile Glu Met Gly Ala Lys Ala Gly Leu Val Ala Pro Asp
    230 235 240
Glu Thr Thr Phe Asn Tyr Val Lys Gly Arg Leu His Ala Pro Lys Gly
        245
               250 255
Gln Asn Phe Asp Asp Ala Val Ala Tyr Trp Lys Thr Leu Lys Thr Asp
      260 265 270
Glu Gly Ala Ile Phe Asp Thr Val Val Thr Leu Gln Ala Glu Glu Ile
     275 280 285
Ala Pro Gin Val Thr Trp Gly Thr Asn Pro Gly Gin Val Ile Ser Val
 290 295 300
Asn Asp Ser Ile Pro Asp Pro Ala Ser Phe Ala Asp Pro Val Glu Arg
    310 315
Ala Ser Ala Glu Lys Ala Leu Ala Tyr Met Gly Leu Lys Pro Gly Val
           325 330 335
Pro Leu Thr Asp Val Ser Ile Asp Lys Val Phe Ile Gly Ser Cys Thr
  340 345 350
Asn Ser Arg Ile Glu Asp Leu Arg Ala Ala Ala Glu Ile Ala Lys Gly
 355 360
                                 365
Arg Lys Val Ala Pro Gly Val Gln Ala Leu Val Val Pro Gly Ser Gly
 370 375
                                380
Pro Val Lys Ala Gln Ala Glu Ala Glu Gly Leu Asp Lys Ile Phe Ile
              390
                             395
                                           400
Glu Ala Gly Phe Glu Trp Arg Leu Pro Gly Cys Ser Met Cys Leu Ala
         405
                        410
Met Asn Asn Asp Arg Leu Asn Pro Gly Glu Arg Cys Ala Ser Thr Ser
                       425
 420
Asn Arg Asn Phe Glu Gly Arg Gln Gly Arg Gly Gly Arg Thr His Leu
435
                    440
                                   445
Val Ser Pro Ala Met Ala Ala Ala Ala Ala Val Thr Gly His Phe Ala
 450
              455
Asp Ile Arg Ser Leu Lys
<210> 9423
<211> 537
<212> PRT
<213> Enterobacter cloacae
<400> 9423
```

Met Ala Thr Arg Arg Gln Pro Leu Ile Pro Gly Trp Leu Val Pro Gly 1 Leu Leu Ala Ala Val Leu Met Val Val Val Ser Leu Gly Ala Phe Leu 20 25 Ala Leu Trp Phe Asn Ala Pro Glu Ser Asp Leu Leu Ala Leu Trp His 4.0 Asp Ser Tyr Leu Trp His Val Ile Arg Phe Ser Phe Trp Gln Ala Phe 55 Leu Ser Ala Leu Leu Ser Ala Ile Pro Ala Ile Phe Leu Ala Arg Ala 7.0 7.5 Leu Tyr Arg Arg Phe Pro Gly Arg Leu Ala Leu Leu Arg Leu Cys 8.5 90 Ala Met Thr Leu Ile Leu Pro Val Leu Val Ala Val Phe Gly Ile Leu 100 105 Ser Val Tyr Gly Arg Gln Gly Trp Leu Ala Ser Leu Phe Asn Leu Leu

115 120 125 Gly Leu Glu Trp Thr Phe Ser Pro Tyr Gly Leu Lys Gly Ile Leu Leu

```
135
Ala His Ile Phe Phe Asn Met Pro Met Ala Thr Arg Leu Phe Leu Gln
        150
                     155
Ala Leu Glu Asn Ile Pro Gly Glu Gln Arg Gln Ile Ala Ala Gln Leu
       165 170 175
Gly Met Arg Gly Trp Ser Phe Phe Arg Phe Val Glu Trp Pro Trp Leu
      180 185 190
Arg Arg Gln Ile Ala Pro Val Ala Ala Leu Ile Phe Met Leu Cys Phe
 195 200 205
Ala Ser Phe Ala Thr Val Leu Ser Leu Gly Gly Gly Pro Gln Ala Thr
 210 215 220
Thr Ile Glu Leu Ala Ile Tyr Gln Ala Leu Ser Tyr Asp Tyr Asp Pro
225 230 235
Gly Arg Ala Ala Leu Leu Ala Ile Val Gln Met Val Cys Cys Leu Ala
         245 250 255
Leu Val Leu Leu Ser Gln Arg Leu Ser Lys Ala Ile Pro Thr Gly Ser
     260 265 270
Asn Asn Leu Thr Gly Trp Arg Asp Pro Gln Asp Ser Leu His Ser Arg
 275 280 285
Val Ala Asp Phe Met Leu Ile Ala Leu Ala Leu Leu Leu Leu Leu Pro
290 295 300
Pro Leu Leu Ala Val Ile Val Asp Gly Leu Asn Arg Asn Val Leu Ser
305 310 315
Val Leu Gln Gln Pro Val Leu Trp Gln Ala Thr Trp Thr Ser Leu Arg
      325 330 335
Ile Ala Leu Ala Ala Gly Leu Leu Cys Val Ile Leu Thr Met Met Leu
     340 345 350
Leu Trp Ser Ser Arg Glu Leu His Ala Arg His Ala Arg Lys Ala Gly
 355 360
                                  365
His Ala Leu Glu Leu Thr Gly Met Leu Ile Leu Ala Met Pro Gly Ile
370 375
                               380
Val Leu Ala Thr Gly Phe Phe Leu Leu Phe Asn Ser Thr Ile Gly Leu
385 390 395
                                          400
Pro Glu Ser Ala Asp Gly Ile Val Ile Phe Thr Asn Ala Leu Met Ala
          405
                         410 415
Ile Pro Tyr Ala Leu Lys Val Leu Glu Asn Pro Met Arg Asp Val Asn
        420
                      425
                                     430
Ser Arg Tyr Ser Leu Leu Cys Gln Ser Leu Gly Met Gln Gly Trp Gln
                       445
                   440
Arg Leu Lys Val Val Glu Leu Arg Ala Leu Lys Arg Pro Leu Ala Gln
              455 460
Ala Leu Ala Phe Ala Cys Val Leu Ser Ile Gly Asp Phe Gly Val Val
465 470
                            475
Ala Leu Phe Gly Asn Glu Asp Phe Arg Thr Leu Pro Phe Trp Leu Tyr
                         490
                                        495
           485
Gln Gln Ile Gly Ser Tyr Arg Ser Gln Asp Gly Ala Val Thr Ala Leu
        500 505
Leu Leu Leu Leu Cys Phe Ala Leu Phe Thr Val Ile Glu Lys Leu
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Pro Gly Arg Asp Val Lys Thr Asp
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<210> 9424
<211> 372
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<212> PRT

<213> Enterobacter cloacae

<400> 9424

Arg Glu Gln Gln Gly Asn Arg Val Met Ser Lys Asn Tyr His Ile Ala 10

Val Leu Pro Gly Asp Gly Ile Gly Pro Glu Val Met Ala Gln Ala Leu

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25
Lys Val Leu Glu Ala Val Arg Ser Arg Phe Ala Met Lys Ile Thr Thr
                      40
                                 4.5
Ser His Tyr Asp Val Gly Gly Ile Ala Ile Asp Asn His Gly Thr Pro
                   55
                                   60
Leu Pro Lys Gly Thr Val Glu Gly Cys Glu Asn Ala Asp Ala Val Leu
               70
                              75
Phe Gly Ser Val Gly Gly Pro Lys Trp Glu His Leu Pro Pro Ala Glu
                 90 95
           8.5
Gln Pro Glu Arg Gly Ala Leu Leu Pro Leu Arg Lys His Phe Lys Leu
                 105 110
Phe Ser Asn Leu Arg Pro Ala Lys Leu Tyr Pro Gly Leu Glu Glu Phe
     115 120 125
Cys Pro Leu Arg Ala Asp Ile Ala Ala Asn Gly Phe Asp Ile Leu Cys
 130 135 140
Val Arg Glu Leu Thr Gly Gly Ile Tyr Phe Gly Gln Pro Lys Gly Arg
      150 155
                                                 160
Glu Gly Ser Gly Gln His Glu Lys Ala Phe Asp Thr Glu Val Tyr His
            165 170
Arg Phe Glu Ile Glu Arg Ile Ala His Ile Ala Phe Glu Ser Ala Arg
   180
                          185
                                           190
Lys Arg Arg Arg Lys Val Thr Ser Ile Asp Lys Ala Asn Val Leu Gln
      195
                       200
                                        205
Ser Ser Ile Leu Trp Arg Glu Ile Val Ser Glu Val Ala Lys Gln Tyr
                   215
210
                                    220
Pro Asp Val Ala Leu Ser His Met Tyr Ile Asp Asn Ala Thr Met Gln
                230
                                 235
Leu Ile Lys Asp Pro Ser Gln Pne Asp Val Leu Leu Cys Ser Asn Leu
            245
                             250
Phe Gly Asp Ile Leu Ser Asp Glu Cys Ala Met Ile Thr Gly Ser Met
                         265 270
         260
Gly Met Leu Pro Ser Ala Ser Leu Asn Glu Glu Gly Phe Gly Leu Tyr
                       280
                                        285
      275
Glu Pro Ala Gly Gly Ser Ala Pro Asp Ile Ala Gly Lys Asn Ile Ala
   290
                    295
                                     300
Asn Pro Ile Ala Gln Ile Leu Ser Leu Ala Leu Leu Arg Tyr Ser
         310
305
                                 315
Leu Asp Ala Gly Asp Ala Ala Thr Ala Ile Glu Asn Ala Ile Asn Arg
             325
                              330
Ala Leu Glu Glu Gly Val Arg Thr Gly Asp Leu Ala Arg Gly Thr Ala
                                           350
          340
                          345
Ala Val Ser Thr Asp Glu Met Gly Asp Ile Ile Ala Arg Tyr Val Ala
                       360
      355
                                        365
Glu Gly Val
  370
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<210> 9425 <211> 207 <212> PRT <213> Enterobacter cloacae

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Ala Arg Glu Asn Phe Gly Cys Gly Ser Ser Arg Glu His Ala Pro Trp
        8.5
                  90
Ala Leu Thr Asp Tyr Gly Phe Lys Val Val Ile Ala Pro Ser Phe Ala
            105 110
        100
Asp Ile Phe Tyr Gly Asn Ser Phe Asn Asn Gln Leu Leu Pro Val Thr
     115 120 125
Leu Ser Asp Glu Gln Val Asp Glu Leu Phe Ala Leu Val Gln Ala Asn
      135 140
Pro Gly Ile Ser Phe Glu Val Asp Leu Glu Ala Glu Val Val Lys Ala
145 150 155 160
Gly Asp Lys Thr Tyr Ser Phe Ser Ile Asp Ala Phe Arg Arg His Cys
165 170 175
Met Leu Asn Gly Leu Asp Ser Ile Gly Leu Thr Leu Gln His Glu Glu
       180 185 190
Ala Ile Ala Ala Tyr Glu Lys Lys Gln Pro Ala Phe Met Gly
<210> 9426
<211> 560
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<212> PRT <213> Enterobacter cloacae

<400> 9426 Phe Phe Val Arg Ser Ser Pro Phe Met Pro Ser Gly Arg Leu Gln Gln 10 Gln Phe Ile Arg Leu Trp Gln Cys Cys Glu Gly Gln Ser Gln Glu Thr 25 Thr Leu Asn Glu Leu Ala Glu Leu Leu Asn Cys Ser Arg Arg His Met 35 40 4.5 Arg Thr Leu Leu Asn Thr Met Gln Gln Gln Gly Trp Leu Asn Trp Glu 55 60 Ala Glu Ala Gly Arg Gly Lys Arg Ser Arg Leu Thr Phe Leu Tyr Thr 70 75 Gly Leu Ala Leu Gln Gln Gln Arg Ala Glu Asp Leu Leu Glu Gln Asp 90 95 8.5 Arg Ile Asp Gln Leu Val Gln Leu Val Gly Asp Lys Ala Ala Val Arg 100 105 Gln Met Leu Val Ser His Leu Gly Arg Ser Phe Arg Gln Gly Arg His 115 120 Ile Leu Arg Val Leu Tyr Tyr Arg Pro Met Lys Asn Leu Leu Pro Gly 135 140 130 Thr Ala Leu Arg Arg Ser Glu Thr His Met Ala Arg Gln Ile Phe Ser 150 155 Gly Leu Thr Arg Ile Asn Glu Glu Asn Gly Glu Leu Glu Ala Asp Ile 165 170 175 Ala His His Trp Gln Gln Leu Ser Pro Arg His Trp Arg Phe Phe Leu 190 180 185 Arg Pro Gly Ile His Phe His His Gly Arg Glu Leu Glu Met Arg Asp 195 200 205 Val Ile Asp Ser Leu Glu Arg Ala Arg Thr Leu Pro Leu Tyr Ser His 215 220 Ile Ala Arg Ile His Ser Pro Thr Ala Trp Thr Leu Asp Ile Glu Leu 230 235 Ser Gln Pro Asp Lys Trp Leu Pro Trp Leu Leu Gly Tyr Val Pro Ser 245 250 Met Ile Leu Pro Ala Glu Trp Arg Ser Leu Asn Asn Phe Ser Ser Gln 260 265 270 Pro Ile Gly Thr Gly Pro Tyr Ser Val Thr Arg Asn Asn Ser Asn Gln 285 275 280

Leu Lys Ile Arg Ala Phe Asp Asp Tyr Phe Gly Tyr Arg Ala Leu Ile

5041 Asp Glu Val Asn Val Trp Val Leu Pro Asp Leu Asn Glu Glu Leu Ser 310 315 Ala Gly Leu Thr Leu Glu Gly Pro Thr Ala Gly Glu Lys Ala Phe Glu 325 330 Ser Arg Leu Glu Glu Gly Cys Tyr Tyr Leu Leu Phe Asp Ser Arg Ser 340 345 350 His Arg Gly Ala Asn His Asp Val Arg Arg Trp Ile Ser His Ile Leu 355 360 365 Ala Pro Ala Asn Leu Ile Tyr His Ala Glu Glu Gln Tyr Gln Thr Trp 370 375 380 Trp Phe Pro Ala Tyr Gly Leu Leu Pro Arg Trp His His Ala Gln Pro 385 390 395 400 Val Arg Ser Glu Lys Pro Ala Gly Leu Glu Thr Ile Thr Leu Ser Tyr 405 410 415 Tyr Arg Asp His Ile Glu His Arg Pne Ile Ala Arg Ile Met Ser Thr 420 425 430 Leu Leu Ala Ala Glu Gly Val Thr Leu Ala Ile Gln Glu Val Asp Tyr 440 445 Asp Glu Trp His Arg Gly Asp Val Ile Ser Asp Ile Trp Leu Asn Ser 450 455 460 Ala Asn Phe Thr Leu Pro Leu Asp Phe Ser Leu Phe Ser His Leu Tyr 465 470 475 Glu Val Pro Leu Ile Gln His Cys Ile Asn Arg Asp Trp Gln Gln Asp 485 490 495 Ala Ala Arg Trp Arg Ala Gly Glu Met Asp Leu Ala Ala Trp Cys Gln 500 505 510 Glu Leu Leu Ala Gly Gln Thr Ile Val Pro Leu Ile His His Trp Leu 515 520 525 Leu Ile Gln Gly Gln Arg Ser Met Arg Gly Leu Arg Met Asn Thr Leu 530 535 Gly Trp Phe Asp Phe Lys Ser Ala Trp Phe Ala Pro Pro Glu Pro 550 555

<210> 9427 <211> 349 <212> PRT

<213> Enterobacter cloacae

<400> 9427

Arg Arg Arg Arg Asp Leu Arg Leu Ser Leu Lys Ile Leu Cys His Ser Thr Leu Arg Cys Lys Val Leu Lys Asn Val Leu Pro Leu Leu Ala Leu 25 20 Phe Ala Leu Pro Val Phe Ala Lys Pro Val Leu Thr Val Tyr Thr Tyr 35 4 ∩ Asp Ser Phe Ser Ala Asp Trp Gly Pro Gly Pro Val Val Lys Lys Ala 55 60 Phe Glu Ala Asp Cys Asn Cys Glu Leu Lys Phe Val Ala Leu Glu Asp Gly Val Ser Leu Leu Asn Arg Leu Arg Met Glu Gly Lys Asn Ser Lys 90 Ala Asp Val Val Leu Gly Leu Asp Asn Asn Leu Leu Glu Ala Ala Thr 100 105 Gln Thr Arg Leu Phe Ala Lys Ser Gly Val Ala Ala Asp Ala Val Asn 115 120 Val Pro Gly Gly Trp Lys Asn Asp Thr Phe Val Pro Phe Asp Tyr Gly 135 140 Tyr Phe Ala Phe Val Tyr Asp Lys Asn Lys Leu Lys Asn Pro Pro Lys 150 155 Ser Leu Lys Glu Leu Val Glu Ser Asp Gln Lys Trp Arg Val Ile Tyr

225 230

165 170 Glu Asp Pro Arg Thr Ser Thr Pro Gly Leu Gly Leu Leu Leu Trp Met 180 185 190 Gln Lys Val Tyr Gly Asp Lys Thr Pro Glu Ala Trp Gln Lys Leu Ala 195 200 205 Ala Lys Thr Val Thr Val Thr Lys Gly Trp Ser Glu Ala Tyr Gly Leu 210 215 220 Phe Leu Lys Gly Glu Ser Asp Leu Val Leu Ser Tyr Thr Thr Ser Pro 225 230 235 240 Ala Tyr His Ile Ile Ala Glu Lys Lys Asp Asn Tyr Ala Ala Ala Asn 245 250 255 Phe Ala Glu Gly His Tyr Leu Gln Val Glu Val Ala Ala Arg Thr Ala 260 265 270 Ala Ser Lys Gln Pro Glu Leu Ala Glu Lys Phe Leu Lys Phe Met Ile 275 280 285 Ser Pro Ala Phe Gln Asn Ala Ile Pro Thr Gly Asn Trp Met Tyr Pro 290 295 300 Val Thr Asp Val Ala Leu Pro Ala Gly Phe Glu Gln Leu Asn Lys Pro 305 310 315 320 Gln Thr Ser Leu Glu Phe Thr Pro Gln Gln Val Ala Ala Gln Arg Ala 325 330 Ala Trp Ile Ser Glu Trp Gln Arg Ala Val Ser Arg <210> 9428 <211> 307 <212> PRT <213> Enterobacter cloacae <400> 9428 Ser Val Arg Trp Pro Arg Arg Trp Arg Leu Pro Ala Cys Cys Arg Leu 10 Ala Ile Leu Ala Leu Trp Pro Ser Ser Ala Thr Arg Ile Ser Ala Arg 2.5 Cys Arg Ser Gly Phe Ile Ser Lys Leu Ala Pro Ile Val Ala Arg Thr 40 Ala Pro Ser Arg Arg Tyr Ser Cys Cys Cys Cys Ala Leu Arg Tyr Leu 5.5 Pro Leu Ser Lys Asn Phe Arg Gly Val Met Leu Lys Leu Thr Asp Val 70 75 Thr Trp Leu Tyr Glu His Leu Pro Met Arg Phe Thr Leu Ser Val Arg 90 8.5 Gln Gly Glu Arg Ile Ala Val Leu Gly Pro Ser Gly Ala Gly Lys Ser 100 105 110 Thr Leu Leu Asn Leu Ile Ala Gly Phe Leu Gln Pro Ala Ser Gly Ser 115 120 125 Ile Val Ile Asp Asn Gly Glu Tyr Thr Tyr Ala Pro Pro Ala Lys Arg 130 135 140 Pro Val Ser Met Leu Phe Gln Glu Asn Asn Leu Phe Asn His Leu Thr 150 155 Val Trp Gln Asn Ile Ala Leu Gly Met Asp Pro Gly Leu Lys Leu Asn 165 170 175 Val Ala Gln Arg Gln Thr Leu Glu Ala 1le Ala Glu Gln Met Gly Leu 180 185 Ala Ala Phe Ile Asn Arg Leu Pro Gly Glu Leu Ser Gly Gly Gln Arg 200 205 195 Gln Arg Val Ala Leu Ala Arg Cys Leu Val Arg Lys Gln Pro Leu Leu 215 210 220 Leu Leu Asp Glu Pro Phe Ser Ala Leu Asp Pro Ala Leu Arg Gln Glu

235

Met Leu Ser Leu Val Glu Glu Val Cys Glu Arg Glu Gln Leu Thr Met

245 250 Leu Met Val Ser His Ser Ile Glu Asp Ala Ala Arg Ile Ala Pro Arg 260 265 270 Ser Val Val Ile Ala Glu Gly Arg Ile Leu Trp Asp Gly Glu Thr Glu 275 280 285 Glu Leu Leu Ser Gly Lys Ala Gly Ala Ser Ser Leu Leu Gly Ile Arg 290 295 Glu Val 305 <210> 9429 <211> 590 <212> PRT <213> Enterobacter cloacae <400> 9429 Arg Phe Leu Ser Leu Val Ser Asn Val Leu Pro Tyr Leu Phe Phe Gly 1.0 Trp Ser Asn Thr Met Ala Ile Ala Ile Gly Leu Asp Phe Gly Ser Asp 20 25 Ser Val Arg Ala Leu Ala Val Asp Cys Thr Thr Gly Gln Glu Ile Ala 3.5 40 Thr Ser Val Glu Trp Tyr Pro Arg Trp Gln Glu Gly Arg Tyr Cys Asp 55 60 Ala Pro Asn Asn Gln Phe Arg His His Pro Arg Asp Tyr Ile Glu Ser 70 75 Met Glu Ala Ala Ile Lys Thr Val Leu Ala Glu Leu Thr Asp Ala Gln 8.5 90 Arg Ala Asp Val Val Gly Ile Gly Val Asp Ser Thr Gly Ser Thr Pro 100 105 Ala Pro Val Asp Ala Glu Gly Arg Val Leu Ala Leu Arg Pro Glu Phe 115 125 Ala Asp Asn Pro Asn Ala Met Phe Val Leu Trp Lys Asp His Thr Ala 130 135 140 Val Glu Glu Ala Glu Ala Ile Thr Arg Leu Cys Leu Gln Pro Gly Lys 150 155 Thr Asp Tyr Ser Arg Tyr Ile Gly Gly Ile Tyr Ser Ser Glu Trp Phe 165 170 175 Trp Ala Lys Ile Leu His Val Thr Arg Ala Asp Ala Ser Val Ala Gln 180 185 Ala Ala Ala Ser Trp Ile Glu Leu Cys Asp Trp Val Pro Ala Leu Leu 195 200 205 Ser Gly Thr Thr Arg Pro Gln Asp Ile Arg Arg Gly Arg Cys Ser Ala 210 215 220 Gly His Lys Ser Leu Trp His Glu Ser Trp Gly Gly Leu Pro Pro Ala 230 235 Ala Phe Phe Asp Glu Leu Asp Pro Ile Ile Asn Lys Asn Leu Thr Tyr 245 250 Pro Leu Phe Thr Asp Thr Phe Thr Ala Asp Ile Pro Val Gly Thr Leu 270 260 265 Cys Glu Glu Trp Ala Lys Arg Leu Gly Leu Pro Gln Asn Val Thr Ile 280 285 Ser Gly Gly Ala Phe Asp Cys His Met Gly Ala Val Gly Ala Gly Ala 290 295 Gln Pro Asn Thr Leu Val Lys Val Ile Gly Thr Ser Thr Cys Asp Ile 310 315 Leu Thr Ala Asp Lys Ala Ser Val Gly Asp Arg Ala Val Lys Gly Ile 330 325 Cys Gly Gln Val Asp Gly Ser Val Val Pro Asp Phe Ile Gly Leu Glu 345 Ala Gly Gln Ser Ala Phe Gly Asp Ile Tyr Ala Trp Phe Gly Arg Val

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355
                   360
Leu Gly Trp Pro Leu Asp Gln Leu Ala Ala Ala His Pro Glu Leu Lys
       375 380
Thr Gln Ile Thr Ala Ser Lys Lys Gln Leu Leu Pro Gln Leu Thr Asp
385 390 395
Ala Trp Ala Lys Asn Pro Ser Leu Asp His Leu Pro Val Val Leu Asp
      405 410 415
Trp Phe Asn Gly Arg Arg Thr Pro Phe Ala Asn Gln Arg Leu Lys Gly
   420 425 430
Val Ile Thr Asp Leu Asn Leu Ala Thr Asp Ala Pro Ala Leu Phe Gly
     435 440 445
Gly Leu Ile Ala Ala Thr Ala Phe Gly Ala Arg Ala Ile Met Glu Cys
 450 455 460
Phe Ile Asp Gln Gly Ile Asp Val Asn Asn Val Met Ala Leu Gly Gly
465 470 475
Ile Ala Arg Lys Asn Pro Val Ile Met Gln Ala Cys Cys Asp Val Leu
          485 490 495
Asn Arg Pro Leu Gln Ile Val Ala Ser Asp Gln Cys Cys Ala Leu Gly
      500 505 510
Ala Ala Ile Phe Ala Ala Val Ala Ala Gly Val His Ala Asp Ile Pro
515 520 525
Thr Ala Gln Gln His Met Ala Ser Ala Val Glu Asn Thr Leu His Pro
             535
530
Gin Thr Gin Gin Ala Gin Arg Phe Glu Gin Leu Tyr Gin Arg Tyr Gin
545 550 555
Glm Trp Ala Lys Ser Ala Glu Leu His Tyr Leu Pro Val Ala Ala Pro
        565 570
Ala Lys Ser Thr Ala Asp Thr Thr Ala Thr Leu Thr His
        580
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<210> 9430 <211> 276 <212> PRT

<213> Enterobacter cloacae

<400> 9430 Arg Arg Ala Ala Leu Glu Arg Ser Leu Leu Arg Phe Lys Thr Leu Ser 1.0 Pro Glu Cys Pro Val Ala Leu Arg Leu Pro Gly Leu Arg Phe Cys Arg 25 20 Pro Asp Lys Arg Ser Ala Ile Trp Gln Glu Thr Thr Met Leu Glu Asp 35 40 Leu Lys Arg Gln Val Leu Glu Ala Asn Leu Ala Leu Pro Lys His Asn 5.5 60 Leu Val Thr Leu Thr Trp Gly Asn Val Ser Ala Val Asp Arg Glu Lys 70 75 8.0 Gly Val Phe Val Ile Lys Pro Ser Gly Val Asp Tyr Thr Val Met Thr 90 85 Ala Glu Asp Met Val Val Ser Ile Glu Thr Gly Glu Val Val Glu 105 110 Gly Lys Lys Pro Ser Ser Asp Thr Pro Thr His Arg Leu Leu Tyr 125 115 120 Gln Ala Phe Pro Thr Ile Gly Gly Ile Val His Thr His Ser Arg His 135 140 130 Ala Thr Ile Trp Ala Gln Ala Gly Gln Pro Ile Pro Ala Thr Gly Thr 155 150 Thr His Ala Asp Tyr Phe Tyr Gly Thr Ile Pro Cys Thr Arg Leu Met 170 165 Thr Asp Ala Glu Ile Asn Gly Glu Tyr Glu Trp Glu Thr Gly Asn Val 185 Ile Val Glu Thr Phe Glu Lys Gln Gly Ile Asp Ala Ala Gln Met Pro

195 200 Gly Val Leu Val His Ser His Gly Pro Phe Ala Trp Gly Lys Asn Ala 220 215 Glu Asp Ala Val His Asn Ala Ile Val Leu Glu Glu Val Ala Tyr Met 225 230 235 Gly Ile Phe Cys Arg Gln Leu Ala Pro Gln Leu Pro Asp Met Gln Gln 245 250 255 Thr Leu Leu Asp Lys His Tyr Leu Arg Lys His Gly Ala Lys Ala Tyr 265 Tyr Gly Gln <210> 9431 <211> 838 <212> PRT <213> Enterobacter cloacae <400> 9431 Thr Phe Ala Arg Cys Arg Cys Ala Tyr Arg Asp Cys Gly Thr Cys Arg 10 Pro Asp Lys Arg Ser Ala Ile Arg Leu Asn Arg His Cys Ile Lys Pro 20 2.5 Gln Gln Thr Pro Leu Asn Gln Ala Ile Ile Arg Pro Gly Phe Val Leu 40 4.5 Trp Asp Asn Ala Val Thr Gln Ala Gln Glu Gly Phe Leu Leu Thr Arg 50 5.5 His Trp Arg Asp Thr Pro Gln Gly Thr Glu Val Glu Phe Trp Leu Ala 7.0 75 Thr Asp Asn Gly Pro Leu Asn Val Thr Leu Pro Pro Gln Glu Ser Val 90 8.5 Ala Phe Ile Pro Glu Ala His Val Glu Lys Val Lys Gln Leu Leu Arg 105 110 100 Gly Glu Asn Gly Trp Arg Ile Thr Pro Leu Glu Leu Lys Asp Phe His 120 125 115 Arg Gln Pro Val Tyr Gly Leu Tyr Cys Arg Ala His Arg Gln Leu Met 135 140 130 Arg Tyr Glu Lys Leu Leu Arg Glu Ala Gly Val Thr Leu Tyr Glu Ala 155 145 150 Asp Ile Arg Pro Pro Glu Arg Phe Leu Met Glu Arg Phe Ile Thr Ala 170 165 Pro Val Trp Val Asp Gly Thr Ala Gln Asn Gly Arg Ile Val Asn Ala 180 185 190 Arg Leu Lys Pro Ser Pro Asn Tyr Arg Pro Pro Leu Lys Trp Val Ser 195 200 205 Leu Asp Ile Glu Thr Thr Arg His Gly Glu Leu Tyr Cys Ile Gly Leu 210 220 Glu Gly Cys Gly Gln Arg Val Val Tyr Met Leu Gly Pro Pro Asn Gly 240 230 235 Asp Ala Ser Ala Leu Asp Phe Asr Leu Glu Tyr Val Asn Ser Arg Pro 245 255 250 Gln Leu Leu Glu Lys Leu Asn Gln Trp Phe Ala Glu His Asp Pro Asp 265 270 260 Val Leu Ile Gly Trp Asn Val Val Gln Phe Asp Leu Arg Val Leu Gln 280 285 275 Lys His Ala Glu Arg Tyr Arg Ile Pro Leu Met Leu Gly Arg Gly Asn 290 295 300 Ser Glu Leu Glu Trp Arg Glu His Gly Phe Lys Asn Gly Val Phe Phe 315 310 Ala Gln Ala Asn Gly Arg Leu Ile Ile Asp Gly Ile Glu Ala Leu Lys 330 325

Ser Ala Phe Trp Asn Phe Ser Ser Phe Ser Leu Glu Ala Val Ala Gln

340 345 Glu Leu Leu Gly Glu Gly Lys Ser Ile Asp Asn Pro Trp Asp Arg Met 355 360 365 Asp Glu Ile Asp Arg Arg Phe Asn Glu Asp Lys Pro Ala Leu Ala Thr 370 375 380 Tyr Asn Leu Lys Asp Cys Glu Leu Val Thr Gln Ile Phe His Lys Thr 385 390 395 400 Glu Ile Met Pro Phe Leu Leu Glu Arg Ala Thr Val Asn Gly Leu Ala 405 410 415 Val Asp Arg His Gly Gly Ser Val Ala Ala Phe Ser His Leu Tyr Phe 420 425 430 Pro Arg Met His Arg Ala Gly Tyr Val Ala Pro Asn Leu Gly Asp Val 435 440 445 Pro Pro Gln Ala Ser Pro Gly Gly Tyr Val Met Asp Ser Arg Pro Gly 450 455 460 Leu Tyr Asp Ser Val Leu Val Leu Asp Tyr Lys Ser Leu Tyr Pro Ser 465 470 475 480 Ile Ile Arg Thr Phe Leu Ile Asp Pro Val Gly Leu Val Glu Gly Met 485 490 495 Ala Gln Pro Asp Asp Ala His Ser Thr Glu Gly Phe Leu Gly Ala Arg 500 505 510 Phe Ser Arg Glu Lys His Cys Leu Pro Glu Ile Val Gly Asn Ile Trp 515 520 525 His Gly Arg Asp Glu Ala Lys Arg His Gly Asn Lys Pro Leu Ser Gln 530 535 540 Ala Leu Lys Ile Ile Met Asn Ala Phe Tyr Gly Val Leu Gly Thr Ser 545 550 555 Ala Cys Arg Phe Phe Asp Pro Arg Leu Ala Ser Ser Ile Thr Met Arg 565 570 Gly His Glu Ile Met Arg Gln Thr Lys Ala Leu Ile Glu Ser Arg Gly 580 585 Tyr Asp Val Ile Tyr Gly Asp Thr Asp Ser Thr Phe Val Trp Leu Lys 595 600 605 Ala Ala His Ser Glu Asp Asp Ala Ala Gln Ile Gly Lys Asp Leu Val 615 620 Ala Phe Val Asn Asp Trp Trp Arg Gl. Ser Leu Gln Lys Glu Arg Leu 630 635 Thr Ser Ala Leu Glu Leu Glu Phe Glu Thr His Phe Ala Arg Phe Leu 645 650 Met Pro Thr Ile Arg Gly Thr Asp Gln Gly Ser Lys Lys Arg Tyr Ala 670 665 660 Gly Leu Ile Gln Glu Gly Asp Thr Gln Arg Met Val Phe Lys Gly Leu 680 675 685 Glu Thr Val Arg Thr Asp Trp Thr Pro Leu Ala Gln Gln Phe Gln Gln 700 695 Thr Leu Tyr Leu Arg Val Phe Arg Asn Glu Pro Tyr Gln Asp Tyr Val 715 710 Arg Asp Thr Ile Ala Ser Leu Met Ala Gly Glu Leu Asp Asp Gln Leu 725 730 Val Tyr Arq Lys Arg Leu Arg Arg Pro Leu Ala Glu Tyr Gln Arg Asn 745 740 Val Pro Pro His Val Arg Ala Ala Arg Leu Ala Asp Glu Glu Asn Val 760 765 Arg Arg Gly Arg Ala Pro Gln Tyr Gln Asn Arg Gly Thr Ile Lys Tyr 770 775 780 Val Trp Thr Thr Asn Gly Pro Glu Pro Val Asp Tyr Gln Gln Ser Pro 790 795 Leu Asp Tyr Asp His Tyr Leu Thr Arg Gln Leu Gln Pro Val Ala Glu 805 810 Gly Ile Leu Pro Phe Ile Asn Asp Asp Phe Ala Thr Leu Val Thr Gly 825

5047 Gln Leu Gly Leu Phe 835 <210> 9432 <211> 268 <212> PRT <213> Enterobacter cloacae <400> 9432 Ala Glu Ser Leu Ile Arg Phe Leu Thr Gly Ile Val Met Gln Ala Leu 10 Leu Glu His Phe Ile Thr Gln Ser Val Met Tyr Ser Leu Ile Ala Val 20 25 Ala Leu Val Ala Phe Leu Glu Ser Leu Ala Leu Val Gly Leu Ile Leu 40 Pro Gly Thr Val Met Met Ala Gly Leu Gly Ala Leu Ile Gly Ser Gly 50 55 Glu Val Asn Phe Trp Gln Ala Trp Met Ala Gly Ile Ile Gly Cys Leu 70 75 Leu Gly Asp Trp Ile Ser Phe Trp Leu Gly Trp Arg Phe Lys Lys Pro 85 Leu His Arg Trp Ser Phe Met Lys Lys Asn Lys Ala Leu Leu Asp Lys 100 105 110 Thr Glu His Ala Leu His Gln His Ser Met Phe Thr Ile Leu Val Gly 115 120 125 Arg Phe Val Gly Pro Thr Arg Pro Leu Val Pro Met Val Ala Gly Met 135 140 Leu Asp Leu Pro Val Ala Lys Phe Val Val Pro Asn Ile Ile Gly Cys 150 155 160 Val Phe Trp Pro Pro Phe Tyr Phe Leu Pro Gly Ile Leu Ala Gly Ala 165 170 175 Ala Ile Asp Ile Pro Asp Gly Met Gln Ser Gly Glu Phe Lys Trp Leu 180 185 190 Leu Leu Gly Thr Ala Val Leu Leu Trp Leu Ala Val Trp Leu Cys Trp 195 200 Arg Leu Trp Arg Ser Ala Lys Ala Ser Val Asp Arg Leu Thr Arg Tyr 215 220 Leu Pro Arg Thr Arg Leu Leu Tro Leu Ala Pro Leu Thr Leu Gly Val 230 235 Ala Val Val Ala Leu Ile Ala Leu Ile Arg His Pro Leu Met Pro Val 250 245 Tyr Gly Glu Ile Leu Leu Lys Val Val Ser Arg 260 265 <210> 9433 <211> 421 <212> PRT <213> Enterobacter cloacae <400> 9433 Ser Pro Ala Ser Lys Met Phe Phe Ala Gly Phe Phe Arg Leu Leu Phe His Pro Ile Ser Ile Arg Phe His Lys Asp Leu Arg Met Leu Trp Leu 20 25 Met Thr Met Gly Arg Arg Leu Asn Gly Val Tyr Ala Ala Phe Met Leu 35 Val Ala Phe Met Met Gly Val Ala Gly Ala Leu Gln Ala Pro Thr Leu Ser Leu Phe Leu Ser Arg Glu Val Gly Ala Gln Pro Phe Trp Val Gly

70

75

Leu Phe Tyr Thr Val Asn Ala Ile Ala Gly Ile Leu Val Ser Leu Trp

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9.0
Leu Ala Lys Arg Ser Asp Ser Gln Gly Asp Arg Arg Lys Leu Ile Leu
        100
                105 110
Phe Cys Cys Ala Met Ala Val Gly Asn Ala Leu Leu Phe Ala Phe Asn
     115 120 125
Arg His Tyr Leu Thr Leu Ile Thr Cys Gly Val Leu Leu Ala Ser Leu
 130 135 140
Ala Asn Thr Ala Met Pro Gln Leu Phe Ala Leu Ala Arg Glu Tyr Ala
145 150 155
Asp Asn Ser Ala Arg Glu Val Val Met Phe Ser Ser Val Met Arg Ala
     165 170 175
Gln Leu Ser Leu Ala Trp Val Ile Gly Pro Pro Leu Ala Phe Met Leu
     180 185 190
Ala Leu Asn Tyr Gly Phe Thr Thr Met Phe Ser Ile Ala Ala Gly Ile
    195 200
                                  205
Phe Val Ile Ser Leu Ala Leu Ile Ala Phe Ala Leu Pro Ser Val Ala
 210 215
                                  220
Arg Val Glu Gln Val Thr Asp Lys Pro Ile Thr Gln Val Ser Gly Trp
    230 235
Gln Asp Lys Asn Val Arg Met Leu Phe Ile Ala Ser Thr Leu Thr Trp
       245
                         250
Thr Cys Asn Thr Met Tyr Ile Ile Asp Met Pro Leu Trp Ile Ser Ser
   260
                         265
Asp Leu Gly Leu Pro Asp Lys Leu Ala Gly Ile Leu Met Gly Thr Ala
   275 280
Ala Gly Leu Glu Ile Pro Ala Met Ile Leu Ala Gly Tyr Tyr Val Lys
  290 295
                                 300
Arg Phe Gly Lys Arg Lys Met Met Val Val Ala Val Ala Ala Gly Val
305 310
                               315
Leu Phe Tyr Leu Gly Leu Ile Leu Phe His Ser Arg Glu Ala Leu Leu
            325 330
Ala Leu Gln Leu Phe Asn Ala Val Phe Ile Gly Ile Val Ala Gly Ile
   340
                        345
Gly Met Leu Trp Phe Gln Asp Leu Met Pro Gly Arg Ala Gly Ser Ala
   355
                     360
                                     365
Thr Thr Leu Phe Thr Asn Ser Ile Ser Thr Gly Val Ile Leu Ala Gly
                 375
Val Ile Gln Gly Ala Leu Ala Gln Ser Tyr Gly His Gly Ser Val Tyr
               390
                              395
Trp Met Ile Ala Ala Ile Ser Val Val Thr Leu Gly Leu Thr Cys Arg
                           410
Val Lys Asp Val
         420
<210> 9434
<211> 171
<212> PRT
<213> Enterobacter cloacae
<400> 9434
Ala Lys Arg Arg Glu Pro Asp Met Arg Arg Ile Leu Ser Val Leu Leu
                           1.0
Glu Asn Glu Ser Gly Ala Leu Ser Arg Val Ile Gly Leu Phe Ala Gln
       20
                        25
Arg Gly Tyr Asn Ile Glu Ser Leu Thr Val Ala Pro Thr Asp Asp Pro
      35
                     40
Thr Leu Ser Arg Met Thr Ile Gln Thr Val Gly Asp Ala Lys Val Leu
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55

70

Glu Gln Ile Glu Lys Gln Leu His Lys Leu Val Asp Val Leu Arg Val

Ser Glu Leu Gly Gln Gly Ala Tyr Val Glu Arg Glu Val Met Leu Val

130

5049 8.5 90 Lys Ile Gln Ala Ser Gly Tyr Gly Arg Glu Glu Val Lys Arg Asn Thr 100 105 110 Asp Ile Phe Arg Gly Gln Ile Ile Asp Val Thr Pro Ser Ile Tyr Thr 120 125 Val Gln Leu Ala Gly Thr Ser Asp Lys Leu Asp Ala Phe Leu Ala Ser 130 135 140 Val Arg Asp Val Ala Lys Ile Val Glu Val Ala Arg Ser Gly Val Val 145 150 155 Gly Leu Ser Arg Gly Asp Lys Ile Met Arg 165 <210> 9435 <211> 133 <212> PRT <213> Enterobacter cloacae <400> 9435 Phe Ser Ala Ala Tyr Cys Arg Glu Asp Glu Arg Met Ile Ser Arg Val 1.0 Thr Glu Thr Leu Ser Lys Val Lys Gly Ser Leu Gly Ser Asn Glu Arg 20 25 His Ala Leu Pro Gly Val Ile Gly Asp Asp Leu Leu Arg Phe Gly Lys 40 Leu Pro Leu Cys Leu Phe Ile Cys Ile Ile Val Thr Ala Val Met Val 5.5 60 Val Thr Thr Ala His His Thr Arg Leu Leu Thr Ala Gln Arg Glu Gln 65 7.0 75 Met Val Leu Glu Arg Asp Ala Leu Asp Ile Glu Trp Arg Asn Leu Ile 85 90 Leu Glu Glu Asn Ala Leu Gly Asp His Ser Arg Val Glu Arg Ile Ala 100 105 110 Thr Glu Lys Leu Gln Leu Gln His Val Asp Pro Ser Gln Glu Asn Ile 115 120 Val Val Gln Lys 130 <210> 9436 <211> 594 <212> PRT <213> Enterobacter cloacae <400> 9436 Gly Lys Thr Arg Arg Met Lys Ala Ala Ala Lys Thr Leu Lys Pro Lys 1.0 Arg Gln Glu Glu Gln Ala Asn Phe Val Ser Trp Arg Phe Ala Leu Leu 2.0 Cys Gly Cys Ile Leu Leu Ala Leu Gly Phe Leu Leu Gly Arg Val Ala 35 4.5 Trp Leu Gln Ile Ile Ala Pro Asp Met Leu Val Arg Gln Gly Asp Met 50 55 Arg Ser Leu Arg Val Gln Glu Val Ser Thr Ser Arg Gly Met Ile Thr 65 70 Asp Arg Ser Gly Arg Pro Leu Ala Val Ser Val Pro Val Lys Ala Ile 85 Trp Ala Asp Pro Lys Glu Leu His Asp Ala Gly Gly Ile Thr Leu Asp 100 105 Asn Arg Trp Lys Ala Leu Ser Asp Ala Leu Lys Met Pro Leu Asp Gln 120 125 Leu Ala Ser Arg Val Asn Ala Asn Pro Lys Gly Arg Phe Ile Tyr Leu

135

Ala Arg Gln Val Asn Pro Asp Met Ala Asp Tyr Ile Lys Lys Leu Lys 150 155 160 Leu Pro Gly Ile His Leu Arg Glu Glu Ser Arg Arg Tyr Tyr Pro Ser 165 170 175 Gly Glu Val Thr Ala His Leu Ile Gly Phe Thr Asn Val Asp Ser Gln 180 185 190 Gly Ile Glu Gly Val Glu Lys Ser Phe Asp Lys Trp Leu Thr Gly Gln 195 200 205 Pro Gly Glu Arg Ile Val Arg Lys Asp Arg Tyr Gly Arg Val Ile Glu 210 215 220 Asp Ile Ser Ser Thr Asp Ser Gln Ala Ala His Asn Leu Ala Leu Ser 230 235 240 Ile Asp Glu Arg Leu Gln Ala Leu Val Tyr Arg Glu Leu Asn Asn Ala 245 250 255 Val Ala Phe Asn Lys Ala Glu Ser Gly Ser Ala Val Leu Val Asp Val 260 265 270 Ala Thr Gly Glu Val Leu Ala Met Ala Ser Ser Pro Ser Tyr Asn Pro 280 285 Asn Asn Phe Ala Gly Thr Ala Lys Asp Ala Met Arg Asn Arg Ser Ile 290 295 300 Thr Asp Val Phe Glu Pro Gly Ser Thr Val Lys Pro Met Val Val Met 310 315 Thr Ala Leu Gln Arg Gly Ile Val Asn Glu Asn Thr Val Leu Asn Thr 325 330 Ile Pro Tyr Arg Ile Asn Gly His Glu Ile Lys Asp Val Ala Arg Tyr 340 345 350 Ser Glu Leu Thr Leu Thr Gly Val Leu Gln Lys Ser Ser Asn Val Gly 355 360 Val Ser Lys Leu Ala Leu Ala Met Pro Ser Ser Ala Leu Val Asp Thr 370 375 380 Tyr Ser Arg Phe Gly Leu Gly Lys Ala Thr Asn Leu Gly Leu Val Gly 390 395 400 Glu Arg Ser Gly Leu Tyr Pro Gln Lys Gln Arg Trp Ser Asp Ile Glu 405 410 Arg Ala Thr Phe Ser Phe Gly Tyr Gly Leu Met Val Thr Pro Leu Gln 420 425 430 Leu Ala Arg Val Tyr Ala Thr Ile Gly Ser Tyr Gly Ile Tyr Arg Pro 435 440 445 Leu Ser Ile Thr Lys Val Asp Pro Pro Val Pro Gly Glu Arg Val Phe 460 455 Pro Glu Ser Ile Val Arg Thr Val Val His Met Met Glu Ser Val Ala 470 475 Leu Pro Gly Gly Gly Val Lys Ala Ala Ile Lys Gly Tyr Arg Ile 485 490 Ala Ile Lys Thr Gly Thr Ala Lys Lys Val Gly Pro Asp Gly Arg Tyr 500 505 510 Ile Asn Lys Tyr Ile Ala Tyr Thr Ala Gly Val Ala Pro Ala Ser Asn 515 520 Pro Arg Phe Ala Leu Val Val Val Ile Asn Asp Pro Gln Ala Glv Lvs 530 535 Tyr Tyr Gly Gly Ala Val Ser Ala Pro Val Phe Gly Ala Ile Met Gly 550 555 Gly Val Leu Arg Thr Met Asn Ile Glu Pro Asp Ala Leu Ala Thr Gly 565 570 575 Glu Lys Ser Glu Phe Val Ile Asn Gln Gly Glu Gly Thr Gly Gly Arq 580 585

<210> 9437 <211> 479

Ser

<212> PRT <213> Enterobacter cloacae

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455 Met Glu Glu Val Val His Ala Leu Gln Glu Asn Gly Thr Cys <210> 9438 <211> 426 <212> PRT <213> Enterobacter cloacae <400> 9438 Cys Leu Tyr Pro Pro Gly Glu Gly Val Arg Leu Met Arg Leu Ser Leu 10 Pro Arg Leu Lys Met Pro Arg Leu Pro Gly Phe Gly Ile Leu Val Trp 25 Leu Phe Thr Ala Leu Lys Gly Trp Val Met Ala Ser Arg Asp Lys Asp 40 Ser Asp Ser Leu Ile Met Tyr Asp Arg Thr Leu Phe Trp Leu Thr Leu 55 Gly Leu Ala Ala Ile Gly Phe Ile Met Val Thr Ser Ala Ser Met Pro 70 75 Val Gly Gln Arg Leu Ala Asr Asp Pro Phe Leu Phe Ala Lys Arg Asp 85 90 95 Gly Leu Tyr Ile Ile Leu Ala Phe Cys Leu Ala Leu Ile Thr Leu Arg 100 105 Leu Pro Met Ser Phe Trp Gln Arg His Ser Thr Ala Met Leu Ile Ala 115 120 125 Ser Ile Ile Met Leu Leu Ile Val Leu Val Val Gly Ser Ser Val Asn 130 135 140 Gly Ala Ser Arg Trp Ile Ala Phe Gly Pro Leu Arg Ile Gln Pro Ala 150 155 160 Glu Phe Thr Lys Leu Ser Leu Phe Cys Tyr Leu Ala Ash Tyr Leu Val 165 170 175 Arg Lys Val Asp Glu Val Arg Asn Asn Leu Arg Gly Phe Leu Lys Pro 180 185 190 Met Gly Val Ile Leu Val Leu Ala Ile Leu Leu Leu Ala Gln Pro Asp 205 195 200 Leu Gly Thr Val Val Val Leu Phe Val Thr Thr Leu Ala Met Leu Phe 210 215 220 Leu Ala Gly Ala Lys Leu Trp Gln Phe Ile Ala Ile Ile Gly Met Gly 230 235 Ile Ser Ala Val Val Leu Leu Ile Leu Ala Glu Pro Tyr Arg Ile Arg 245 250 Arg Val Thr Ser Phe Trp Asn Pro Trp Glu Asp Pro Phe Gly Ser Gly 260 265 270 Tyr Gln Leu Thr Gln Ser Leu Met Ala Phe Gly Arg Gly Glu Val Trp 275 280 285 Gly Gln Gly Leu Gly Asn Ser Val Gln Lys Leu Glu Tyr Leu Pro Glu 295 300 Ala His Thr Asp Phe Ile Phe Ser Ile Ile Gly Glu Glu Leu Gly Tyr 310 315 Ile Gly Val Val Leu Ala Leu Leu Met Val Phe Phe Val Ala Phe Arg 330 Ala Met Ser Ile Gly Arg Lys Ala Leu Glu Ile Asp His Arg Phe Ser 340 345 350 Gly Phe Leu Ala Cys Ser Ile Gly Ile Trp Phe Ser Phe Gln Ala Leu 360 355 365 Val Asn Val Gly Ala Ala Ala Gly Met Leu Pro Thr Lys Gly Leu Thr 375 380 Leu Pro Leu Ile Ser Tyr Gly Gly Ser Ser Leu Leu Ile Met Ser Thr 390 395 Ala Ile Met Phe Leu Leu Arg Ile Asp Tyr Glu Thr Arg Leu Glu Lys

405 410 415 Ala Gln Ala Phe Thr Arg Gly Ser Arg 420 <210> 9439 <211> 188 <212> PRT <213> Enterobacter cloacae <400> 9439 Leu Tyr Val Phe Trp Thr Arg Arg Ala Asp Met Ser Gln Ala Ala Leu 5 10 Asn Thr Arg Asn Arg Asp Asp Glu Glu Glu Tyr Ser Ser Ser Arg Arg 20 25 Ser Asn Gly Thr Arg Leu Ala Gly Ile Ile Phe Leu Leu Gly Val Leu 35 40 45 Cys Thr Val Phe Ile Ser Gly Trp Met Val Leu Gly Trp Met Glu Asp 55 60 Ala Gln Arg Leu Pro Leu Ser Lys Leu Val Val Thr Gly Glu Arg His 7.0 7.5 Tyr Thr Arg Asn Asp Asp Ile Arg Gln Ser Ile Leu Ala Leu Gly Ser 8.5 90 Pro Gly Thr Phe Met Thr Gln Asp Val Asn Ile Ile Gln Ser Gln Ile 100 105 110 Glu Arg Leu Pro Trp Ile Lys Gln Ala Ser Val Arg Lys Gln Trp Pro 115 120 125 Asp Glu Leu Lys Ile His Leu Val Glu Tyr Val Pro Ile Ala Arg Trp 130 135 140 Asn Asp Gln His Met Val Asp Val Asp Gly Asn Ser Phe Ser Val Pro 150 155 Ser Asp Arg Val Asn Lys Gln Asn Leu Pro Met Leu Tyr Gly Pro Ala 165 170 Val Ile Glu Asn Arg Arg Ile Pro Gly Phe Ser 180 185 <210> 9440 <211> 337 <212> PRT <213> Enterobacter cloacae <400> 9440 Ile Ile Phe Phe Glu Val Ile Thr Val Pro Trp Gln Arg Glu Phe Ser 10 15 Val Thr Val Glu Ser Glu Met Pro Glu Asn Asn Ile Asn Gln Pro Gln 20 Thr Tyr Asp Gly Val Lys Pro Gln Leu Arg Thr Val Asp Leu Asn Leu 45 Leu Thr Val Phe Asp Ala Val Met Gln Glu Gln Asn Ile Thr Arg Ala 5.5 Ala Gln Ser Leu Gly Met Ser Gln Pro Ala Val Ser Asn Ala Val Ala 7.0 75 Arg Leu Lys Val Met Phe Asn Asp Glu Leu Phe Val Arg Tyr Gly Arg 85 90 Gly Ile Gln Pro Thr Ala Arg Ala Phe Gln Leu Phe Gly Ser Ile Arg 100 105 110 Gln Ala Leu Gln Leu Val Gln Asn Glu Leu Pro Gly Ser Gly Phe Glu 120 115 Pro Leu Ser Ser Glu Arg Val Phe His Leu Cys Val Cys Ser Pro Leu 135 130 140 Asp Asn Tyr Leu Thr Ser Val Ile Tyr Asn Lys Val Glu Gln Ile Ala 150 155

Pro Asn Ile His Leu Val Phe Lys Ser Ser Leu Asn Gln Asn Thr Glu 165 170 175 His Gln Leu Arg Tyr Gln Glu Thr Glu Phe Val Leu Gly Tyr Glu Glu 180 185 190 Phe Arg Arg Pro Glu Phe Ala Cys Val Pro Leu Phe Lys Asp Glu Met 195 200 205 Val Leu Val Ala Ser Lys Lys His Pro Arg Met Asn Ser Pro Leu Arg 210 215 Glu Ser Asp Val Tyr Ser Glu Gln His Ala Val Val Ala Leu Asp Arg 230 235 Tyr Ala Ser Phe Ser Leu Pro Trp Tyr Asp Thr Ala Asp Lys Gln Ala 245 250 255 Ser Val Ala Tyr Gln Gly Met Ala Met Val Ser Val Leu Asn Val Val 260 265 270 Ser Gln Thr Gln Leu Val Ala Ile Ala Pro Arg Trp Leu Ala Glu Glu 275 280 285 Phe Ser Asp Ser Leu Ser Leu Gln Ile Leu Pro Leu Pro Leu Lys Leu 290 295 300 Asn Ser Arg Thr Cys Tyr Leu Ser Trp His Glu Ala Ala Gly Arg Asp 310 315 Lys Gly His Gln Trp Met Glu Glu Leu Leu Val Asn Ile Cys Arg Arg 325 330

<210> 9441 <211> 329 <212> PRT <213> Enterobacter cloacae

<400> 9441 Phe Arg Asn Ile Ile Gly Thr Ala Ala Gly Leu Val Ser Ile Asn Met 1 10 Met Glu Asn Tyr Lys His Thr Thr Val Leu Leu Asp Glu Ala Val Asn 20 Gly Leu Asn Ile Arg Pro Asp Gly Ile Tyr Ile Asp Gly Thr Phe Gly 35 40 Arg Gly Gly His Ser Arg Leu Ile Leu Ser Gln Leu Gly Ala Glu Gly 55 Arg Leu Leu Ala Ile Asp Arg Asp Pro Gln Ala Ile Ala Val Ala Gln 70 65 75 Thr Ile Asp Asp Pro Arg Phe Ser Ile Val His Gly Pro Phe Ser Ala 90 8.5 95 Leu Ala Asp Tyr Val Ala Glu Arg Gly Leu Thr Gly Lys Ile Asp Gly 100 105 Ile Leu Leu Asp Leu Gly Val Ser Ser Pro Gln Leu Asp Asp Ala Glu 115 120 125 Arg Gly Phe Ser Phe Met Arg Asp Gly Pro Leu Asp Met Arg Met Asp 130 135 140 Pro Thr Arg Gly Gln Ser Ala Ala Glu Trp Leu Gln Thr Ala Asp Glu 150 145 155 Ala Asp Ile Ala Trp Val Ile Lys Thr Phe Gly Glu Glu Arg Phe Gly 165 170 175 Lys Arg Ile Ala Arg Ala Ile Val Glu Arg Asn Arg Val Glu Pro Met 180 185 190 Thr Arg Thr Lys Glu Leu Ala Glu Val Ile Ala Ala Ala Thr Pro Val 195 200 205 Lys Asp Lys His Lys His Pro Ala Thr Arg Thr Phe Gln Ala Val Arg 210 215 220 Ile Trp Val Asn Ser Glu Leu Glu Glu Ile Glu Leu Ala Leu Lys Ser 225 235

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Ser Leu Asp Val Leu Ala Pro Gly Gly Arg Leu Ser Ile Ile Ser Phe
             245
                                250 255
His Ser Leu Glu Asp Arg Ile Val Lys Arg Phe Met Arg Glu Gln Ser
          260
                            265 270
Arg Gly Pro Gln Val Pro Ala Gly Leu Pro Met Thr Glu Glu Gln Leu
      275
            280 285
Arg Lys Leu Gly Gly Arg Gln Leu Arg Ala Leu Gly Lys Leu Met Pro
  290 295 300
Gly Glu Glu Val Ala Glu Asn Pro Arg Ala Arg Ser Ser Val Leu
305 310 315
Arg Ile Ala Glu Arg Thr Asn Ala
              325
<210> 9442
<211> 503
<212> PRT
<213> Enterobacter cloacae
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Leu Ala Pro Trp Val Pro Met Leu Pro Ala Arg Ala Leu Arg Glu Met
       20
                            25
Val Leu Asp Ser Arg Val Ala Ala Ser Gly Asp Leu Phe Val Ala Val
    35
                        40
Val Gly His Gln Ala Asp Gly Arg Arg Tyr Ile Pro Gln Ala Ile Ala
 50
                     5.5
Gln Gly Val Ala Ala Ile Ile Ala Glu Ala Lys Asp Glu Ala Thr Asp
                 70
                      75
Gly Glu Ile Arg Glu Met His Gly Val Pro Val Ile Tyr Leu Ser Gln
             85
                                90
Leu Asn Glu Arg Leu Ser Ala Leu Ala Gly Arg Phe Tyr Asn Glu Pro
          100
                            105
Ser Asp Gln Leu Gln Leu Val Gly Val Thr Gly Thr Asn Gly Lys Thr
       115
                        120
                                           125
Thr Thr Thr Gln Leu Met Ala Gln Trp Ala Gln Leu Leu Gly Glu Thr
   130
                     135
                                       140
Gly Ala Val Met Gly Thr Val Gly Asn Gly Leu Leu Gly Lys Val Ser
145
                 150
                                    155
                                                     1.60
Pro Thr Glu Asn Thr Thr Gly Ser Ala Val Asp Val Gln Arg Val Leu
              165
                             170
Ala Gly Leu Ala Glu Gln Gly Ala Thr Phe Ala Ala Met Glu Val Ser
          180
                            185
                                             190
Ser His Gly Leu Val Gln His Arg Val Ala Ala Leu Lys Phe Ala Ala
       195
                         200
                                          205
Ser Val Phe Thr Asn Leu Ser Arg Asp His Leu Asp Tyr His Gly Asp
   210
                     215
                                    220
Met Glu His Tyr Glu Ala Ala Lys Trp Leu Leu Tyr Ser Thr His His
225
                 230
                                  235
His Gly Gln Ala Ile Ile Asn Ala Asp Asp Glu Val Gly Arg Arg Trp
              245
                               250
Leu Glu Lys Leu Pro Asp Ala Val Ala Val Ser Met Glu Asp Arg Ile
          260
                            265
                                              270
Asn Pro Asn Cys Arg Gly Arg Trp Leu Lys Ala Val Glu Val Asn Tyr
                         280
                                          285
His Asp Ser Gly Ala Thr Ile Arg Phe Ala Ser Ile Trp Gly Glu Gly
   290
                     295
                                      300
Glu Ile Glu Ser Arg Leu Met Gly Ala Phe Asn Val Ser Asn Leu Leu
305
                 310
                                  315
Leu Ala Leu Ala Thr Leu Leu Ala Leu Gly Tyr Pro Met Ala Asp Leu
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330

Leu Lys Thr Ala Glu Arg Leu Gln Pro Val Cys Gly Arg Met Glu Val 340 345 Phe Ser Ala Pro Gly Lys Pro Thr Val Val Val Asp Tyr Ala His Thr 355 360 365 Pro Asp Ala Leu Glu Lys Ala Leu Glu Ala Ala Arg Leu His Cys Ala 375 380 Gly Lys Leu Trp Cys Val Phe Gly Cys Gly Gly Asp Arg Asp Lys Gly 385 390 395 Lys Arg Pro Leu Met Gly Ala Ile Ala Glu Gln Phe Ala Asp Ile Pro 405 410 Val Val Thr Asp Asp Asn Pro Arg Thr Glu Glu Pro Arg Ala Ile Ile 420 425 430 Asn Asp Ile Leu Ala Gly Met Leu Asp Ala Gly Arg Ala Arg Val Val 435 440 445 Glu Gly Arg Ala Glu Ala Val Thr Asn Ala Ile Met Gln Ala Gln Glu 450 455 460 Asn Asp Val Val Leu Leu Ala Gly Lys Gly His Glu Asp Tyr Gln Ile 470 475 Val Gly Asn Arg Arg Leu Asp Tyr Ser Asp Arg Val Thr Ala Ala Arg 485 490 Leu Leu Gly Val Val Ala

<210> 9443 <211> 472

<212> PRT <213> Enterobacter cloacae

500

<400> 9443 Thr Glu Arg Leu Ala Gly Ala Ala Arg His Cys Ala Leu Leu Asp Tyr Phe Ala Asp Ala Gly Ala Asp Trp Pro Gly Asn Ala Glu Gly Thr Leu 20 Ile Met Ala Asp Tyr Gln Gly Lys Lys Val Val Ile Ile Gly Leu Gly 35 40 Leu Thr Gly Leu Ser Cys Val Asp Phe Phe Leu Ala Arg Gly Val Thr 50 55 Pro Arg Val Met Asp Thr Arg Val Ser Pro Pro Gly Leu Asp Lys Leu 70 Pro Glu Gln Val Glu Arg His Leu Gly Gly Leu Asn Asp Glu Trp Leu 85 90 Leu Thr Ala Asp Leu Ile Val Ala Ser Pro Gly Met Ala Leu Ala His 100 105 Pro Ser Leu Ser Ala Ala Ala Asp Ala Gly Val Glu Ile Val Gly Asp 115 120 Ile Glu Leu Phe Cys Arg Glu Ala Gln Ala Pro Ile Val Ala Ile Thr 135 140 Gly Ser Asn Gly Lys Ser Thr Val Thr Thr Leu Val Gly Glu Met Ala 145 150 155 Lys Ala Ala Gly Lys Asn Val Gly Val Gly Gly Asn Ile Gly Leu Pro 165 170 175 Ala Leu Met Leu Leu Asp Lys Gly Cys Glu Leu Phe Val Leu Glu Leu 180 1.85 190 Ser Ser Phe Gln Leu Glu Thr Thr Ser Ser Leu His Ala Ala Ala Ala 195 200 Thr Ile Leu Asn Val Thr Glu Asp His Met Asp Arg Tyr Pro Phe Gly 215 220 Leu Gln Gln Tyr Arg Ala Ala Lys Leu Arg Val Tyr Glu Asn Ala Lys 230 235 Val Cys Val Val Asn Ala Asp Asp Ala Leu Thr Met Pro Val Arg Gly 250

Ala Asp Asp Arg Cys Ile Ser Phe Gly Ile Asn Met Gly Asp Tyr His 260 265 Leu Asn Arg Gln Gln Gly Glu Thr Trp Leu Arg Val Lys Gly Glu Lys 275 280 285 Val Leu Asn Val Lys Glu Met Met Leu Ser Gly Gln His Asn Tyr Thr 290 295 300 Asn Ala Leu Ala Ala Leu Ala Leu Ala Asp Ala Val Gly Leu Pro Arg 310 315 Ser Ser Ser Leu Lys Ala Leu Thr Thr Phe Thr Gly Leu Ala His Arg 325 330 Phe Gln Leu Ala Leu Glu His Asn Gly Val Arg Trp Ile Asn Asp Ser 340 345 350 Lys Ala Thr Asn Val Gly Ser Thr Glu Ala Ala Leu Asn Gly Leu His 355 360 365 Val Asp Gly Thr Leu His Leu Leu Leu Gly Gly Asp Gly Lys Ser Ala 375 380 Asp Phe Ser Ser Leu Lys Gln Tyr Leu Asn Gly Asp Asn Val Arg Leu 390 395 Tyr Cys Phe Gly Arg Asp Gly Ser Glu Leu Ala Ala Leu Arg Pro Glu 405 410 Val Ala Glu Gln Thr Glu Thr Met Glu Gln Ala Met Arg Leu Ile Ala 420 425 430 Pro Arg Val Lys Pro Gly Asp Met Val Leu Leu Ser Pro Ala Cys Ala 435 440 Ser Leu Asp Gln Phe Lys Asn Phe Glu Gln Arg Gly Asp Val Phe Thr 450 455 Arq Leu Ala Lys Glu Leu Gly 465

<211> 493 <212> PRT <213> Enterobacter cloacae

<210> 9444

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Glu Asn Leu Lys Gln Thr Phe Ile Asn Phe Leu His Asn Leu Pro Phe 215 220 Tyr Gly Arg Ala Val Met Cys Val Asp Asp Pro Val Ile Arg Glu Leu 230 235 Leu Pro Arg Val Gly Arg Gln Ile Thr Thr Tyr Gly Phe Ser Glu Asp 245 250 255 Ala Asp Val Arg Val Glu Asp Tyr Lys Gln Ile Gly Ala Gln Gly His 260 265 270 Phe Thr Leu Ala Arg Gln Asp Lys Asp Leu Leu His Val Thr Leu Asn 275 280 285 Ala Pro Gly Arg His Asn Ala Leu Asn Ala Ala Ala Ala Val Ala Val 290 295 300 Ala Thr Glu Glu Gly Ile Asp Asp Glu Ala Ile Leu Arq Ala Leu Glu 310 315 Ser Phe Gln Gly Thr Gly Arg Arg Phe Asp Phe Leu Gly Glu Phe Pro 325 330 Leu Glu Pro Val Asn Gly Lys Pro Gly Ser Ala Met Leu Val Asp Asp 340 345 350 Tyr Gly His His Pro Thr Glu Val Asp Ala Thr Ile Lys Ala Ala Arg 360 355 365 Ala Gly Trp Pro Glu Lys Asn Leu Val Met Ile Phe Gln Pro His Arg 370 375 380 Tyr Thr Arg Thr Arg Asp Leu Tyr Asp Asp Phe Ala Asn Val Leu Ser 390 395 Gln Val Asp Thr Leu Leu Met Leu Asp Val Tyr Ala Ala Gly Glu Thr 405 410 Pro Ile Pro Gly Ala Asp Ser Arg Ser Leu Cys Arg Thr Ile Arg Gly 420 425 Arg Gly Lys Val Asp Pro Ile Leu Val Pro Asp Pro Ala Gln Val Ala 435 440 Glu Met Leu Ala Pro Val Leu Thr Gly Asn Asp Leu Ile Leu Ile Gln 450 455 460 Gly Ala Gly Asn Ile Gly Lys Ile Ala Arg Thr Leu Ala Glu Ile Lys 465 470 475 Leu Lys Pro Gln Thr Gln Glu Asp Glu Arg His Gly

<210> 9445 <211> 341 <212> PRT <213> Enterobacter cloacae

485

<400> 9445

130

Thr Leu Leu Leu Leu Ile Arg Pro Cys Trp Arg Arg Asn Gln Gly 10 Glu Arg Leu Lys His Gly Gly Arg Lys Arg Gly Val Met Leu Phe Gly 20 25 Ser Phe Arg Gly Pro Phe Leu Tyr Cys Phe Tyr Arg Tyr Gly Gln Leu 35 40 4.5 Val Ser Phe Arg Thr Leu Gly Arg Thr Glu Ser Met Ala Glu Pro Gln 55 Asn Asp Pro Leu Leu Pro Gly Tyr Ser Phe Asn Ala His Leu Val Ala 75 Gly Leu Thr Pro Ile Glu Ala Glu Gly Tyr Leu Asp Phe Tyr Val Asp 90 Arg Pro Leu Gly Met Lys Gly Tyr Ile Leu Asn Leu Thr Val Arg Gly 100 105 110 Glu Gly Val Val Lys Asn Gly Asp Gln Gln Phe Ile Cys Arg Pro Gly 115 120 125

Asp Met Leu Leu Phe Pro Pro Gly Glu Ile His His Tyr Gly Arg His

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Pro Asp Ala Lys Glu Trp Tyr His Gln Trp Val Tyr Phe Arg Pro Arg
145
     150
                  155 160
Ala Tyr Trp Gln Glu Trp Leu Ser Trp Pro Ala Ile Phe Ala His Thr
        165 170 175
Gly Leu Tyr Arg Pro Asp Glu Ala His Leu Ala Gln Phe Arg Glu Leu
       180 185 190
Phe Ala Gln Ile Ile Glu Ala Gly Gln Ala Gly Gly Arg Tyr Ala Glu
 195 200 205
Leu Leu Ala Ile Asn Leu Leu Glu Gln Val Leu Leu Arg Arg Met Glu
210 215 220
Ala Ile Asn Glu Ser Leu Asn Pro Pro Leu Asp Asn Arg Val Arg Asp
225 230 235 240
Ala Cys Gln Tyr Ile Ser Asp His Leu Ala Asp Ser Gln Phe Asp Ile
         245 250 255
Ala Ser Val Ala Gln His Val Cys Leu Ser Pro Ser Arg Leu Ser His
     260
                      265
                                    270
Leu Phe Arg Gln Gln Leu Gly Val Ser Val Leu Ser Trp Arg Glu Asp
                   280 285
Gln Arg Ile Ser Gln Ala Lys Leu Leu Leu Ser Thr Thr Arg Met Pro
                295 300
Ile Ala Thr Val Gly Arg Asn Val Gly Phe Glu Asp Gln Leu Tyr Phe
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Ser Arg Val Phe Lys Lys Cys Thr Gly Ala Ser Pro Ser Glu Phe Arg
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                         330
Ala Gly Cys Glu
        340
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<210> 9446

<211> 585 <212> PRT

<213> Enterobacter cloacae

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5.0

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Gly Gly Ala Val Asn Ala Ala Cys Glu Thr Gln Leu Arg Glu Leu Ile
225
                     235
        230
Glu Lys Leu Asn Leu Pro Val Ala Ser Ser Leu Met Gly Leu Gly Ala
         245
                            250 255
Phe Pro Ala Thr His Arg Gln Ala Leu Gly Met Leu Gly Met His Gly
         260 265 270
Thr Tyr Glu Ala Asn Met Thr Met His His Ser Asp Val Ile Phe Ala
    275 280 285
Val Gly Val Arg Phe Asp Asp Arg Thr Thr Asn Asn Leu Ala Lys Tyr
  290 295 300
Cys Pro His Ala Thr Val Leu His Ile Asp Ile Asp Pro Thr Ser Ile
305 310
                                315
Ser Lys Thr Val Pro Ala Asp Val Pro Ile Val Gly Asp Ala Arg Gln
          325
                             330
                                             335
Val Leu Asp Gln Met Leu Asp Leu Leu Ala Gln Glu Thr Ala Ser Gln
         340
                         345
                                          350
Pro Leu Asp Glu Ile Arg Asp Trp Trp Gln Gln Ile Glu Gln Trp Arg
      355
                      360
                                       365
Gly Arg Gln Cys Leu Lys Tyr Asp Thr Gln Ser Glu Asn Ile Lys Pro
 370
                   375
                                    380
Gln Ala Val Ile Glu Thr Ile Trp Arg Leu Thr Asn Gly Asp Ala Tyr
                390
                                 395
Val Thr Ser Asp Val Gly Gln His Gln Met Phe Ala Ala Leu Tyr Tyr
             405
                             410
Pro Phe Asp Lys Pro Arg Arg Trp Ile Asn Ser Gly Gly Leu Gly Thr
         420
                          425
Met Gly Phe Gly Leu Pro Ala Ala Leu Gly Val Lys Leu Ala Leu Pro
      435
                      440
                                      445
Asn Glu Thr Val Ile Cys Val Thr Gly Asp Gly Ser Ile Gln Met Asn
 450
                  455
                                   460
Ile Gln Glu Leu Ser Thr Ala Leu Gln Tyr Glu Leu Pro Val Leu Val
      470 475
Leu Asn Leu Asn Asn Gly Tyr Leu Gly Met Val Lys Gln Trp Gln Asp
            485
                             490
Met Ile Tyr Ser Gly Arg His Ser Gln Ser Tyr Met Lys Ser Leu Pro
         500
                          505
                                         510
Asp Phe Val Arg Leu Ala Glu Ala Tyr Gly His Ile Gly Met Arg Val
      515
                      520
                                       525
Thr Asp Pro Ser Glu Leu Glu Ala Lys Leu Gly Glu Ala Leu Glu His
  530
                  535
                                   540
Val Lys Asn Asn Arg Leu Val Pne Met Asp Val Ile Val Asp Gly Thr
545
               550
                               555
Glu His Val Tyr Pro Met His Ile Arg Gly Gly Gly Met Asp Glu Met
          565
                            570
Trp Leu Ser Lys Thr Glu Arg Thr
         580
<210> 9447
<211> 338
<212> PRT
<213> Enterobacter cloacae
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Gly Ala Ile Val Lys Leu Asp Glu Ile Ala Arg Leu Ala Gly Val Ser
                          10
Arg Thr Thr Ala Ser Tyr Val Ile Asn Gly Lys Ala Lys Gln Tyr Arg
                         25
Val Ser Asp Lys Thr Val Glu Lys Val Met Ala Val Val Arg Glu His
                     40
                                 4.5
```

Asn Tyr His Pro Asn Ala Val Ala Ala Gly Leu Arg Ala Gly Arg Thr

His

Arg Ser Ile Gly Leu Val Ile Pro Asp Leu Glu Asn Thr Ser Tyr Thr 7.0 7.5 Arg Ile Ala Asn Tyr Leu Glu Arg Gln Ala Arg Gln Arg Gly Tyr Gln 85 90 95 Leu Leu Ile Ala Cys Ser Glu Asp Gln Pro Asp Asn Glu Met Arg Cys 100 105 110 Ile Glu His Leu Leu Gln Arg Gln Val Asp Ala Ile Ile Val Ser Thr 115 120 125 Ser Leu Pro Pro Glu His Pro Phe Tyr Gln Arg Trp Ala Asn Asp Pro 135 140 Phe Pro Ile Val Ala Leu Asp Arg Ala Leu Asp Arg Glu His Phe Thr 145 150 155 160 Ser Val Val Gly Ala Asp Gln Asp Asp Ala Glu Met Leu Ala Ala Glu 165 170 175 Leu Arg Thr Phe Pro Ala Glu Thr Val Leu Tyr Leu Gly Ala Leu Pro 180 185 190 Glu Leu Ser Val Ser Phe Leu Arg Glu Gln Gly Phe Arg Thr Ala Trp 195 200 205 Lys Asp Asp Pro Arg Asp Val His Tyr Leu Tyr Ala Asn Ser Tyr Glu 220 210 215 Arg Glu Ala Ala Ala Gln Leu Phe Glu Lys Trp Leu Glu Thr His Pro 225 230 235 Met Pro Gln Ala Leu Phe Thr Thr Ser Phe Ala Leu Leu Gln Gly Val 245 250 255 Met Asp Val Thr Leu Arg Arg Asp Gly Lys Leu Pro Ser Asp Leu Ala 265 260 270 Ile Ala Thr Phe Gly Asp Asn Glu Leu Leu Asp Phe Leu Gln Cvs Pro 275 280 Val Leu Ala Val Ala Gln Arg His Arg Asp Val Ala Glu Arg Val Leu 290 295 300 Glu Ile Val Leu Ala Ser Leu Asp Glu Pro Arg Lys Pro Lys Pro Gly 310 305 315 Leu Thr Arg Ile Lys Arg Asn Leu Tyr Arg Arg Gly Ile Leu Ser Arg 325 330

<210> 9448 <211> 171 <212> PRT <213> Enterobacter cloacae

<400> 9448 Thr Pro Ser Gly Gly Asn Leu Trp Val Lys Val Val Arg Arg Gly Glu 10 Thr Gly Met Phe Arg Gly Ala Thr Leu Val Asn Leu Asp Ser Lys Gly 25 Arg Leu Ser Val Pro Thr Arg Tyr Arg Asp Gln Leu Ile Glu Asn Ala 4.0 Ser Gly Gln Leu Val Cys Thr Ile Asp Ile Asn Ser Pro Cys Leu Leu 5.5 Leu Tyr Pro Leu Pro Glu Trp Glu Ile Ile Glu Gln Lys Leu Ser Arg 70 75 Leu Ser Ser Met Asn Pro Gln Glu Arg Arg Val Gln Arg Leu Leu 8.5 90 Gly His Ala Ser Glu Cys Gln Met Asp Ser Ala Gly Arg Leu Leu Ile 105 100 110 Ala Pro Val Leu Arg Gln His Ala Gly Leu Thr Lys Glu Val Met Leu 120 125 115 Val Gly Gln Phe Asn Lys Phe Glu Leu Trp Asp Glu Thr Thr Trp Tyr

Gln Gln Val Lys Glu Asp Ile Asp Ala Glu Gln Ser Asp Ser Glu Thr 150 Leu Ser Glu Arg Leu Arg Asp Leu Ser Leu 165

<210> 9449 <211> 376 <212> PRT

<213> Enterobacter cloacae

<400> 9449

Cys Arg His Gly Arg Gly Cys Ala Arg Ile Thr Gly Glu Arg Asp Met 10 Leu Val Trp Leu Ala Glu His Leu Val Lys Tyr Tyr Ser Gly Phe Asn

20 25 Val Phe Ser Tyr Leu Thr Phe Arg Ala Ile Val Ser Leu Leu Thr Ala

4.0 4.5 Leu Phe Ile Ser Leu Trp Met Gly Pro Arg Met Ile Ala Arg Leu Gln 5.5

Lys Leu Ser Phe Gly Gln Val Val Arg Asn Asp Gly Pro Glu Ser His 65 70 75 Phe Ser Lys Arg Gly Thr Pro Thr Met Gly Gly Ile Met Ile Leu Thr

85 90 Ala Ile Val Val Ser Val Leu Leu Trp Ala Tyr Pro Ser Asn Pro Tyr

100 105 110 Val Trp Cys Val Leu Thr Val Leu Val Gly Tyr Gly Ile Ile Gly Phe

115 120 125 Val Asp Asp Tyr Arg Lys Val Val Arg Lys Asp Thr Lys Gly Leu Ile

130 135 140 Ala Arg Trp Lys Tyr Phe Trp Met Ser Val Ile Ala Leu Gly Val Ala 150 155

Phe Ala Leu Tyr Leu Ala Gly Lys Asp Thr Pro Ala Thr Glu Leu Val 165 170 175

Val Pro Phe Phe Lys Asp Val Met Pro Gln Leu Gly Leu Phe Tyr Ile 180 185 190 Leu Leu Ala Tyr Phe Val Ile Val Gly Thr Gly Asn Ala Val Asn Leu

200 205 Thr Asp Gly Leu Asp Gly Leu Ala Ile Met Pro Thr Val Phe Val Ala

210 215 220 Gly Gly Phe Ala Leu Val Ala Trp Ala Thr Gly Asn Met Asn Phe Ala

225 230 235 240 Asn Tyr Leu His Ile Pro Tyr Leu Arg His Ala Gly Glu Leu Val Ile 245 250 255

Val Cys Thr Ala Ile Val Gly Ala Gly Leu Gly Phe Leu Trp Phe Asn 260 265 270

Thr Tyr Pro Ala Gln Val Phe Met Gly Asp Val Gly Ser Leu Ala Leu 275 280 285

Gly Gly Ala Leu Gly Ile Ile Ala Val Leu Leu Arg Gln Glu Phe Leu 290 295 300 Leu Val Ile Met Gly Gly Val Phe Val Val Glu Thr Leu Ser Val Ile

310 315 305 Leu Gln Val Gly Ser Phe Lys Leu Arg Gly Gln Arg Ile Phe Arg Met

325 330 335 Ala Pro Ile His His His Tyr Glu Leu Lys Gly Trp Pro Glu Pro Arg 340 345 350

Val Ile Val Arg Phe Trp Ile Ile Ser Leu Met Leu Val Leu Ile Gly 360 Leu Ala Thr Leu Lys Val Arg

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<211> 369
<212> PRT
<213> Enterobacter cloacae
<400> 9450
Asn Ala Ser Gly Glu Ser Ser Gly Val Tyr Thr Arg Phe Thr Met Asn
                              1.0
Gln Pro Lys Arg Leu Met Val Met Ala Gly Gly Thr Gly Gly His Val
          2.0
                          25
                                            3.0
Phe Pro Gly Leu Ala Val Ala His His Leu Met Glu Gln Gly Trp Gln
                     40
                            4.5
Val Arg Trp Leu Gly Thr Ala Asp Arg Met Glu Ala Asp Leu Val Pro
  5.0
              55
                          60
Lys His Gly Ile Glu Ile Asp Phe Ile Arg Ile Ser Gly Leu Arg Gly
              7.0
                                 75
Lys Gly Ile Lys Ala Leu Leu Leu Ala Pro Val Arg Ile Phe Asn Ala
            85 90
Trp Arg Gln Ala Arg Ala Ile Met Lys Arg Phe Lys Pro Asp Val Val
         100
                          105 110
Leu Gly Met Gly Gly Tyr Val Ser Gly Pro Gly Gly Leu Ala Ala Trp
                       120
                                        125
Ser Leu Gly Ile Pro Val Val Leu His Glu Gln Asn Gly Ile Ala Gly
                   135 140
Leu Thr Asn Lys Trp Leu Ala Lys Ile Ala Thr Lys Val Met Gln Ala
145 150 155 160
Phe Pro Gly Ala Phe Pro Lys Ala Asp Val Val Gly Asn Pro Val Arg
             165
                              170
                                                175
Val Asp Val Leu Ala Leu Ala Leu Pro Asp Thr Arg Leu Ala Gly Arg
         180
                           185
                                            190
Glu Gly Pro Val Arg Val Leu Val Val Gly Gly Ser Gln Gly Ala Arg
                        200
                                         205
Ile Leu Asn Gln Thr Met Pro Gln Val Ala Ala Lys Leu Gly Asp Ala
                    215
                                     220
Val Thr Ile Trp His Gln Ser Gly Lys Gly Ala Gln Gln Thr Val Glu
                 230
                                  235
Gln Ala Tyr Ala Gln Glu Gly Gln Pro Gln His Lys Val Thr Glu Phe
             245
                              250
Ile Asp Asp Met Ala Ala Ala Tyr Ala Trp Ala Asp Val Val Cys
         260
                           265
                                            270
Arg Ser Gly Ala Leu Thr Val Ser Glu Ile Ala Ala Ala Gly Leu Pro
      275
                       280
                                         285
Ala Leu Phe Val Pro Phe Gln His Lys Asp Arg Gln Gln Tyr Trp Asn
                    295
                                     300
Ala Leu Pro Leu Glu Lys Ala Gly Ala Ala Lys Ile Phe Glu Gln Pro
                310
                                 315
Gln Phe Thr Ala Asp Ala Val Ala Thr Thr Leu Ala Gly Trp Asn Arg
             325
                              330
Asp Val Leu Leu Glu Met Ala Gln Arg Ala Arg Ala Thr Ala Ile Pro
          340
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<210> 9451
<211> 316
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355

<400> 9451

Ser Arg Lys Leu Arg Arg Thr Ser Val Met Ala Asp Lys Ile Ala Val

340 345 350
Asp Ala Thr Glu Arg Val Ala Lys Glu Val Ser Leu Ala Ala Gln Ala

365

<212> PRT <213> Enterobacter cloacae

```
Leu Phe Gly Gly Thr Ser Ala Glu Arg Glu Val Ser Leu Asn Ser Gly
         20
                        25
Ala Ala Val Leu Ala Gly Leu Arg Glu Gly Gly Val Asp Ala His Pro
                     40
Val Asp Pro Lys Glu Val Asp Val Thr Gln Leu Lys Ala Met Gly Phe
                55
Asp Lys Ala Phe Ile Ala Leu His Gly Arg Gly Glu Asp Gly Thr
        70
                              75
Leu Gln Gly Leu Leu Glu Leu Ile Gly Ile Pro Tyr Thr Gly Ser Gly
         85 90
Val Met Ala Ser Ala Ile Ser Met Asp Lys Leu Arg Ser Lys Leu Leu
      100 105
Trp Gln Gly Ala Gly Leu Pro Val Ala Pro Trp Val Ala Leu Thr Arg
    115 120 125
Arg Glu Tyr Glu Leu Gly Leu Ser Asp Ser Val Asn Thr Arg Ile Ala
  130 135 140
Ala Leu Gly Leu Pro Val Ile Val Lys Pro Ser Arg Glu Gly Ser Ser
145 150 155
Val Gly Met Ser Lys Val Asp Lys Ala Val Asp Leu Ala Asp Ala Leu
           165 170
Ala Leu Ala Phe Gln His Asp Glu Glu Val Leu Ile Glu Lys Trp Leu
             185
                             190
       180
Ser Gly Pro Glu Phe Thr Val Ala Met Leu Gly Glu Glu Ile Leu Pro
195 200 205
Ser Ile Arg Ile Gln Pro Ala Gly Val Phe Tyr Asp Tyr Glu Ala Lys
210 215 220
Tyr Leu Ser Asp Glu Thr Gln Tyr Phe Cys Pro Ala Gly Leu Glu Ala
            230
                             235
Glu Arg Glu Ala Glu Leu Gln Ser Leu Val Leu Lys Ala Trp Asn Val
           245
                           250
Leu Gly Cys Arg Gly Trp Gly Arg Ile Asp Val Met Leu Asp Gly Asp
      260
                        265
                            270
Gly Gln Phe Tyr Leu Leu Glu Ala Asn Thr Ser Pro Gly Met Thr Ser
                    280
                                  285
His Ser Leu Val Pro Met Ala Ala Arg Gln Ala Gly Met Ser Phe Ser
                  295
Gln Leu Val Val Arg Ile Leu Asp Gln Ala Gly
               310
```

<210> 9452 <211> 155 <212> PRT <213> Enterobacter cloacae

<400> 9452

120 Thr Lys Pro Glu Asn Gln Glu Arg Arg Arg Gln Glu Asn Asp Gln 130 135 Ala Ile Arg Asp Asn Arg Val Thr Gln His 150 <210> 9453 <211> 243 <212> PRT <213> Enterobacter cloacae <400> 9453 Pro Ser Asp Arg Leu Val Lys Thr Ile Val Gln Ala Thr Gly Val Gly Leu His Thr Gly Lys Lys Val Thr Leu Thr Leu Arg Pro Ala Pro Ala 20 25 3.0 Asn Thr Gly Val Ile Tyr Arg Arg Thr Asp Leu Asn Pro Pro Val Asp 4.0 Phe Pro Ala Asp Ala Lys Ser Val Arg Asp Thr Met Leu Cys Thr Cys 55 Leu Val Asn Glu His Asp Val Arg Ile Ser Thr Val Glu His Leu Asn 70 Ala Ala Leu Ala Gly Leu Gly Ile Asp Asn Ile Met Val Glu Val Asp 8.5 90 Ala Pro Glu Ile Pro Ile Met Asp Gly Ser Ala Ala Pro Phe Val Tyr 100 105 Leu Leu Leu Asp Ala Gly Ile Glu Glu Leu Asn Cys Ala Lys Lys Phe 115 120 125 Val Arg Ile Lys Glu Thr Val Arg Val Glu Asp Gly Asp Lys Trp Ala 135 140 Glu Phe Lys Pro Tyr Asn Gly Phe Ser Leu Asp Phe Thr Ile Asp Phe 150 155 Asn His Pro Ala Ile Asp Ser Ser Thr Gln Arg Tyr Ala Met Asn Phe 165 170 Ser Ala Asp Ala Phe Met Arg Gln Ile Ser Arg Ala Arg Thr Phe Gly 180 185 Phe Met Arg Asp Ile Glu Tyr Leu Gln Ser Arg Gly Leu Cys Leu Gly 195 200 205 Gly Ser Phe Asp Cys Ala Ile Val Val Asp Asp Tyr Arg Val Leu Asn 215 220 Glu Asp Gly Leu Arg Phe Glu Asn Glu Phe Val Arg His Lys Met Leu 230 235 Asp Ala Ile <210> 9454 <211> 282 <212> PRT <213> Enterobacter cloacae <400> 9454 His Glu Val Ala Leu Ile Tyr Pro Gly Asp Pro Met Ala Ile Lys Leu 10 Ile Ala Ile Asp Met Asp Gly Thr Leu Leu Leu Pro Asp His Thr Ile 20 25 Ser Pro Ala Val Lys Asn Ala Ile Ala Ala Ala Arg Glu Lys Gly Val 40 Asn Val Val Leu Thr Thr Gly Arg Pro Tyr Ala Gly Val His Ser Tyr 55 Leu Lys Glu Leu His Met Asn Gln Pro Gly Asp Tyr Cys Ile Thr Tyr

70

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Asn Gly Ala Leu Val Gln Lys Ala Ala Asp Gly Ser Thr Val Ala Gln
Thr Ala Leu Ser Tyr Asp Asp Tyr Arg Phe Leu Glu Lys Leu Ser Arg
                         105
Asp Val Gly Ser His Phe His Ala Leu Asp Arg Asn Thr Leu Tyr Thr
      115
                      120
                                       125
Ala Asn Arg Asp Ile Ser Tyr Tyr Thr Val His Glu Ser Tyr Val Ala
 130
                 135
                                   140
Thr Ile Pro Leu Val Phe Cys Glu Ala Glu Lys Met Asp Pro Ala Thr
    150 155
Gln Phe Leu Lys Val Met Met Ile Asp Glu Pro Ala Val Leu Asp Lys
      165 170 175
Ala Ile Ser Arg Ile Pro Ala Glu Val Lys Glu Lys Tyr Thr Val Leu
    180 185 190
Lys Ser Ala Pro Tyr Phe Leu Glu Ile Leu Asp Lys Arg Val Asn Lys
  195 200 205
Gly Thr Gly Val Lys Ser Leu Ala Asp Ala Leu Gly Ile Lys Pro Glu
 210
                   215 220
Glu Ile Met Ala Leu Gly Asp Gln Glu Asn Asp Ile Ala Met Ile Glu
225 230 235 240
Tyr Ala Gly Met Gly Val Ala Met Asp Asn Ala Ile Pro Ser Val Lys
    245 250 255
Glu Val Ala Asn Phe Val Thr Lys Ser Asn Leu Glu Asp Gly Val Ala
        260 265
Trp Ala Ile Glu Lys Phe Val Leu Ser
<210> 9455
<211> 326
<212> PRT
<213> Enterobacter cloacae
<400> 9455
Ser Ala Val Arg Cys Asp Thr Ala Ser Gly Arg Arg Cys Gly Arg Ala
                           10
Gly Gly Ala Asp His Asp Arg Gln Leu Asp Thr Lys Val Glu Gly Asn
                       25
His Met Thr Ser Arg Tyr Ile Ala Ile Asp Trp Gly Ser Thr Asn Leu
                     40
Arg Ala Trp Leu Tyr Gln Gly Glu Gln Cys Leu Glu Ser Arg Gln Ser
                 5.5
                       60
Glu Ala Gly Val Thr Arg Leu Asn Gly Lys Ser Pro Ala Ala Val Leu
               70
                              7.5
Ala Glu Val Thr Gln Asn Trp Arg Asp Gly Thr Thr Pro Val Val Met
            85
                            90
Ala Gly Met Val Gly Ser Asn Val Gly Trp Lys Val Ala Pro Tyr Leu
         100
                       105
Ser Val Pro Val His Phe Thr Ala Val Gly Glu Gln Leu Thr Ser Val
     115
                      120
                                      125
Gly Asp Asn Val Trp Ile Ile Pro Gly Leu Cys Val Ser Arg Asp Asp
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Ash His Ash Val Met Arg Gly Glu Glu Thr Gln Leu Leu Gly Ala Arg 145 $$ $$ $$ $$ 150 $$ $$ 150 $$ 150 $$ 160 Thr Leu Ser Pro Ser Ser Val Tyr Val Met Pro Gly Thr His Cys Lys 165 $$ Trp Val Gln Ala Asp Ala Glu Gln Ile His Asp Phe Arg Thr Val Met 180 $$ Thr Gly Glu Leu His His Leu Leu Lys His Ser Leu Val Gly Thr 195 $$ Gly Leu Pro Glu Gln Thr Pro Ser Pro Glu Ala Pae Ala Ala Gly Leu

140

220

135

215

130

```
5067
Glu Arg Gly Ile Ala Ser Pro Ala Val Leu Pro Gln Leu Phe Glu Val
                230
                                235
Arg Ala Ser His Val Leu Gly Asn Leu Pro Arg Glu Gln Val Ser Glu
             245
                             250
                                              255
Phe Leu Ser Gly Leu Leu Ile Gly Ala Glu Val Ala Thr Leu Ser Asp
         260
                         265
Ala Phe Ala Gly Gln Gln Ala Ile Thr Leu Val Ala Gly Ser Ser Leu
                           285
      275
           280
Thr Ser Arg Tyr Arg Gln Ala Phe His Ala Ile Gly Arg Asp Val Ala
 290 295 300
Ala Val Glu Gly Asp Thr Ala Phe Gln Ala Gly Ile Arg Ser Ile Ala
305 310
                      315
His Ala Val Ala Asn
            325
<210> 9456
<211> 112
<212> PRT
<213> Enterobacter cloacae
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Thr Gly Glu Asp Gly Leu Gln Ala Tyr Arg His Thr Glu Tyr Glu Pro Arg Gly Asp Pro Pro Gly Gly Gly Val Arg His Asp Arg Leu Pro Gly 20 Leu Arg His Gly Tyr Arg Ser Leu Cys Arg Pro Arg Cys Arg Arg Thr 4.0 4.5 Val Ser Gln Asn Phe Pro Val Val Gly Leu Trp Ser Gly Leu His Gln 5.5 Ser Ala Glu Ser Gly Leu Thr Arg Gln Arg Ala Gly Leu Cys Arg Gly 70 75 Arg Arg His Ala Gly Lys Pro Gly Ala Val Asp Lys Ser Gly Leu Cys

85 Gly Arg Arg Ala Gly Gln Arg Ser Leu Ser Cys Arg Thr Ala Arg

<210> 9457 <211> 401 <212> PRT

<400> 9456

<213> Enterobacter cloacae

<400> 9457 Ala Tyr Arg Thr Ala Gly Gly Ser Ile Cys Glu Ser Val Ser Arg Gly 10 Ser Ala Met Lys Ile Thr Lys Leu Thr Thr Tyr Arg Leu Pro Pro Arg 2.0 25 30 Trp Met Phe Leu Lys Ile Glu Thr Asp Glu Gly Val Val Gly Trp Gly 40 45 Glu Pro Val Ile Glu Gly Arg Ala Arg Thr Val Glu Ala Ala Val His 55 60 Glu Leu Gly Glu Tyr Leu Ile Gly Gln Asp Pro Ala Arg Ile Asn Asp 70 75 Leu Trp Gln Val Met Tyr Arg Ala Gly Phe Tyr Arg Gly Gly Pro Ile 8.5 90 Leu Met Ser Ala Ile Ala Gly Ile Asp Gln Ala Leu Trp Asp Ile Lys 100 105 Gly Lys Val Leu Asn Ala Pro Val Trp Gln Leu Met Gly Gly Leu Val 115 120 125 Arg Asp Lys Ile Lys Ala Tyr Ser Trp Val Gly Gly Asp Arg Pro Ala 130 135 140 Glu Val Ile Asp Gly Ile Arg Gln Leu Arg Asn Ile Gly Phe Asp Thr

150 155 Phe Lys Leu Asn Gly Cys Glu Glu Met Gly Val Ile Asp Asn Ser Arg 170 165 Ala Val Asp Arg Ala Val Asn Thr Val Ala Gln Ile Arg Glu Ala Phe 180 185 190 Gly Asn Glu Ile Glu Phe Gly Leu Asp Phe His Gly Arg Val Ser Ala 195 200 205 Pro Met Ala Lys Val Leu Ile Lys Glu Leu Glu Pro Tyr Arg Pro Leu 210 215 220 Phe Ile Glu Glu Pro Val Leu Ala Glu Gln Ala Glu Tyr Tyr Pro Lys 230 235 240 Leu Ala Glu Gln Thr His Ile Pro Ile Ala Ala Gly Glu Arg Met Phe 245 250 Ser Arg Phe Glu Phe Lys Arg Val Leu Glu Ala Gly Gly Ile Ala Ile 260 265 270 Leu Gln Pro Asp Leu Ser His Ala Gly Gly Ile Thr Glu Cys Tyr Lys 275 280 285 Ile Ala Gly Met Ala Glu Ala Tyr Asp Val Ala Leu Ala Pro His Cys 290 295 300 Pro Leu Gly Pro Ile Ala Leu Ala Ala Cys Leu His Val Asp Phe Val 305 310 315 Ser Arg Asn Ala Val Phe Gln Glu Gln Ser Met Gly Ile His Tyr Asn 325 330 Lys Gly Ala Glu Leu Leu Asp Phe Val Lys Asn Lys Glu Asp Phe Ser 340 345 350 Met Glu Gly Gly Phe Phe Lys Pro Leu Thr Lys Pro Gly Leu Gly Val 355 360 365 Glu Ile Asp Glu Ala Lys Val Ile Glu Leu Ser Lys Ser Ala Pro Asp 370 375 380 Trp Arg Asn Pro Leu Trp Arg His Glu Asp Gly Ser Val Ala Glu Trp 395

<210> 9458 <211> 466 <212> PRT

<213> Enterobacter cloacae

<400> 9458 Arg Ile Pro Phe Thr Phe Leu Ile Lys Lys Thr Lys Tyr Thr Leu Cys 1.0 Lys Leu Gln Gly Met Val Ser Gly Phe Ala Met Pro Lys Ile Trp Arg 20 25 30 Gln Ile Ala Met Asp Ile Pro Val Thr Ala Ala Lys Thr Gly Arg Arg 35 40 4.5 Arg Tyr Leu Thr Leu Ile Met Ile Phe Ile Thr Val Val Ile Cys Tyr 55 60 Val Asp Arg Ala Asn Leu Ala Val Ala Ser Ala His Ile Gln Glu Glu 7.0 75 Phe Gly Ile Thr Lys Ala Glu Met Gly Tyr Val Phe Ser Ala Phe Ala 85 90 Trp Leu Tyr Thr Leu Cys Gln Ile Pro Gly Gly Trp Phe Leu Asp Arg 100 105 Val Gly Ser Arg Leu Thr Tyr Phe Ile Ala Ile Phe Gly Trp Ser Val 115 120 125 Ala Thr Leu Phe Gln Gly Phe Ala Thr Gly Leu Met Ser Leu Ile Gly 135 140 Leu Arg Ala Ile Thr Gly Val Phe Glu Ala Pro Ala Phe Pro Thr Asn 150 155 Asn Arg Met Val Thr Ser Trp Phe Pro Glu His Glu Arg Ala Ser Ala

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Val Gly Phe Tyr Thr Ser Gly Gln Phe Val Gly Leu Ala Phe Leu Thr
                        185
Pro Leu Leu Ile Trp Ile Gln Glu Leu Leu Ser Trp His Trp Val Phe
      195
                    200
                                    205
Ile Val Thr Gly Gly Ile Gly Ile Ile Trp Ser Leu Ile Trp Phe Lys
  210
       215
                         220
Val Tyr Gln Pro Pro Arg Leu Thr Lys Ser Ile Thr Lys Ala Glu Leu
225
      230 235
Asp Tyr Ile Arg Asp Gly Gly Gly Leu Val Asp Gly Asp Ala Pro Val
            245 250 255
Lys Lys Glu Ala Arg Gln Pro Leu Thr Arg Ala Asp Trp Lys Leu Val
       260 265 270
Phe His Arg Lys Leu Val Gly Val Tyr Leu Gly Gln Phe Ala Val Thr
   275 280 285
Ser Thr Leu Trp Phe Phe Leu Thr Trp Phe Pro Asn Tyr Leu Thr Gln
 290 295 300
Glu Lys Gly Ile Thr Ala Leu Lys Ala Gly Phe Met Thr Thr Val Pro
         310
                   315
Phe Leu Ala Ala Phe Phe Gly Val Leu Leu Ser Gly Trp Leu Ala Asp
           325
                           330
Lys Leu Val Lys Lys Gly Phe Ser Leu Gly Val Ala Arg Lys Thr Pro
            345
        340
Ile Ile Cys Gly Leu Leu Ile Ser Thr Cys Ile Met Gly Ala Asn Tyr
     355 360
                                    365
Thr Asn Asp Pro Val Trp Ile Met Thr Leu Met Ala Val Ala Phe Phe
       375
                                 380
Gly Asn Gly Phe Ala Ser Ile Thr Trp Ser Leu Val Ser Ser Leu Ala
    390 395
Pro Met Arg Leu Ile Gly Leu Thr Gly Gly Val Phe Asn Phe Val Gly
           405
                           410
Gly Leu Gly Gly Ile Thr Val Pro Leu Val Ile Gly Tyr Leu Ala Gln
                        425
        420
Asp Tyr Gly Phe Gly Pro Ala Leu Val Tyr Ile Ser Ala Val Ala Leu
    435
                    440
                          445
Ile Gly Ala Leu Ser Tyr Ile Leu Leu Val Gly Asp Val Lys Arg Val
                  455
Glv
465
```

<210> 9459 <211> 427 <212> PRT <213> Enterobacter cloacae

<400> 9459

85 90 95

His Gly Pro Lys Asn Pro Asp Ala Asp Trp Gln Tyr Asp Phe His His
110 105

Arg Gln Gly Val Ile Ala His Asn Gly Gln Val Ser Asn Leu Asp Ala

```
120
Met Asp Ile Thr Ala Pro Tyr Thr Ala Gly Ala Leu Arg Gly Gly Thr
            135
                              140
His Val His Val Phe Ser Pro Asn Gly Gln Phe Val Ser Phe Thr Tyr
         150 155
Asn Asp His Val Leu His Ala Arg Asp Pro Gln Leu Asp Leu Arg Asn
         165 170 175
Val Gly Val Ala Ala Pro Phe Gly Pro Val Asn Pro Gln Gly Asn His
      180 185 190
Pro Arg Glu Tyr Ala Gly Thr Phe Trp Ser Val Leu Val Ser Arg Thr
195 200 205
Thr Pro Asn Pro Lys Pro Gly Ser Asp Glu Val Asn Arg Ala Tyr Glu
210 215 220
Glu Gly Trp Val Gly Asn Asp Arg Leu Ala Phe Ile Gly Asp Thr Val
225 230 235
Ser Ala Lys Gly Glu Lys Val Pro Glu Leu Phe Ile Val Asp Leu Pro
          245 250
Lys Asp Glu Gln Gly Trp Lys Arg Ala Gly Asp Ala Pro Leu Gln Gly
      260 265 270
Thr Pro Asp Thr Met Pro Ala Pro Pro Ala Gly Val Met Gln Arg Arg
275 280 285
Leu Thr Phe Thr His Gln Lys Ala Tyr Pro Gly Leu Val Asn Val Pro
290 295 300
Arg His Trp Val Arg Ser Asn Pro Gln Gly Thr Gln Val Ala Phe Leu
305 310 315 320
Met Arg Asp Asp Asn Gly Val Val Gln Leu Trp Leu Ile Ser Pro Glu
          325 330 335
Gly Gly Glu Pro Arg Gln Leu Thr His Ser Glu Ser Asp Ile Gln Ser
  340
                    345
Ala Phe Asn Trp His Pro Ser Gly Arg Thr Leu Gly Phe Val Leu Glu
355 360 365
Ser Arg Ile Ala Cys Cys Asp Ala Gln Thr Gly Glu Val Thr Phe Leu
              375
                              380
Thr Ser Asp His Gly Asn Pro Pro Ser Ala Asp Ala Val Val Phe Ser
385 390 395 400
Pro Asp Gly Arg Phe Ile Ala Trp Met Glu Ala Lys Asp Gly Phe Arg
          405 410
Gln Leu Trp Leu Thr Glu Thr Ala Gln Asn
```

<210> 9460 <211> 155 <212> PRT

<213> Enterobacter cloacae

<400> 9460

Thr Val Pro Asn Ser Leu Leu Arg Arg Arg Phe Ser Met Arg Asn Tyr Asp Phe Ser Pro Leu Leu Arg Gln Trp Ile Gly Phe Asp Lys Leu Ala 20 25 30 Asn Ala Leu Gln Ser Ala Thr Glu Gln Gln Thr Phe Pro Pro Tyr Asn 4.0 Ile Glu Lys Ser Asp Asp Asn His Tyr Arg Ile Thr Leu Ala Leu Ala 55 Gly Phe Arg Gln Glu Asp Leu Asp Ile Gln Leu Glu Gly Ala Arg Leu 70 75 Thr Val Lys Gly Ser Pro Glu Lys Pro Asp Thr Glu Thr Lys Trp Leu 90 His Gln Gly Leu Val Thr Gln Pro Phe Ser Leu Ser Phe Thr Leu Ala 105 Asp His Met Glu Val Ser Gly Ala Thr Phe Thr Asn Gly Leu Leu Asn

115 120 Ile Asp Leu Thr Arg Asn Val Pro Glu Ala Ile Ala Pro Gln Arg Ile 130 135 Ala Ile Ser Glu Arg Pro Ala Leu Asn Ser 150 <210> 9461 <211> 617 <212> PRT <213> Enterobacter cloacae <400> 9461 Ser Cys Ala Gly Trp Cys Pro His Pro Asp Pro Leu Pro Val Gly Glu 10 Gly Ala Asn Thr Lys Asn Gly His Leu Arg Val Thr Val Leu Arg Leu 25 Pro Ser Ala Phe Leu Cys Ala Ile Ala His Thr Thr Ala Ala Ser Ser 40 Glu Arg Ile Leu Ile Ile Thr Lys Val Ile His Arg Met Trp Asn Met 5.0 55 60 Ser Asp Ile Ala Leu Thr Val Ser Val Leu Ala Leu Val Ala Val Val 7.0 75 8.0 Gly Leu Trp Leu Gly Asn Ile Lys Ile Arg Gly Val Gly Phe Gly Ile 85 90 Gly Gly Val Leu Phe Gly Gly Ile Phe Val Gly His Phe Ala Asp Gln 100 105 110 Leu Gly Trp Val Leu Ser Ala Asp Met Leu His Phe Ile Gln Glu Phe 115 120 125 Gly Leu Ile Leu Phe Val Tyr Thr Ile Gly Ile Gln Val Gly Pro Gly 130 135 140 Phe Phe Ala Ser Leu Arg Ile Ser Gly Leu Arg Leu Asn Leu Phe Ala 145 150 155 Phe Gly Ile Val Val Met Gly Gly Leu Val Thr Ala Ile Leu His Lys 165 170 Leu Phe Ala Ile Pro Leu Pro Val Val Leu Gly Ile Phe Ser Gly Ala 180 185 190 Val Thr Asn Thr Pro Ala Leu Gly Ala Gly Gln Gln Ile Leu Arg Asp 195 200 Leu Gly Ile Pro Ala Asp Val Val Asp Gln Met Gly Met Ser Tyr Ala 215 220 Met Ala Tyr Pro Phe Gly Ile Cys Gly Ile Leu Leu Ser Met Trp Leu 230 235 240 Val Arg Val Leu Phe Arg Val Asn Val Gly Gln Glu Ala Lys Glu His 245 250 Glu Ser Thr Leu Thr Asn Gly His Ala Leu Ile Lys Thr Ile Asn Ile 265 260 Arg Val Glu Asn Pro Asn Leu Asn Asn Met Ala Ile Gln Asp Val Pro 275 280 285 Ile Leu Asn Ser Ala Thr Ile Ile Cys Ser Arg Leu Lys Arg Asp Asp 295 290 300 Thr Leu Met Val Pro Ser Pro Asp Thr Leu Ile Gln His Gly Asp Leu 310 315 Leu His Leu Val Gly Gln Pro Ala Asp Leu Asn Asn Ala Arg Leu Val 325 330 Ile Gly Gln Glu Val Asp Thr Ser Leu Ser Thr Arg Gly Thr Asp Met 345 Arg Val Glu Arg Val Val Thr Asn Glu Lys Val Leu Gly Lys Lys 355 360 Ile Arg Asp Leu Gln Val Lys Glu Arg Tyr Asp Val Val Ile Ser Arg 375 380

Leu Asn Arg Ala Gly Val Glu Leu Val Ala Ser Gln Asp Ala Ser Leu

```
385
              390
                            395
Gln Phe Gly Asp Ile Leu Asn Leu Val Gly Arg Pro Ser Ser Ile Asp
         405
                410
Ala Val Ala Asp Met Val Gly Asn Ala Gln Gln Lys Leu Gln Gln Val
       420 425 430
Gln Met Leu Pro Val Phe Ile Gly Val Gly Leu Gly Val Met Leu Gly
     435 440 445
Ser Ile Pro Leu Tyr Val Pro Gly Phe Pro Val Ala Leu Lys Leu Gly
450 455 460
Leu Ala Gly Gly Pro Leu Ile Met Ala Leu Ile Leu Gly Arg Ile Gly
     470 475
Ser Ile Gly Lys Leu Tyr Trp Phe Met Pro Pro Ser Ala Asn Leu Ala
          485 490 495
Leu Arg Glu Leu Gly Ile Val Leu Phe Leu Ala Val Val Gly Leu Lys
            505 510
Ser Gly Gly Asp Phe Val Asp Thr Leu Val Asn Gly Glu Gly Met Ser
   515 520 525
Trp Val Gly Tyr Gly Ile Phe Ile Thr Ala Ile Pro Leu Ile Thr Val
              535 540
 530
Gly Leu Leu Ala Arg Met Phe Ala Lys Met Asn Tyr Leu Thr Leu Cys
545
   550 555
Gly Met Leu Ala Gly Ser Met Thr Asp Pro Pro Ala Leu Ala Phe Ala
           565 570
Asn Asn Leu His Ala Thr Ser Gly Ala Ala Ala Leu Ser Tyr Ala Thr
   580
                      585
                           590
Val Tyr Pro Leu Val Met Phe Leu Arg Ile Ile Thr Pro Gln Leu Leu
   595 600
Ala Val Leu Phe Trp Gly Met Gly
```

610 <210> 9462 <211> 558

<212> PRT

<213> Enterobacter cloacae

<400> 9462 Lys Thr Ile Lys Ala Ser Ile Pro Tyr Arg Leu Phe His Glu Asp Leu Lys Met Leu Ser Gln Ile Gln Arg Phe Gly Gly Ala Met Phe Thr Pro 20 2.5 30 Val Leu Leu Phe Pro Phe Ala Gly Ile Val Val Gly Ile Ala Ile Met 35 40 45 Leu Arg Asn Pro Leu Phe Val Gly Glu Ala Leu Thr Ala Pro Asp Asn Leu Phe Ala Gln Ile Val His Ile Ile Glu Glu Gly Gly Trp Ala Val 70 75 Phe Arg Asn Met Pro Leu Ile Phe Ala Val Gly Leu Pro Ile Gly Leu 8.5 Ala Lys Gln Ala Gln Gly Arg Ala Cys Leu Ala Val Leu Ile Ser Phe 100 105 Leu Thr Trp Asn Tyr Phe Ile Asn Ala Met Gly Met Thr Trp Gly His 120 115 Phe Phe Gly Val Asp Phe Ser Ala Glu Pro Thr Ala Gly Ser Gly Leu 1.35 140 130 Ala Met Ile Ala Gly Ile Lys Thr Leu Asp Thr Ser Ile Ile Gly Ala 150 155 Ile Ile Ile Ser Gly Leu Val Thr Ala Ile His Asn Arg Phe Phe Asp 165 170 175 Lys Pro Leu Pro Val Phe Leu Gly Ile Phe Gln Gly Thr Ser Phe Val 180 185 190 Val Ile Leu Ala Phe Phe Val Met Ile Pro Cys Ala Trp Leu Thr Leu

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195
                        200
Leu Gly Trp Pro Lys Val Gln Met Gly Ile Glu Ser Leu Gln Ala Phe
                  215
                                220
Leu Arg Thr Ala Gly Ala Leu Gly Val Trp Val Tyr Thr Phe Leu Glu
       230
                                235
Arg Ile Leu Ile Pro Thr Gly Leu His His Phe Val Tyr Gly Pro Phe
           245 250
Ile Phe Gly Pro Ala Ala Val Glu Gly Gly Ile Gln Val Tyr Trp Ala
         260 265 270
Gln His Leu Gln Glu Phe Ser Gln Ser Thr Val Pro Leu Lys Thr Leu
           280 285
      275
Phe Pro Glu Gly Gly Phe Ala Leu His Gly Asn Ser Lys Val Phe Gly
                 295 300
Ser Val Gly Ile Ala Leu Ala Ile Trp Tyr Thr Ala Ser Pro Glu Asn
                 310 315
Arg Val Lys Val Ala Gly Leu Leu Ile Pro Ala Thr Leu Thr Ala Val
                   330 335
              325
Leu Val Gly Ile Thr Glu Pro Leu Glu Phe Thr Phe Leu Phe Ile Ser
                                350
          340
                            345
Pro Leu Leu Phe Ala Ile His Ala Val Leu Ala Ala Thr Met Ala Thr
                        360 365
       355
Val Met Tyr Ile Phe Gly Val Val Gly Asn Met Gly Gly Gly Leu Leu
                                      380
   370
                    375
Asp Gln Phe Leu Pro Gln Asn Trp Ile Pro Met Phe His Asn His Ala
       390
                                   395
Ser Thr Val Phe Thr Gln Ile Gly Ile Gly Leu Cys Phe Thr Gly Ile
                               410
             405
Tyr Phe Val Val Phe Arg Thr Leu Ile Glu Arg Leu Asn Leu Lys Thr
                            425
          420
Pro Gly Arg Glu Glu Ser Glu Ile Lys Leu Tyr Ser Lys Ala Asp Tyr
                        440
                                          445
       435
Lys Ala Ala Arg Gly Gln Thr Thr Ala Pro Ala Ala Ala Ser Gln Gln
                  455
                                      460
Val Gly Gln Ala Ala Gly Phe Leu Gln Ala Leu Gly Gly Ala Ala Asn
                                   475
                470
Ile Glu Ser Ile Asn Asn Cys Ala Thr Arg Leu Arg Ile Ala Leu Val
                               490
              485
Asp Met Thr Lys Thr Gln Ser Asp Asp Val Phe Lys Ala Leu Gly Ala
                           505
          500
His Gly Val Val Arg Arg Gly Asn Gly Ile Gln Val Ile Val Gly Leu
                        520
                                          525
His Val Pro Gln Val Arg Asp Gln Leu Glu Ser Leu Met Lys Thr Pro
                                       540
                     535
Leu Thr Asn Glu Gln Thr Thr Leu Thr Glu Ala Ile Ser
<210> 9463
<211> 237
<212> PRT
<213> Enterobacter cloacae
<400> 9463
Tyr Val Ser Ser Arg Ser Asp Asn Glu Arg Lys Gln Glu Cys Ala Ala
1
Lys Cys Lys His Arg Gly Asp Lys Arg Arg Arg Arg Ile Val Phe Glu
          20
                            25
                                              30
Gly Leu Ile Gln Gly Arg Ala Ala Val Leu Leu Asn Gln Pro Glu Glu
                        40
                                          45
Arg Ile Gly His Asp Arg Ala Ala Asn Ser Ala Gly Pro Asp Gly Asn
                     5.5
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Gly Asp Asp Leu Arg Ala Tyr Val Arg Val Glu Arg Gln His Arg Arg

```
7.5
His Tyr Arg Arg Gly Thr His His Arg Tyr Arg Cys Arg Thr His Gly
          8.5
                  90
                                   95
Gly Val Gln His Gln Cys His Gln Pro Gly Glu Lys Asp Arg Val His
       100 105 110
Met Gln Val Arg Glu Asn Met Arg Gln Arg Leu Arg Gln Thr Thr Gly
 115 120 125
Phe Lys Asp Gly Val Glu Arg Pro Ala Arg Thr Asp Asn Gln Gln Asn
130 135 140
Val Gly Asp Arg Ala Lys Ala Val Leu Arg Met Gly Gln His Cys Ala
145 150 155 160
His Ala His Val Leu Ala Asp Pro Gln Gln Val Ile Gly Asp Lys His
165 170 175
Gly Asp Lys His Arg Gly Asp Gly Val Ala Asp Lys Leu Gln Gln Gly
         180 185 190
Ile Gln Arg Ala Phe Phe Arg His Val Gln Leu Gly Asn Gly Phe His
195 200 205
Gln His Gln Gly Asn Arg Gln Gln His Gly Glu Gln Arg Gly Ala Gln
210 215 220
Arg Arg Gln Ser Val Leu Phe Pro His Leu Gln Val
                230
<210> 9464
<211> 318
<212> PRT
<213> Enterobacter cloacae
<400> 9464
Thr Gln Lys Leu Arg Val Gly Ile Val Met Thr Asp Ala Asn Glu Gly
                             10
Arg Asn Arg Leu Leu Asn Gly Trp Gln Leu Ser Lys Met Tyr Thr Phe
20
                         25
                                          3.0
Glu Val Ala Ala Arg His Glu Ser Phe Ala Leu Ala Ala Ala Glu Leu
35
                      40
                               4.5
Ser Leu Ser Pro Ser Ala Val Ser His Arg Ile Asn Leu Leu Glu Glu
                55
50
                                 60
Glu Leu Gly Ile Gln Leu Phe Val Arg Ser His Arg Lys Val Glu Leu
               70
                              75
                                                8.0
Thr Gln Glu Gly Lys Arg Val Tyr Trp Thr Leu Lys Ser Ser Leu Asp
                             90
            85
Thr Leu Asn Gln Glu Ile Leu Asp Ile Lys Asn Gln Ala Leu Ser Gly
        100 105
Thr Leu Thr Val Tyr Ser Arg Pro Ser Ile Ala Gln Cys Trp Leu Val
      115
                      120
                                     125
Pro Met Leu Gly Asp Phe Thr Arg Arg Tyr Pro Ser Ile Ser Leu Thr
 130 135
                                    140
Ile Leu Thr Gly Asn Asp Tyr Val Asn Met Gln Arg Thr Gly Ile Asp 145 150 150 160
Leu Ala Leu Tyr Phe Asp Asp Thr Pro Pro Asn His Leu Ser His His
                             170
                                             175
             165
Phe Leu Met Asp Glu Glu Ile Leu Pro Val Cys Ser Pro Ala Tyr Ala
         180 185
                                          190
Arg Glu His Glu Leu Leu Lys Asn Pro His Asn Leu Ser His Cys Thr
195 200 205
Leu Leu His Asp Arg Gln Ala Trp Ser Asn Asp Ser Gly Thr Asp Glu
 210
                   215
                                   220
Trp Leu Ser Trp Ala Gln His Phe Ala Val Asn Met Pro Leu Ser Ser
            230 235
Gly Ile Gly Phe Asp Arg Ser Asp Leu Ala Ile Ile Ala Ala Met Ser 245 250 255
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Asn Val Gly Val Ala Met Gly Arg Lys Arg Leu Val Gln Lys Arg Leu

Ala Ala Ser

260 265 Glu Arg Gly Glu Leu Ile Ala Pro Phe Asp Gly Glu Thr Leu Lys Cys 275 280 285 His Gln His Tyr Tyr Val Ser Thr Leu Pro Gly Arg Gln Trp Pro Lys 290 295 300 Ile Asp Ala Phe Ile Gly Trp Leu Arg Glu Leu Ala Gly <210> 9465 <211> 372 <212> PRT <213> Enterobacter cloacae <400> 9465 Thr Val Leu Lys Pro Phe Ile Ala Thr Ala Ile Leu Leu Ser Ser Gly 10 Trp Ala Thr Ala Ala Glu Pro Pro Leu Thr Ala Ala Arg Tyr Ala Gln 25 Met Leu Gly Val Gly Met Asp Val Asp Trp Ala Arg Thr Glu Arg Gly 35 40 Ile Arg Glu Phe Asp Pro Leu Val Val Arg Asp Phe Gln Ala Lys Gly 50 55 60 Ile His His Val Arg Ile Arg Val Ala Gly Glu Pro Thr Glu Ala Arg 70 75 Leu Ile His Leu Arg Lys Leu Val Glu Ala Cys Glu Gln Tyr Gly Val 85 90 Ile Pro Ile Ile Ala Tyr Gln Ala Asp Glu Tyr Lys Asn Asp Pro Lys 100 105 110 Ala Asp Thr Glu Lys Glu Val Ile Asn Trp Trp Ile Ala Val Ala His 115 120 Tyr Phe Gly Gln Arg Ser Pro Leu Leu Gly Phe Asp Leu Ile Tyr Glu 130 135 140 Pro Ala Asp Lys Leu Asn His Asn Val Ala Ser Leu Asn Arg Val Tyr 145 150 155 160 Glu Lys Ala Ile Lys Asp Ile His Ala Ile Asp Ala Ser Arg Met Ile 165 170 175 Phe Ile Ala Pro Arg Leu Arg Ala Ala Pro Glu Asp Leu Ser Thr Leu 180 185 190 Lys Leu Pro Ala His Ser Gln Asn Tyr Leu Leu Ala Glu Trp His Ile 195 205 200 Phe Pro Trp Gly Pro Leu Lys Thr Asn Gly Lys Tyr Pro Trp Thr Ser 210 215 220 Gly Thr Ala Ala Glu Lys Ala Ala Ile Arg Asn Arg Ile Asn Ala Ala 225 230 235 Leu His Trp Gln Gln Lys Thr Gly His Val Ser Trp Val Gly Gly Trp 245 250 255 Gly Val Gly Glu Ser Lys Ser Leu Thr Pro Thr Ala Ser Gln Met Ala 260 265 Phe Ala Thr Phe Met Ala Cys Glu Leu Gln His Ala Asn Ile Pro Tyr 275 280 Ala Ile Asn Ala Asp Val Gln Phe Tyr Asp Gly Glu Glu Gly Ala Trp 290 295 300 Arg Pro Ala Pro Glu Arg Leu Leu Gln Ala Met Ile Ala Pro Val Cys 305 310 315 Glu Lys Pro Gly Glu Lys Pro Gly His His Ala Val Lys Pro Ala Val 325 330 Arg Asp Ala Arg His Ala Thr Pro Ala Ala Ala Ser Thr Ala Lys Ser 340 345 350 Ala Ala Pro Ser Gly Ser Ser Ala Ser Leu Asn Ser Pro Ala Arg Ser 360 355

370

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<210> 9466
<211> 154
<212> PRT
<213> Enterobacter cloacae
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<400> 9466

Gly Glu Arg Met Val Trp Ile Met Leu Ala Thr Leu Ala Val Val Phe 1.0 Val Val Gly Phe Arg Val Leu Thr Ser Asp Ser Arg Arg Ala Ile Lys 20 25 Arg Leu Ser Glu Arg Leu Gly Ile Thr Pro Met Pro Val Glu Ser Met 35 4.0 4.5 Ile Asp Gln Phe Gly Lys Thr Pro Gly Asn Glu Phe Ile Arg Tyr Leu 60 50 35 Glu Arg Pro Asp Glu Ala His Leu Gln Asn Ala Ala Gln Val Leu Leu 75 70 65 Ile Trp Gln Val Cys Ile Val Asp Gly Ser Glu Glu Asn Leu His Thr 90 8.5 Trp His Arg Met Leu Arg Lys Ala Arg Leu Ala Ala Pro Ile Thr Asp 110 100 105 Ala Gln Ile Arg Leu Ala Leu Gly Phe Met Arg Glu Ile Glu Pro Asp 120 125 115 Pro Gln Glu Leu Asp Ala Phe Gln Leu Arg Tyr Asn Gln Leu Phe Leu 140 135 Pro Glu Glu Gly Val Phe Tyr Leu His

ro Glu Glu Gly Val Phe 45 150

45 1

<210> 9467 <211> 411

<212> PRT <213> Enterobacter cloacae

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<400> 9467 Thr Ala Arg Leu Phe Arg Thr Phe Leu Ser Ser Gly Asp Ala Met Thr 15 Glu His Ile Gln Pro Thr Thr Arg Pro Gln Thr Lys Glu Val Ser Arg 20 30 Pro Asn Trp Ser Ala Val Phe Ser Val Ala Phe Cys Val Ala Cys Leu 40 Ile Thr Val Glu Phe Leu Pro Val Ser Leu Leu Thr Pro Met Ala Gln 55 Asp Leu Gly Ile Ser Glu Gly Val Ala Gly Gln Ser Val Thr Val Thr 7.0 Ala Phe Val Ala Met Phe Ala Ser Leu Phe Ile Thr Gln Ala Ile Gly 90 85 Thr Ile Asp Arg Arg Lys Val Val Ile Leu Phe Ser Val Leu Leu Thr 100 105 Leu Ser Cys Leu Leu Val Ser Phe Ala Glu Ser Phe Thr Leu Leu Leu 115 120 Leu Gly Arg Ala Cys Leu Gly Leu Gly Leu Gly Gly Phe Trp Ala Met 130 135 140 Ser Ala Ser Leu Thr Met Arg Leu Val Pro Ala Arg Thr Val Pro Lys 150 155 Ala Leu Ser Val Ile Phe Gly Ala Val Ser Ile Ala Leu Val Ile Ala 170 165 Ala Pro Leu Gly Ser Phe Leu Gly Gly Ile Ile Gly Trp Arg Asn Val 185 190 180 Phe Asn Ala Ala Ala Val Met Gly Val Leu Cys Ile Ile Trp Val Trp 200

Lys Ala Leu Pro Ser Leu Pro Gly Glu Ala Ala His His Lys Gln Asn 210 215 220 Met Phe Ala Leu Leu Lys Arg Pro Gly Val Leu Ala Gly Met Thr Ala 230 235 Ile Phe Met Ala Phe Ala Gly Gln Phe Ala Phe Phe Thr Tyr Ile Arg 245 250 255 Pro Val Tyr Met Thr Met Ala Gly Phe Asp Val Asp Gly Leu Thr Leu 260 265 270 Val Leu Leu Ser Phe Gly Ile Ala Ser Phe Val Gly Thr Ser Leu Ser 275 280 285 Ser Gln Phe Leu Lys Arg Ser Leu Lys Val Ala Leu Ala Gly Ala Pro 295 300 Leu Val Leu Ala Ile Ser Ala Ala Val Leu Val Leu Trp Gly Ser Asp 305 310 315 Lys Trp Val Ala Ser Ala Ile Ala Ile Ile Trp Gly Phe Ala Phe Ala 325 330 335 Leu Val Pro Val Gly Trp Ser Thr Trp Ile Thr Arg Ser Leu Ala Asp 345 340 Gln Ala Glu Lys Ala Gly Ser Ile Gln Val Ala Val Ile Gln Leu Ala 355 360 Asn Thr Cys Gly Ala Ala Val Gly Gly Val Ala Leu Asp His Leu Gly 375 380 Leu Thr Ser Pro Leu Val Ile Ser Gly Thr Leu Met Leu Leu Thr Ala 395 390 Leu Leu Val Ala Gly Lys Val Lys Ala Lys 405

<210> 9468 <211> 375 <212> PRT

<213> Enterobacter cloacae

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Lys Gln Phe Leu Pro Glu Phe Ser Leu Thr Phe Ser Phe Gln Arq Gly
                     235
225
      230
Trp Glu Lys Glu Thr Asp Tyr Ala Glu Val Leu Glu Arg Ser Phe Glu
          245
                            250 255
Arg Asp Arg Met Leu Thr Tyr Thr Ala His Gly Pro His Lys Ala Asp
         260 265 270
Phe Arg Ile Arg Ala Asp Gly Ala Pro Val Glu Asp Thr Leu Ser Arg
     275 280 285
Gly Gln Leu Lys Leu Leu Met Cys Ala Leu Arg Leu Ala Gln Gly Glu
 290 295 300
Phe Leu Thr Arg Glu Ser Gly Arg Arg Cys Leu Tyr Leu Ile Asp Asp
               310 315 320
Phe Ala Ser Glu Leu Asp Asp Ala Arg Arg Gly Leu Leu Ala Ser Arg
      325 330 335
Leu Lys Ala Thr Gln Ser Gln Val Phe Val Ser Ala Ile Ser Ala Glu
         340
                         345 350
His Val Met Asp Met Ser Asp Glu Asn Ser Lys Met Phe Thr Val Glu
   355
                      360
Lys Gly Lys Ile Thr Asp
  370
<210> 9469
<211> 346
<212> PRT
<213> Enterobacter cloacae
<400> 9469
Gln Glu Lys Lys Met Thr Ala Thr Met Gln Arg Trp Ser Met Asp Ala
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Leu Gly Arg Glu Ser Leu Arg Leu Val Gln Glu Pro Val Pro Gln Pro
                         25
                                          30
Gly Ser Gly Glu Val Arg Val Arg Val Asn Ala Val Ala Leu Asn Tyr
35
                      4.0
                                      4.5
Arg Asp Lys Met Val Ile Glu Gly Thr Met Pro Ile Pro Leu Ser Phe
50
                   55
                                   60
Pro Phe Thr Pro Ala Ser Asp Met Ala Gly Val Val Asp Ser Ile Gly
                                75
             7.0
                                                 80
Glu Gly Val Thr Arg Phe Lys Pro Gly Ala Arg Val Ile Ser Thr Phe
            85
                             90
Phe Pro Glu Trp Ile Asp Gly Lys Pro Gln Ala Asp Ala Arg Asp Leu
         100 105
                                       110
Pro Tyr Lys Thr Ser Gly Gly Tyr Phe Gln Gly Met Leu Ala Glu Tyr
                      120
                                       125
      115
Val Ile Val Ser Glu Asn Ala Leu Val Ala Ser Pro Glu Ser Leu Asp
         135
   130
                                    140
Asp Ala Glu Ala Ser Thr Leu Pro Cys Ala Gly Leu Thr Ala Trp Phe
                                155
145
             150
                                                 160
Ala Leu Val Glu Arg Gly His Leu Arg Ala Gly Gln Ser Val Leu Val
                            170
                                              175
            165
Gln Gly Thr Gly Gly Val Ala Leu Phe Ala Leu Gln Ile Ala Lys Ala
         180
                185
                                          190
His Gly Ala Glu Val Phe Val Ser Ser Gly Ser Asp Glu Lys Leu Ala
      195
                       200
                                       205
Arg Ala Lys Lys Leu Gly Ala Ser Gln Gly Ile Asn Arg Leu Lys Gly
                   215
Asp Trp Ala Glu Asn Thr Leu Ala Leu Thr Gln Asp Arg Gly Ile Asp
225
      230
                                235
His Ile Ile Glu Thr Val Gly Gly Glu Asn Leu Arg His Ser Leu Arg
             245
                             250
                                              255
Ala Val Ala Val His Gly Arg Ile Ser Val Ile Gly Val Leu Ala Gly
         260
                          265
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Thr Glu Ile Ser Leu Pro Ala Ser Glu Leu Leu Leu Lys Ser Pro Val 275 280 Ile Gln Gly Ile Gly Val Gly His Arg Arg Ala Leu Glu Asp Phe Val 295 300 290 Arg Ala Val Asp Val Thr Glu Leu Lys Pro Val Ile Glu His Arg Tyr 305 310 315 320 Arg Phe Asp Glu Leu Glu Gln Ala Leu Glu His Leu Asp Arg Gly Ala 325 330 Phe Gly Lys Ile Val Leu Thr Arg Glu 340 <210> 9470 <211> 239 <212> PRT <213> Enterobacter cloacae <400> 9470 Trp Thr Tyr Arg Ala Gln Gly Leu Ser Met Thr Leu Asn Lys Thr Asp 10 Arg Ile Val Ile Thr Leu Gly Thr Gln Ile Val Gly Gly Lys Tyr Val 25 3.0 20 Pro Gly Ser Pro Leu Pro Ala Glu Ala Glu Leu Cys Glu Glu Phe Glu 35 40 Thr Ser Arg Asn Ile Ile Arg Glu Val Phe Arg Ser Leu Met Ala Lys 50 55 Arg Leu Ile Glu Met Lys Arg Tyr Arg Gly Ala Phe Val Ala Pro Arg 70 75 Asn Gln Trp Asn Tyr Leu Asp Thr Asp Val Leu Gln Trp Val Leu Glu 90 85 Asn Asp Tyr Asp Pro Arg Leu Ile Gly Ala Met Ser Glu Val Arg Asn 100 105 Leu Val Glu Pro Ala Ile Ala Arg Trp Ala Ala Glu Arg Ala Thr Ser 120 125 115 Gly Asp Leu Ala Gln Ile Glu Ser Ala Leu Asn Asp Met Ile Ala Asn 135 140 130 Asn Gln Asn Arg Glu Ala Phe Asn Glu Ala Asp Ile Arg Tyr His Glu 150 155 145 Ala Val Leu Gln Ser Val His Asn Pro Val Leu Gln Gln Leu Ser Val 170 175 165 Ala Ile Ser Ser Leu Gln Arg Ala Val Phe Glu Arg Thr Trp Met Gly 185 190 180 Asp Glu Ala Asn Met Pro Lys Thr Leu Gln Glu His Lys Ala Leu Phe 205 195 200 Asp Ala Ile Arg His Gln Asp Gly Asp Ala Ala Glu Gln Ala Ala Leu 215 210 Thr Met Ile Ala Ser Ser Thr Arg Arg Leu Lys Glu Ile Thr 230 235 <210> 9471 <211> 210 <212> PRT <213> Enterobacter cloacae <400> 9471 Gly Ala Ser Leu Met Gln Trp Gln Thr Glu Leu Pro Leu Ile Ala Ile 10 Leu Arg Gly Ile Thr Pro Gly Glu Ala Leu Ala His Val Gly Ala Val 30 25 Ile Asp Ala Gly Phe Asp Ala Val Glu Ile Pro Leu Asn Ser Pro Glu 40 Trp Glu Lys Ser Ile Pro Ala Ile Val Lys Ala Phe Gly Asp Lys Ala

55 Leu Ile Gly Ala Gly Thr Val Leu Gln Pro Glu Gln Val Asp Glu Leu 70 7.5 Ala Lys Met Gly Cys Lys Leu Ile Val Thr Pro Asn Met Asn Pro Glu 85 90 Val Ile Arg Arg Ala Val Glu Tyr Gly Met Thr Val Cys Pro Gly Cys 105 110 Ala Thr Ala Thr Glu Ala Phe Ala Ala Leu Asp Ala Gly Ala Gln Ser 115 120 125 Leu Lys Ile Phe Pro Ser Ser Ala Phe Gly Pro Asp Tyr Ile Lys Ala 130 135 140 Leu Lys Ala Val Leu Pro Ala Ser Val Pro Val Phe Ala Val Gly Gly 145 150 155 Val Thr Pro Glu Asn Leu Val Gln Trp Ile Lys Ala Gly Cys Val Gly 165 170 175 Ala Gly Leu Gly Ser Asp Leu Tyr Arg Ala Gly Gln Pro Val Glu Arg 185 190 180 Thr Ala Gln Gln Ala Ala Phe Val Lys Ala Tyr Arg Glu Ala Val 200 195 210 <210> 9472 <211> 126 <212> PRT <213> Enterobacter cloacae <400> 9472 Ser Leu His Ala Ala Arg Gln Gly Thr Phe Met Asn Ile Ser Arg Leu Gly Glu Ala Pro Asp Tyr Arg Phe Ser Leu Ala Asn Glu Arg Thr Phe 20 Leu Ala Trp Ile Arg Thr Ala Leu Gly Phe Leu Ala Ala Gly Val Gly 4.0 Leu Asp Gln Leu Ala Pro Asp Phe Ala Thr Pro Leu Ile Arg Glu Val 60 55 Leu Ala Leu Leu Cys Leu Ile Ala Gly Val Leu Ala Ile Tyr Gly 80 70 75 Tyr Leu Arg Trp Leu Arg Asn Glu Lys Ala Met Arg Leu Lys Gln Asp 90 8.5 Leu Pro Tyr Thr Arg Gly Leu Leu Ile Ile Ser Thr Ile Leu Leu Met 105 Val Ala Gly Val Val Met Leu Leu Val Leu Tyr Ala Gly 115 <210> 9473 <211> 153 <212> PRT <213> Enterobacter cloacae <400> 9473 Thr Ile Thr Val Pro Thr Ser Ala Pro Asn Leu Leu Val Thr Asn Ser 15 Ala Ala Gly Cys Gly Gly Thr Thr Gln Cys Thr Ala Ile Ser Ala Val 20 25 Gln Ser Gly Met Ala Ser Leu Ser Ser Asp Val Leu Val Phe Leu Ala 35 4.0 4.5 Met Glu Asn Ala Ser Gly Ile Ser Ser Thr Thr Pro Thr Ser Thr Asn 55 60 Ser Val Met Pro Gln Ile Arg Pro Thr Arg Thr Ile Ile Thr Ser Ala

Asp Ser Gln Arg Gln Arg Cys Asn Val Ile Pro Met Arg Ser Ala Ala 8.5 Pro Glu Thr Ser Ile Ile Leu Pro Arg Ile Val Pro Arg Pro Ile Thr 100 105 110 Ala Ala Arg Lys Pro Ser Val Pro Pro Ile Pro Leu Ser Met Ala Leu 115 120 125 Thr Ile Ser Ser Gly Leu Ile Pro Ile Ile Ala Pro Thr Lys Lys Leu 130 135 140 Ala Ser Ser Ser Ala Arg Asn Gly 150 <210> 9474 <211> 143 <212> PRT <213> Enterobacter cloacae <400> 9474 Gly Glu Glu Met Met Ile Val Ala Asp Ala Met Lys Ala Thr His Ala 10 Leu Val Ala Ala Val Pro Leu Leu Gly Glu Gln Pro Ser Glu Lys Asp 25 20 Tyr Lys Asp Ala Leu Glu Leu Val Glu Tyr Leu Leu Met Asn Glu Pro 35 4.0 4.5 Asn Ser Pro Leu Leu Asp Ile Val Cys Ala Arg Ile Ser Arg Tyr Glu 55 60 Ala Asn Arg Pro Glu Ile Val Ala Leu Arg Lys Glu Met Glu Ser Val 65 70 75 80 Pro Val Gly Ile Ala Val Leu Arg Thr Leu Met Asp Gln Tyr Asn Leu 9.0 85 Thr Ile Ser Asp Phe Lys Asp Glu Ile Gly Ser Lys Ser Met Val Ser 100 105 110 Arg Val Leu Asn Gly Gln Arg Gln Leu Thr Leu Asn His Ile Lys Lys 120 115 Leu Ala Ala Arg Phe Gly Val Ser Pro Ala Leu Phe Ile Glu 130 135 <210> 9475 <211> 577 <212> PRT <213> Enterobacter cloacae <400> 9475 Thr Thr Arg Lys Ala Gly Ser Glu Glu Lys Asp Trp Ser Met Ala 10 Ser Ser Gly Thr Thr Ser Thr Lys Thr Arg Phe Thr Gly Ala Gln Leu 20 25 30 Ile Val His Leu Leu Glu Arg Gin Gly Ile Thr Thr Val Ala Gly Ile 40 45 Pro Gly Gly Thr Val Leu Pro Leu Tyr Asp Ala Leu Ser Gln Ser Thr Gln Ile Arg His Val Leu Ala Arg His Glu Gln Gly Ala Gly Phe Ile 70 75 Ala Gln Gly Met Ala Arg Thr Gln Gly Lys Pro Ala Val Cys Met Ala 8.5 90 Cys Ser Gly Pro Gly Ala Thr Asn Leu Val Thr Ala Ile Ala Asp Ala 100 105 110 Arg Leu Asp Ser Ile Pro Leu Ile Cys Ile Thr Gly Gln Val Pro Ser 115 120 Ser Met Ile Gly Thr Asp Ala Phe Gln Glu Val Asp Thr Tyr Gly Ile 135

Ser Ile Pro Ile Thr Lys His Asn Tyr Leu Val Arg Asp Ile Ser Glu

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150
Leu Pro Gln Val Ile Ser Asp Ala Phe Arg Ile Ala Gln Ser Gly Arg
      165 170
Pro Gly Pro Val Trp Ile Asp Ile Pro Lys Asp Val Gln Thr Ala Glu
     180
                     185
                         190
Ile Glu Ile Asp Ile Leu Pro Glu Pro Gly Glu Arg Ala Pro Ala Pro
 195 200 205
Glu Phe Ser Ala Glu Ser Val Arg Asp Ala Ala Ala Met Ile Asn Ala
210 215 220
Ala Lys Arg Pro Val Leu Tyr Leu Gly Gly Gly Ala Ile Asn Ala Ala
225 230 235 240
Asp Glu Ile Arg Gln Phe Ala Glu Lys Ala Asn Leu Pro Thr Thr Met
       245 250 255
Thr Leu Met Ala Leu Gly Met Leu Pro Lys Ala His Pro Leu Ser Leu
   260 265 270
Gly Met Leu Gly Met His Gly Ala Arg Ser Thr Asn Tyr Ile Leu Gln
275 280 285
Glu Ala Asp Leu Leu Ile Val Met Gly Ala Arg Phe Asp Asp Arg Ala
290 295 300
Ile Gly Lys Thr Glu Gln Phe Cys Pro Asn Ala Lys Ile Ile His Val
305 310 315
Asp Ile Asp Arg Ala Glu Leu Gly Lys Ile Lys Gln Pro His Val Ala
        325 330 335
Ile Gln Gly Asp Val Ala Glu Val Leu Ala Gln Leu Ile Pro Gln Thr
       340 345
Val Ala Thr Asp Arg Ala Asp Trp Arg Gln Leu Val Ala Asp Leu Gln
355 360 365
Arg Glu Phe Pro Gly Ala Ile Pro Thr Glu Gly Asp Pro Leu Ser His
370 375 380
Tyr Gly Leu Ile Asn Ala Val Ala Ala Cys Val Asp Asp Ser Ala Ile
385 390
                          395
Ile Thr Thr Asp Val Gly Gln His Gln Met Trp Thr Ala Gln Ala Tyr
        405 410 415
Pro Leu Asn Arg Pro Arg Gln Trp Leu Thr Ser Gly Gly Leu Gly Thr
420 425 430
Met Gly Phe Gly Leu Pro Ala Ala Val Gly Ala Ala Leu Ala Asn Pro
    435 440
                      445
Asp Arg Lys Val Ile Cys Phe Ser Gly Asp Gly Ser Leu Met Met Asn
 450 455 460
Ile Gln Glu Met Ala Thr Ala Ala Glu Asn Gln Leu Asp Val Lys Ile
465 470 475
Ile Leu Met Asn Asn Glu Ala Leu Gly Leu Val His Gln Gln Gln Ser
         485 490 495
Leu Phe Tyr Lys Gln Gly Val Phe Ala Ala Thr Tyr Pro Gly Met Ile
                     505 510
      500
Asn Phe Met Gln Ile Ala Ala Gly Phe Gly Leu His Thr Cys Asp Leu
                      525
515 520
Asn Ala Glu Glu Asp Ala His Ala Ala Leu Gln Asp Ala Ile Ser Arg
                   540
                535
Pro Gly Pro Ala Leu Ile His Val Arg Ile Asp Pro Glu Gln Lys Val
545 550 555
Tyr Pro Met Val Pro Pro Gly Ala Ala Asn Thr Glu Met Val Gly Glu
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           565
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<210> 9476

<211> 97 <212> PRT

<213> Enterobacter cloacae

<210> 9477

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<211> 505 <212> PRT <213> Enterobacter cloacae <400> 9477 Gln Leu Ala Met Asn Ser Leu Phe Ser Arg Leu Ile Ala Val Val Ala 1.0 Ser Phe Phe Ile Phe Ser Ala Ala Trp Phe Cys Leu Trp Ser Ile Ser 20 25 30 Leu His Leu Val Glu Arg Pro Glu Leu Ala Val Leu Leu Phe Pro Phe 35 40 Gly Leu Arg Leu Gly Leu Met Leu Gln Cys Pro Arg Gly Tyr Trp Pro 60 55 Val Leu Leu Gly Ala Glu Trp Leu Met Leu Ile Trp Leu Ala Gln Glu 70 75 65 Val Ala Leu Ala His Leu Pro Leu Leu Met Thr Gly Ser Leu Leu Thr 9.0 85 Leu Ile Pro Val Ala Leu Ile Ser Arg Tyr Arg His Gln Arg Asp Trp 105 110 100 Arg Thr Leu Leu Arg Gln Gly Ala Ala Leu Ile Ala Ala Ala Leu Leu 125 115 120 Gln Ser Leu Pro Trp Val Gly Glu Lys Glu Val Leu Asn Ala Leu Leu 135 130 140 Leu Thr Leu Thr Gly Gly Leu Thr Leu Ala Pro Thr Cys Leu Val Ile 150 155 Trp His Tyr Leu Thr Ser Thr Val Trp Gln Pro Leu Gly Pro Ala Leu 165 170 175 Val Ser Gln Pro Val Asn Trp Arg Ala Arg His Leu Ile Trp Tyr Leu 185 180 190 Leu Leu Phe Val Val Ser Leu Trp Leu Gln Leu Gly Leu Pro Ala Glu 205 195 200 Leu Ser Arg Phe Thr Pro Phe Cys Leu Ala Leu Pro Ile Ile Ala Leu 215 220 Ala Trp His Tyr Gly Trp Gln Gly Ala Leu Ile Ala Thr Leu Met Asn 230 235 Ala Ile Ala Leu Ile Ala Ser Gln Thr Trp His Asp His Pro Val Asp 245 250 255 Leu Leu Ser Leu Leu Ala Gin Ser Leu Thr Gly Leu Leu Leu Gly 260 265 270 Ala Gly Ile Gln Arg Leu Arg Glu Leu Asn Gln Ser Leu Gln Asn Glu 280 275 Leu Ala Arg Asn Arg Arg Leu Ala Glu Arg Leu Leu Glu Thr Glu Glu 295 300 Ser Val Arg Gln Glu Val Ala Arg Glu Leu His Asp Asp Ile Gly Gln

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310
                            315
Thr Ile Thr Ala Ile Arg Thr Gln Ala Gly Ile Val Gln Arg Leu Ala
         325 330
Ala Glu Asn Ala Gly Val Lys Gln Gly Gly Ala His Ile Glu Gln Leu
            345 350
       340
Ser Leu Gly Val Tyr Asp Ser Val Arg Arg Leu Leu Gly Arg Leu Arg
355 360 365
Pro Arg Gln Leu Asp Asp Leu Ser Leu Glu Gln Ala Val Arg Ser Leu
370 375 380
Met Arg Glu Met Glu Leu Gla Ser Arg Gly Ile Val Ser His Leu Asp
385 390 395 400
Trp Arg Ile Ser Glu Pro Ala Leu Ser Glu Gly Gln Arg Val Thr Leu
           405 410 415
Phe Arg Val Cys Gln Glu Gly Leu Asn Asn Ile Val Lys His Ala Ser
        420 425
Ala Ser Ala Val Thr Ile Gln Gly Trp Gln Gln Asp Glu Arg Leu Met
         440 445
Leu Val Ile Glu Asp Asp Gly Cys Gly Leu Pro Pro Gly Ser Gly Gln
                     460
450 455
Gln Gly Phe Gly Leu Ala Gly Met Arg Glu Arg Val Lys Ala Leu Gly
           470
                             475
Gly Thr Leu Ser Leu Ser Cys Thr His Gly Thr Arg Val Ser Val Ser
           485
                          490
Leu Pro Leu Arg Thr His His Val
        500
```

<210> 9478 <211> 339

<212> PRT <213> Enterobacter cloacae

<400> 9478 Arg Arg Ala Cys Met Leu Thr Arg Arg Leu Ser Cys Leu Ala Leu Leu 10 Met Ala Leu Ala Ser Pro Ala Met Ala Ala Asn Ala Pro Thr Tyr Gly Glu Lys Leu Glu Gly Phe Asp Tyr Gly Trp Pro Val Lys His Phe Thr 40 Phe Thr Ser Gln Asn Gln Pro Leu Asp Met Ala Tyr Leu Asp Val Lys Pro Glu Lys Pro Asn Gly Arg Thr Val Val Leu Met His Gly Lys Asn 70 7.5 Phe Cys Ala Gly Thr Trp Asp Gly Thr Ile Arg Ala Leu Ser Ala Ser 90 95 85 Gly Tyr Arg Val Ile Ala Pro Asp Gln Ile Gly Phe Cys Lys Ser Thr 100 105 Lys Pro Glu His Tyr Gln Tyr Thr Phe Gln Gln Leu Ala Asp Asn Thr 120 115 His Ala Leu Leu Lys Thr Leu Gly Val Asp Arg Val Thr Val Ile Gly 140 135 His Ser Thr Gly Gly Met Leu Ala Thr Arg Tyr Ala Leu Met Trp Pro 155 150 Gin Gin Val Glu Gin Leu Val Met Val Asn Pro Ile Gly Leu Glu Asp 165 170 175 Trp Lys Ala Arg Gly Val Pro His Ile Thr Val Asp Gln Trp Tyr Gln 185 190 180 Arg Glu Leu Lys Val Ser Ala Asp Gly Ile Arg Gln Tyr Glu Lys Asn 195 200 205 Thr Tyr Tyr Ala Gly Glu Trp Lys Pro Glu Tyr Glu Arg Trp Val Thr 210 215 220 Met Leu Ala Gly Leu Asn Asn Gly Pro Gly Lys Glu Arg Val Ala Trp

230 235 Asn Ser Ala Leu Leu Tyr Asp Met Ile Tyr Thr Gln Pro Val Ile Tyr 245 250 255 Glu Phe Ser Glu Leu Ser Met Pro Val Leu Leu Met Ile Gly Thr Lys 260 265 270 Asp Asn Thr Ala Ile Gly Lys Asp Leu Ala Pro Pro Glu Ile Arg Lys 275 280 285 Thr Leu Gly Asn Tyr Ala Val Leu Gly Lys Glu Thr Ala Lys Arg Ile 290 295 300 Pro His Ala Thr Leu Val Glu Phe Asn Asp Met Gly His Ala Pro Gln 305 310 315 320 Met Gln Asp Pro Glu Arg Phe His Glu Ala Leu Leu Lys Gly Leu Gln 325

Ala Arg

<210> 9479 <211> 177

<212> PRT <213> Enterobacter cloacae

<400> 9479

Thr Met Lys Gln Ser Ala Ile Ile Trp Pro Asn Asp Tyr Leu Pro Gly 10 Thr Thr Asp Asn Phe Ala Ser Asn Glu Ile Ile Val Ala Gly Leu Ser 25 30

20 Ala Lys Glu Ile Trp Ala Gln Leu Asn Asp Thr Thr Leu Trp Pro Asn 35 40

Tyr Tyr Ser Asn Ala Glu Asp Ile Arg Phe His Asp Gly Ser Gly Pro 5.0 5.5 60

Glu Leu Ser Ala Asn Ala Arg Phe Arg Phe Thr Thr Phe Gly Phe Pro 75 80 70 Val Glu Ala Gln Val Thr Glu Tyr Val Pro Pro Val Asp Gly Glu Ala

8.5 90 Ala Arg Ile Ala Trp His Gly Trp Val Glu Gly Asp Ala Ser Ser Arg

110 100 105 Leu Asp Val Ile His Ala Trp Leu Phe Glu Asp Leu Pro Gly Asn Arg 115 120 125

Val Arg Ile Leu Thr Gln Glu Ser Gln Lys Gly Val Pro Ala Gln Glu 130 135 140

Leu Ala Arg Thr Val Pro Asn Pro Met Ile Asn Gly His Gln Glu Trp 150 155 160 Ile Val Gly Leu Ala Asn Ala Ala Met Gln Glu Lys Leu Ser Lys Arg

165 170 175

<210> 9480 <211> 370 <212> PRT <213> Enterobacter cloacae

<400> 9480 Pro Pro Arg Thr Tyr Glu Trp Leu Ala Gly Ala Val Gly Asn Lys Pro 10 Leu Gln Gln Val Ser Gly Pro Leu Gly Gly Arg Pro Thr Leu Pro Ile 20 25 30 Leu Gly Asn Leu Leu Gln Val Ala Asp Gly Thr Leu Ser Leu Thr 35 40 Gly Thr Asp Leu Glu Met Glu Met Ile Ala Arg Val Thr Leu Thr Gln 55

Pro His Asp Ala Gly Ala Thr Thr Val Pro Ala Arg Lys Phe Phe Asp 75 Ile Cys Arg Gly Leu Pro Glu Gly Ala Glu Ile Ala Val Gln Leu Glu 85 90 Gly Asp Arg Met Leu Val Arg Ser Gly Arg Ser Arg Phe Ser Leu Ser 100 105 110 Thr Leu Pro Ala Ala Asp Phe Pro Asn Leu Asp Asp Trp Gln Ser Glu 115 120 125 Val Glu Phe Thr Leu Pro Gln Ala Thr Met Lys Arg Leu Ile Glu Ala 140 130 135 Thr Gln Phe Ser Met Ala His Gln Asp Val Arg Tyr Tyr Leu Asn Gly 150 155 Met Leu Phe Glu Thr Glu Gly Glu Glu Leu Arg Thr Val Ala Thr Asp 165 170 175 Gly His Arg Leu Ala Val Cys Ser Met Pro Ile Gly Asp Ser Leu Pro 180 185 190 Asn His Ser Val Ile Val Pro Arg Lys Gly Val Ile Glu Leu Met Arg 195 200 205 Met Leu Asp Gly Gly Asp Thr Pro Leu Arg Val Gln Ile Gly Ser Asn 220 210 215 Asn Ile Arg Ala His Val Gly Asp Phe Val Phe Thr Ser Lys Leu Val 230 235 Asp Gly Arg Phe Pro Asp Tyr Arg Arg Val Leu Pro Lys Asn Pro Asp 245 250 Lys Thr Leu Glu Ala Gly Cys Asp Ile Leu Lys Gln Ala Phe Ala Arg 265 270 260 Ala Ala Ile Leu Ser Asn Glu Lys Phe Arg Gly Val Arg Leu Tyr Val 285 275 280 Ser Glu Asn Gln Ile Lys Ile Thr Ala Asn Asn Pro Glu Gln Glu Glu 290 295 300 Ala Glu Glu Ile Leu Asp Val Thr Tyr Ala Gly Ala Glu Met Glu Ile 315 305 310 Gly Phe Asn Val Ser Tyr Val Leu Asp Val Leu Asn Ala Leu Lys Cys 325 330 335 Glu Asn Val Arg Ile Leu Leu Thr Asp Ser Val Ser Ser Val Gln Ile 340 345 350 Glu Asp Ala Ala Ser Gln Ser Ala Ala Tyr Val Val Met Pro Met Arg 360 355

Leu 370

<210> 9481

<211> 810 <212> PRT

<213> Enterobacter cloacae

<400> 9481 Asn Glu Arg Glu Thr Leu Met Ser Asn Ser Tyr Asp Ser Ser Ser Ile Lys Val Leu Lys Gly Leu Asp Ala Val Arg Lys Arg Pro Gly Met Tyr 25 3.0 Ile Gly Asp Thr Asp Asp Gly Thr Gly Leu His His Met Val Phe Glu 35 4.0 4.5 Val Val Asp Asn Ala Ile Asp Glu Ala Leu Ala Glv His Cys Lys Asp 55 Ile Val Val Thr Ile His Ala Asp Asn Ser Val Ser Val Thr Asp Asp 70 75 8.0 Gly Arg Gly Ile Pro Thr Gly Ile His Pro Glu Glu Gly Val Ser Ala 85 90 95 Ala Glu Val Ile Met Thr Val Leu His Ala Gly Gly Lys Phe Asp Asp 105 100

Asn Ser Tyr Lys Val Ser Gly Gly Leu His Gly Val Gly Val Ser Val 120 115 Val Asn Ala Leu Ser Gln Lys Leu Glu Leu Val Ile Gln Arg Glu Gly 135 140 Lys Ile His Arg Gln Ile Tyr Gln His Gly Val Pro Glu Ala Pro Leu 145 150 155 Ala Val Thr Gly Asp Thr Glu Lys Thr Gly Thr Met Val Arg Phe Trp 165 170 175 Pro Ser Leu Glu Thr Phe Thr Asn Val Thr Glu Phe Glu Tyr Asp Ile 180 185 190 Leu Ala Lys Arg Leu Arg Glu Leu Ser Phe Leu Asn Ser Gly Val Ser 195 200 205 Ile Arg Leu Arg Asp Lys Arg Asp Asn Lys Glu Asp His Phe His Tyr 210 215 220 Glu Gly Gly Ile Lys Ala Phe Val Glu Tyr Leu Asn Lys Asn Lys Thr 230 235 Pro Ile His Pro Asn Ile Phe Tyr Phe Ser Thr Glu Lys Asp Gly Ile 250 245 Gly Val Glu Val Ala Leu Gln Trp Asn Asp Gly Phe Gln Glu Asn Ile 260 265 270 Tyr Cys Phe Thr Asn Asn Ile Pro Gln Arg Asp Gly Gly Thr His Leu 280 285 Ala Gly Phe Arg Ala Ala Met Thr Arg Thr Leu Asn Ala Tyr Met Asp 290 295 300 Lys Glu Gly Tyr Ser Lys Lys Ala Lys Val Ser Ala Thr Gly Asp Asp 305 310 315 Ala Arg Glu Gly Leu Ile Ala Val Val Ser Val Lys Val Pro Asp Pro 325 330 335 Lys Phe Ser Ser Gln Thr Lys Asp Lys Leu Val Ser Ser Glu Val Lys 345 350 340 Ser Ala Val Glu Gln Gln Met Asn Glu Leu Leu Ser Glu Tyr Leu Leu 365 355 360 Glu Asn Pro Ser Asp Ala Lys Ile Val Val Gly Lys Ile Ile Asp Ala 375 380 370 Ala Arg Ala Arg Glu Ala Ala Arg Lys Ala Arg Glu Met Thr Arg Arg 395 385 390 Lys Gly Ala Leu Asp Leu Ala Gly Leu Pro Gly Lys Leu Ala Asp Cys 405 410 415 Gln Glu Arg Asp Pro Ala Leu Ser Glu Leu Tyr Leu Val Glu Gly Asp 420 425 430 Ser Ala Gly Gly Ser Ala Lys Gln Gly Arg Asn Arg Lys Asn Gln Ala 435 440 445 Ile Leu Pro Leu Lys Gly Lys Ile Leu Asn Val Glu Lys Ala Arg Phe 455 460 Asp Lys Met Leu Ser Ser Gln Glu Val Ala Thr Leu Ile Thr Ala Leu 470 475 Gly Cys Gly Ile Gly Arg Asp Glu Tyr Asn Pro Asp Lys Leu Arg Tyr 490 495 485 His Ser Ile Ile Ile Met Thr Asp Ala Asp Val Asp Gly Ser His Ile 505 510 Arg Thr Leu Leu Thr Phe Phe Tyr Arg Gln Met Pro Glu Ile Val 520 515 Glu Arg Gly His Val Tyr Ile Ala Gln Pro Pro Leu Tyr Lys Val Lys 535 540 530 Lys Gly Lys Gln Glu Gln Tyr Ile Lys Asp Asp Asp Ala Met Asp Gln 545 550 555 Tyr Gln Ile Ala Ile Ala Leu Asp Gly Ala Thr Leu His Ala Asn Ser 5 6 5 570 Ser Ala Pro Ala Leu Ala Gly Glu Pro Leu Glu Arg Leu Val Ser Glu 585 580 Phe Asn Ala Thr Gln Lys Met Ile Gly Arg Met Glu Arg Arg Tyr Pro

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595
                       600
Lys Ala Leu Leu Lys Glu Leu Ile Tyr Gln Pro Thr Leu Thr Glu Ala
          615
                            620
Asp Leu Ser Asn Glu Gln Thr Val Thr Arg Trp Val Asn Thr Leu Val
625 630 635
Ser Glu Leu Asn Glu Lys Glu Gln His Gly Ser Gln Trp Lys Phe Asp
          645 650 655
Val Gln Gln Asn Ala Glu Gln Gln Phe Glu Pro Ile Val Arg Val Arg
         660 665 670
Thr His Gly Val Asp Thr Asp Tyr Pro Leu Glu His Glu Phe Val Thr
      675 680 685
Gly Pro Glu Tyr Arg Arg Ile Cys Thr Leu Gly Glu Lys Leu Arg Gly
 690 695 700
Leu Ile Glu Asp Asp Ala Phe Ile Glu Arg Gly Glu Arg Arg Gln Pro
       710 715
Val Ala Ser Phe Glu Gln Ala Leu Glu Trp Leu Val Lys Glu Ser Arg
          725 730 735
Arg Gly Leu Ser Ile Gln Arg Tyr Lys Gly Leu Gly Glu Met Asn Pro
         740
                        745
Asp Gln Leu Trp Glu Thr Thr Met Asp Pro Glu Ser Arg Arg Met Leu
          760
      755
                                        765
Arg Val Thr Val Lys Asp Ala Ile Ala Ala Asp Gln Leu Phe Thr Thr
                                    780
770 775
Leu Met Gly Asp Ala Val Glu Pro Arg Arg Ala Phe Ile Glu Glu Asn
                790
                                795
785
Ala Leu Lys Ala Ala Asn Ile Asp Ile
             805
<210> 9482
<211> 143
<212> PRT
<213> Enterobacter cloacae
<400> 9482
Phe Gln Glu His Leu Ser Met Arg Asn Phe Asp Leu Ser Pro Leu Tyr
Arg Ser Ala Ile Gly Phe Asp Arg Leu Phe Asn His Leu Glu Asn Asn
          20
                          25
                                           30
Gln Ser Gln Ser Asn Gly Tyr Pro Pro Tyr Asn Val Glu Leu Val Asp
 35
                      40
                                        4.5
Glu Asn His Tyr Arg Ile Ala Ile Ala Val Ala Gly Phe Ala Glu Ser
  50
                   55
                                    60
Glu Leu Glu Ile Thr Ala Gln Asp Asn Leu Leu Val Val Lys Gly Ser
                70
                                75
His Ala Gly Glu Gln Lys Glu Arg Thr Tyr Leu Tyr Gln Gly Ile Ala
                              90
            85
Glu Arg Asn Phe Glu Arg Lys Phe Gln Leu Ala Glu Asn Ile His Val
                                           110
          100
                          105
Lvs Gly Ala Asn Leu Val Asn Gly Leu Leu Phe Ile Glu Leu Glu Arg
      115 120
Val Ile Pro Glu Glu Lys Lys Pro Arg Arg Ile Glu Ile Asn
   130
                    135
<210> 9483
<211> 493
<212> PRT
<213> Enterobacter cloacae
<400> 9483
Arg Ile Gln Ser Pro Gly Arg Thr Arg Cys Gly Ala Ala Arg Gln Arg
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His Thr Gly Asp Cys Arg Ser Ala Arg Ser Ser Gly Ala Arg Pro Ala 20 25 Gly Ile Ala Asp Glu Asn Pro Phe Asn Lys Arg Thr Asn His Ser Asp 35 4.0 Arg Gly Tyr Ile Met Lys Lys Phe Ser Val Val Ile Ala Gly Gly Gly 55 60 Ser Thr Phe Thr Pro Gly Ile Val Leu Met Leu Leu Ala Asn Arg Asp 75 70 Arg Phe Pro Leu Arg Ala Leu Lys Phe Tyr Asp Asn Asp Gly Ala Arg 8.5 90 Gln Glu Ile Ile Ala Glu Ala Cys Lys Ile Ile Leu Lys Glu Gln Ala 100 105 Pro Glu Ile Glu Phe Ser Tyr Thr Thr Asp Pro Glu Ala Ala Phe Thr 115 120 125 Asp Val Asp Phe Val Met Ala His Ile Arg Val Gly Lys Tyr Pro Met 135 140 130 Arg Glu Lys Asp Glu Lys Ile Pro Leu Arg His Gly Val Leu Gly Gln 145 150 155 Glu Thr Cys Gly Pro Gly Gly Ile Ser Tyr Gly Met Arg Ser Ile Gly 165 170 175 Gly Val Leu Glu Leu Val Asp Tyr Met Glu Gln Tyr Ser Pro Asn Ala 185 190 180 Trp Met Leu Asn Tyr Ser Asn Pro Ala Ala Ile Val Ala Glu Ala Thr 1.95 200 205 Arg Arg Leu Arg Pro Asn Ala Lys Ile Leu Asn Ile Cys Asp Met Pro 220 215 Ile Gly Ile Glu Gly Arg Met Ala Gln Ile Val Gly Leu Lys Asp Arg 230 235 Lys Glu Met Arg Val Arg Tyr Tyr Gly Leu Asn His Phe Gly Trp Trp 245 250 Thr Ser Ile Glu Asp Gln Asn Gly Asn Asp Leu Met Pro Lys Leu Arg 265 270 260 Glu Tyr Val Ala Lys Asn Gly Tyr Val Pro Pro Ser Glu Asp Val His 280 285 Thr Glu Ala Ser Trp Asn Asp Thr Phe Ala Lys Ala Lys Asp Val Gln 290 295 300 Ala Leu Asp Pro Asp Thr Met Pro Asn Thr Tyr Leu Lys Tyr Tyr Leu 310 315 Phe Pro Asp Tyr Val Val Ala His Ser Asn Pro Glu Arg Thr Arg Ala 325 330 335 Asn Glu Val Met Asp His Arg Glu Lys His Val Phe Ser Ser Cys Arg 350 340 345 Ala Ile Ile Glu Ala Gly His Ser Ser Ala Gly Glu Leu Glu Ile Asp 360 355 Glu His Ala Ser Tyr Ile Val Asp Leu Ala Thr Ala Ile Ala Phe Asn 375 380 Thr Gln Glu Arg Met Leu Leu Ile Val Pro Asn Asn Gly Ala Ile His 390 395 Asn Phe Asp Ala Asp Ala Met Val Glu Ile Pro Cys Leu Val Gly His 405 410 Asn Gly Pro Glu Pro Leu Thr Val Gly Asp Ile Pro His Phe Gln Lys 420 425 430 Gly Leu Met Ser Gln Gln Val Ala Val Glu Lys Leu Val Val Asp Ala 435 440 445 Trp Glu Gln Arg Ser Tyr Gln Lys Leu Trp Gln Ala Ile Thr Leu Ser 450 455 460 Lys Thr Val Pro Ser Ala Ser Val Ala Lys Ala Ile Leu Asp Asp Leu 470 475 Ile Glu Ala Asn Lys Asp Tyr Trp Pro Glu Leu His

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<210> 9484
<211> 121
<212> PRT
<213> Enterobacter cloacae
<400> 9484
Cys Tyr Trp Cys Cys Met Pro Asp Ser Arg Lys Ala Arg Arg Glu Ala
                                  1.0
Asp Pro Gly Leu Gln Pro Glu Arg Thr Ser Leu Ala Trp Leu Arg Thr
                                                   30
                               25
Leu Leu Gly Tyr Gly Ala Leu Ile Ala Leu Ala Ile Lys His Asn Trp
                    40
                                              45
His Arg Thr Gly Ala Pro Phe Trp Ile Ser Ile Val Val Leu Ala Leu
                    5.5
Val Ala Ile Ile Leu Trp Arg Tyr Thr Arg Ser Arg Asn Leu Met Asp
                   70
                                       75
Val Ser Gln Asn Asp Phe Ala Gin Pro Lys Ala Val Arg Asp Lys Phe
               85
                                   90
Leu Ile Ala Leu Ala Val Leu Ser Leu Ser Leu Leu Phe Ala Val Thr
           100
                               105
His Ile Gln Gln Ile Leu His Leu
       115
<210> 9485
<211> 114
<212> PRT
<213> Enterobacter cloacae
<400> 9485
Trp Gln Trp Thr Arg Gln Ala Ser Arg Met His Leu Ile Ser Met Lys
                                   10
Ala Ile Leu Asp Ala Val Ser Gln Phe Pro Gln His Arg Glu Glu Leu
                               25
                                                   3.0
           20
Leu Phe Leu Gly Arg Val Ile Glu Lys Ser His Cys Pro Thr Pro Ala
       35
                           40
                                               45
Ala Leu Arg Lys Leu Phe Pro Thr Leu Asp Asn Phe Lys Tyr Leu Asp
                     55
 50
Lys His Tyr Val Ile Asp Ile Ala Asn Asn Asn Leu Arg Val Val Ala
                    70
                                       75
65
Leu Ile Phe Phe Glu Ser Gln Lys Phe Tyr Val Arg His Val Phe Thr
                                   90
               8.5
His Lys Glu Tyr Asp Arg Phe Thr Glu Lys His Arg Thr Lys Gly Lys
                               105
                                                   110
            100
Lys
<210> 9486
<211> 256
<212> PRT
<213> Enterobacter cloacae
<400> 9486
Arg Arg Ser Thr Ser Trp Lys Thr Ser Pro Lys Trp Arg Ala Thr Ser
                                    10
Pro Ile Pro Pro Cys Leu Thr Lys Leu Arg Cys Ser Ser Asn Arg Ser
                                25
                                                    30
Leu Lys Val Ser Val Phe Arg Ser Cys Arg Pro Asp Lys Arg Ser Ala
                                               4.5
                            40
Ile Arq Leu Phe Gln Thr Ala Gly Thr His Met Thr Thr Ile Ala Leu
                        55
Ile Asp Asp His Leu Ile Val Arg Ser Gly Phe Ala Gln Leu Leu Asn
```

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70
                                75
Leu Glu Pro Asp Phe Gln Val Val Ala Glu Phe Gly Ser Gly Arg Glu
          85
                 90
Ala Leu Ala Gly Leu Pro Gly Arg Gly Val Gln Val Cys Ile Cys Asp
       100
             105 110
Ile Ser Met Pro Asp Leu Ser Gly Leu Glu Leu Leu Ser Gln Leu Pro
 115 120 125
Lys Gly Met Ala Thr Ile Met Leu Ser Val His Asp Ser Pro Ala Leu
 130 135 140
Val Glu Gln Ala Leu Asn Ala Gly Ala Arg Gly Phe Leu Ser Lys Arg
145 150 155
Cys Ser Pro Asp Glu Leu Ile Ala Ala Val Arg Thr Val Ser Thr Gly
165 170 175
Gly Cys Tyr Leu Thr Pro Asp Ile Ala Ile Lys Leu Ala Ala Gly Arg
       180 185 190
Gln Asp Pro Leu Thr Arg Arg Glu Arg Gln Val Ala Glu Lys Leu Ala
      195 200
                                       205
Gln Gly Met Ser Val Lys Glu Ile Ala Val Glu Leu Gly Leu Ser Pro
 210 215 220
Lys Thr Val His Val His Arg Ala Asn Leu Met Glu Lys Leu Asn Val
             230 235
Ser Asn Asp Val Glu Leu Ala Arg Arg Met Phe Asp Ser Trp Gln
             245
                              250
<210> 9487
<211> 440
<212> PRT
<213> Enterobacter cloacae
<400> 9487
Gly Arg Ile Met Phe Lys Thr Pro Ala Ser Ala Ala Pro Leu Ser Asn
                             10
Lys Ala Glu Ile Asp Ser Arg Tyr Arg Tyr Trp Arg Arg His Ile Leu
                          25
Ile Thr Ile Trp Leu Gly Tyr Ala Leu Phe Tyr Phe Thr Arg Lys Ser
                      40
Phe Asn Ala Ala Pro Glu Ile Leu Ala Ser Gly Val Met Thr Arg
50 55 60
Thr Asp Ile Gly Leu Leu Ala Thr Leu Phe Tyr Ile Thr Tyr Gly Leu
                70
                               75
Ser Lys Phe Phe Ser Gly Ile Val Ser Asp Arg Ser Asn Ala Arg Tyr
                             90
Phe Met Gly Val Gly Leu Ile Ala Thr Gly Val Val Asn Ile Leu Phe
         100
                          105
Gly Phe Ser Thr Ser Leu Trp Ala Phe Ala Leu Leu Trp Ala Leu Asn
      115
                       120
Ala Phe Phe Gln Gly Trp Gly Ala Pro Val Cys Ala Arg Leu Leu Thr
                   135
                                    140
Ala Trp Tyr Ser Arg Asn Glu Arg Gly Gly Trp Trp Ala Ile Trp Asn
                150
                                155
Thr Ala His Asn Val Gly Gly Ala Leu Ile Pro Met Val Val Gly Ala
          165 170
Ala Ala Leu His Tyr Gly Trp Arg Ala Gly Met Met Ile Ala Gly Gly
         180
                          185
                                          190
Leu Ala Ile Val Ala Gly Leu Phe Leu Cys Trp Arg Leu Arg Asp Arg
      195
                      200
                               205
Pro Gln Thr Val Gly Leu Pro Pro Val Gly Asp Trp Arg His Asp Glu
                 215
                                    220
Met Glu Ile Ala Gln Gln Gln Glu Gly Ala Gly Leu Ser Arg Gln Glu
               230
                                235
```

Ile Leu Thr Lys Tyr Val Leu Lys Asn Pro Tyr Ile Trp Leu Leu Ser

```
245
                             250
Leu Cys Tyr Val Leu Val Tyr Val Val Arg Ala Ala Ile Asn Asp Trp
      260
              265
                                 270
Gly Asn Leu Tyr Met Ser Glu Thr Leu Gly Val Asp Leu Val Thr Ala
  275 280
                          285
Asn Ser Ala Val Thr Met Phe Glu Leu Gly Gly Phe Ile Gly Ala Leu
 290
       295 300
Val Ala Gly Trp Gly Ser Asp Lys Leu Phe Asn Gly Asn Arg Gly Pro
305 310 315
Met Asn Leu Ile Phe Ala Ala Gly Ile Leu Leu Ser Val Gly Ser Leu
          325 330 335
Trp Leu Met Pro Phe Ala Ser Tyr Val Met Gln Ala Ala Cys Phe Phe
        340 345 350
Thr Ile Gly Phe Phe Val Phe Gly Pro Gln Met Leu Ile Gly Met Ala
     355 360 365
Ala Ala Glu Cys Ser His Lys Glu Ala Ala Gly Ala Ala Thr Gly Phe
 370 375 380
Val Gly Leu Phe Ala Tyr Leu Gly Ala Ser Leu Ser Gly Trp Pro Leu
385 390
                               395
Ala Arg Val Ile Asp Ile Trp His Trp Ser Gly Phe Phe Ala Val Ile
            405
                            410
Ala Ile Ala Ala Gly Ile Ser Ala Leu Leu Leu Pro Phe Leu His
        420
                         425
Ala Gln Ala Pro Arg Glu Ala
     435
<210> 9488
<211> 508
<212> PRT
<213> Enterobacter cloacae
<400> 9488
Arg Ala Ser Pro Phe Ala Ala Glu Thr Arg Lys Thr Lys Lys Phe Ser
Arg Phe His Leu Asp Ala Val Ser Gly Ile Ser Pro Gly Trp Phe Leu
20
                         25
                                         30
Gln Cys Cys Lys Asn Gln Leu Arg Ser Lys Pro Thr Met Leu Ala Phe
35
                      4.0
                                      4.5
Leu Asn Gln Val Arg Lys Pro Thr Leu Asp Leu Pro Leu Asp Val Arg
 50
                   55
Arg Lys Met Trp Phe Lys Pro Phe Met Gln Ser Tyr Leu Val Val Phe
                              75
                70
65
Ile Gly Tyr Leu Thr Met Tyr Leu Ile Arg Lys Asn Phe Asn Ile Ala
          8.5
                             90
Gln Asn Asp Met Ile Ser Thr Tyr Gly Leu Ser Met Thr Gln Leu Gly
         100
                         105
                                          110
Met Ile Gly Leu Gly Phe Ser Ile Thr Tyr Gly Val Gly Lys Thr Val
      115
                      120
                                       125
Val Ser Tyr Tyr Ala Asp Gly Lys Asn Thr Lys Gln Phe Leu Pro Phe
                   135
  130
                                   140
Met Leu Ile Leu Ser Ala Ile Cys Met Leu Gly Phe Ser Ala Ser Met
                150
                     155
                                                160
Gly Ala Gly Ser Val Ser Leu Phe Leu Met Ile Ala Phe Tyr Ala Leu
         165 170
                                             175
Ser Gly Phe Phe Gln Ser Thr Gly Gly Ser Cys Ser Tyr Ser Thr Ile
                                          190
         180
                         185
Thr Lys Trp Thr Pro Arg Arg Lys Arg Gly Ser Tyr Leu Gly Met Trp
                      200
                                       205
Asn Ile Ser His Asn Leu Gly Gly Ala Gly Ala Ala Gly Val Ala Leu
          215
                                   220
Phe Gly Ala Asn Tyr Leu Phe Asp Gly His Val Ile Gly Met Phe Ile
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<212> PRT

<213> Enterobacter cloacae

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235
Phe Pro Ser Ile Ile Ala Leu Ile Val Gly Phe Ile Gly Leu Arg Tyr
         245
                           250
Gly Ser Asp Ser Pro Glu Ser Tyr Gly Leu Gly Lys Ala Glu Glu Leu
        260
                        265
                                      270
Phe Gly Glu Glu Ile Ser Glu Glu Asp Lys Asp Thr Glu Glu Asn Glu
                             285
     275 280
Met Thr Lys Trp Gin Ile Phe Val Glu Tyr Val Leu Lys Asn Lys Val
 290 295 300
Ile Trp Leu Leu Cys Phe Ser Asn Ile Phe Leu Tyr Val Val Arg Ile
305 310 315
Gly Ile Asp Gln Trp Ser Thr Val Tyr Ala Phe Gln Glu Leu Lys Leu
         325 330
                                           335
Ser Lys Glu Val Ala Ile Gln Gly Phe Thr Leu Phe Glu Val Gly Ala
                        345 350
       340
Leu Val Gly Thr Leu Leu Trp Gly Trp Leu Ser Asp Leu Ala Asn Gly
         360 365
Arg Arg Ala Leu Val Ala Cys Ile Ala Leu Ala Leu Ile Ile Ala Thr
 370 375 380
Leu Gly Val Tyr Gln His Ala Ser Asn Gln Tyr Val Tyr Leu Ala Ser
385 390 395 400
Leu Phe Ala Leu Gly Phe Leu Val Phe Gly Pro Gln Leu Leu Ile Gly
          405 410 415
Val Ala Ala Val Gly Phe Val Pro Lys Lys Ala Ile Gly Ala Ala Asp
         420 425 430
Gly Ile Lys Gly Thr Phe Ala Tyr Leu Ile Gly Asp Ser Phe Ala Lys
      435 440 445
Leu Gly Leu Gly Met Ile Ala Asp Gly Thr Pro Ile Phe Gly Leu Thr
                455 460
Gly Trp Ala Gly Thr Phe Ala Ala Leu Asp Ala Ala Ala Ile Gly Cys
465 470 475
Ile Val Leu Met Ala Met Val Ala Val Leu Glu Glu Arg Lys Ile Arg
       485
Arg Glu Asn Arg Ala Gln Lys Leu Lys Val Ala
         500
                         505
<210> 9489
<211> 105
<212> PRT
<213> Enterobacter cloacae
<400> 9489
Arg Val Met Met Met Ile Ala Leu Glu Glu Ala Val Met Glu Ile Ile
                            10
Val Asn Ala Gly Gln Ser Arg Ser Leu Cys Phe Glu Ala Leu His Ala
   20
                         25
Ala Arg Gln Gly Asn Leu Asp Glu Ala Lys Ser Leu Leu Arg Glu Ala
                     40
                                     45
      35
Asp Gly Tyr Ala Arg Gln Ala His Lys Met Gln Thr Lys Leu Ile Glu
                  5.5
Gln Asp Ala Gly Glu Ala Arg Gln Pro Met Thr Leu Ile Met Val His
                     75
               70
Ala Gln Asp His Leu Met Asn Ser Leu Leu Ala Arg Glu Leu Ser Glu
          85
Glu Ile Ile His Leu Tyr Gln Arg
<210> 9490
<211> 469
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Glu Ala Trp Phe

<400> 9490 Ile Lys Leu Asn Tyr Ile Glu Ile Thr Met Asn Thr Ile Lys Lys Leu 10 Pro Leu Thr Met Ala Val Ile Ala Ala Leu Cys Pro Ile Ser Val Leu 25 20 Ala Glm Glu Phe Thr Glm Glu Glm Ile Asp Ala Ile Val Ala Lys Ala 45 40 Val Asp Lys Ala Leu Ala Glu Arg Gln Ala Lys Met Asp Ala Ala Val 55 60 Ala Lys Lys Ala Asp Val Val Thr Glu Pro Gln Ser Ala Ala Gln Ser 70 75 Pro Asp Met Ala Ile Pro Phe Gly Val Lys Phe Thr Gly Tyr Ala Arg 85 90 95 Tyr Gly Ala His Phe Gln Ala Ala Asp Gln Lys Tyr Val Ala Val Asp 100 105 110 Gly Ser Tyr Asn Gly Ala Ser Ala Ile Gly Arg Leu Gly Asn Glu Gly 115 120 125 Asn Gly Gly Glu Phe Gln Leu Ser Lys Ala Phe Lys Gly Glu Asn Gly 130 135 140 Ala Ile Trp Asp Ile Asn Val Met Ile Asp His Trp Gly Asp Glu Val 145 150 155 160 Asn Leu Lys Lys Ala Tyr Ala Gly Val Thr Asn Ile Met Ala Ser Asn 165 170 175Pro Asn Ala Tyr Phe Trp Ala Gly Arg Asp Phe His Gln Arg Pro Gln 180 185 190 Gln Gly Ile Asn Asp Tyr Phe Trp Met Asn His Asp Gly Gln Gly Ala 195 200 205 Gly Val Lys Asn Phe Asp Ile Gly Gly Val Gln Phe Asp Val Ala Ala 210 215 220 Val Ala Ala Val Glu Ser Cys Ser Pro Glu Val Met Glu Asp Glu Ala 235 225 230 Asn Pro Ser Arg Ile Thr Cys Thr Gly Gly Ser Gly Thr Gly Asp Lys 245 250 255 Gly Asn Tyr Ala Ala Thr Ser Lys Ile His Gly Met Lys Leu Gly Pro 265 270 260 Leu Asp Leu Glu Leu Tyr Ala Asn Tyr Gly Phe Asp Ser Lys Ala Val 285 280 Glu Ser Asp Glu Arg Leu Asn Ala Trp Gln Gly Gly Val Val Leu Ser 295 300 His Thr Asn Asp Ser Gly Val Asn Lys Val Ile Ala Arg Tyr Ser Asp 310 315 305 Asn Ser Asp Asn Ser Val Phe Asn Lys Thr Glu Asp Leu Thr Thr Val 330 335 Tyr Ala Ser Phe Glu Gly Leu Tyr Lys Phe Thr Gln Ala Thr Gln Val 340 345 Glu Tyr Ile Leu Ala Phe His Asp Tyr Asp Asn Ser Arg Asp Lys Thr 355 360 365 Asp Asn Arg Lys Asn Tyr Asn Ala Ile Val Arg Pro Met His Trp Trp 375 380 Asn Asp Val His Ser Thr Trp Leu Glu Ala Gly Trp Gln His Val Asp 390 395 Tyr Asp Asn Gly Gly Asp Asn Lys Gly Trp Lys Leu Thr Leu Ser Gln 405 410 Asn Met Ser Ile Ala Met Gly Pro Glu Phe Arg Pro Met Leu Arg Phe 420 425 430 Tyr Val Thr Gly Gly Lys Val Asp Asn Glu Arg Thr Ala Arg Val Asn 440 445 435 Asn Thr Lys Asp Glu Thr Leu Asp Asp Phe Asn Val Gly Ala Met Trp 455 450

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<210> 9491
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 9491
Ser Lys Ser Lys Thr Ala Thr Lys Val Ala Val Phe Asn Val Arg Ser
                            10
Leu Ser Pro Trp Glu Arg Ala Gly Val Arg Ala Ser Gly Arg Thr Gln
                         25
  20
                                          30
Pro Cys Tyr Ala Val Asp Arg Ile Asn Asp Asn Ile Thr Gly Glu Asn
                      40
                          45
Met Gly Ser Thr Arg Lys Gly Met Leu Asn Val Leu Ile Ala Ala Val
                  5.5
                         60
Leu Trp Gly Ser Ser Gly Val Cys Ala Gln Tyr Ile Met Glu Lys Ser
               7.0
                    75
His Ile Ser Ser Pro Tyr Leu Thr Met Val Arg Leu Leu Phe Thr Gly
           8.5
                 90 95
Val Ile Leu Leu Thr Leu Ser Phe Val His Gly Asp Lys Ile Phe Ser
         100 105 110
Val Ile Lys Asn Arg Lys Asp Ala Leu Ser Leu Leu Phe Phe Ser Leu
 115 120 125
Val Gly Ala Leu Thr Val Gln Leu Thr Phe Leu Leu Thr Ile Glu Lys
 130 135
                                 140
Ser Asn Ala Ala Thr Ala Thr Val Leu Gln Phe Leu Ser Pro Thr Ile
145 150 155
Ile Val Ala Trp Phe Ala Leu Ala Arg Lys Thr Arg Pro Gly Ile Phe
            165 170 175
Val Leu Ser Ala Ile Phe Thr Ser Leu Val Gly Thr Phe Leu Leu Val
                         185
         180
Thr His Gly Asp Pro Thr Ser Leu Ser Ile Ser Pro Ala Ala Leu Phe
 195
                     200
Phe Gly Ile Ala Ser Ala Phe Ala Ala Ala Phe Tyr Thr Thr Tyr Pro
                   215 220
 210
Ser Thr Leu Ile Ala Arg Tyr Gly Thr Leu Pro Ile Val Gly Trp Ser
                230
                               235
Met Leu Ile Ala Gly Leu Met Leu Thr Pro Phe Tyr Ala Gly Arg Gly
                             250 255
             245
Thr Thr Phe Val Ile Asp Gly Gly Leu Leu Leu Ala Phe Phe Tyr Leu
         260
                         265
Val Val Ile Gly Thr Ala Leu Thr Phe Ser Leu Tyr Leu Lys Gly Ala
                      280
                          285
Gln Met Ile Gly Gly Pro Lys Ala Ser Ile Leu Ser Cys Ala Glu Pro
                   295
                                   300
  290
Leu Ser Ser Ala Leu Leu Ser Val Val Leu Leu Gly Val Ala Phe Thr
                310
                                315 320
Leu Pro Asp Trp Leu Gly Thr Leu Leu Ile Val Ser Ser Val Val Leu
            325 330
Ile Ser Met Asp Ser Arg Arg Arg Val Lys Ala Ser Ala
          340
                         345
<210> 9492
<211> 304
<212> PRT
<213> Enterobacter cloacae
<400> 9492
Gln Asn Ile Met Lys Ala Asp Leu Arg Thr Leu Asp Leu Asn Leu Leu
                             1.0
```

Lys Thr Leu Asp Ala Leu Leu Asp Glu Arg Ser Val Thr Arg Ala Ala 2.0 Ala Arg Leu Ala Leu Thr Gln Pro Ala Val Ser Gly Met Leu Asn Arg 4.0 Leu Arg Asp Tyr Phe Asp Asp Pro Leu Phe Ile Arg Ala Pro His Gly 5.5 Met Val Pro Thr Thr Arg Ala Glu Ala Leu Ala Ala Pro Val Lys Arg 70 75 Ile Leu Ala Asp Ile Asp Val Leu Leu Gln Pro Val Ala Phe Asp Pro 85 90 Asn Thr Ala Arg Leu Thr Phe Thr Leu Ala Ala Thr Asp Tyr Ala Leu 100 105 110 Arg Ala Val Val Val Pro Phe Ile Ala Ala Leu Lys Thr Gln Ala Pro 115 120 125 Gly Ile Arg Val Arg Val Val Pro Val Thr Pro Gly Ser Leu Val Ser 130 135 140 Gln Leu Glu Gln Gly Ala Ile Asp Val Ala Leu Ile Thr Pro His Thr 150 155 Thr Pro Asp Glu Leu His Ser Arg Ala Leu Tyr Asp Glu Arg Tyr Val 170 175 165 Cys Met Met Arg Ala Asp His Pro Asn Ala Gly Glu Pro Met Thr Leu 185 180 Asp Arg Phe Cys Ala Leu Glu His Val Leu Val Ser Tyr Glu Gly Asp 200 205 195 Gly Phe Arg Gly Val Thr Asp Ser Ala Leu Glu Lys Ile Gly Arg Thr 215 220 210 Arg His Val Gly Leu Ser Val Ser His Phe Leu Val Leu Pro Asp Val 230 235 225 Leu Ala Leu Ser Asp Met Ile Ala Val Val Pro Ser Arg Ile Ala Glu 245 250 Asn Gln Thr Gly Met Phe Ile Cys Glu Thr Pro Val Pro Val Pro Gly 265 270 260 Phe Thr Lys Ser Met Ala Trp His Gly Arg Thr His Arg Asn Pro Ala 280 275 Gln Ala Trp Leu Arg Gly Leu Leu Leu Gln Thr Ser Gln Arg Ala 295 290

<210> 9493 <211> 447 <212> PRT <213> Enterobacter cloacae

<400> 9493 Asp Met Gly Ser Glo Val Tr

Asp Met Gly Ser Gln Val Trp Val Val Ala Thr Leu Leu Val Ser Ile 1.0 Val Leu Ile Val Leu Thr Ile Val Lys Leu Lys Phe His Pro Phe Leu 20 Ala Leu Leu Leu Ala Ser Phe Phe Val Gly Ala Met Met Gly Met Ser 4 0 Pro Leu Asp Met Val Asn Ala Ile Glu Ser Gly Ile Gly Gly Thr Leu 60 5.5 Gly Phe Leu Ala Ala Val Ile Gly Leu Gly Thr Ile Leu Gly Lys Met 65 70 Met Glu Val Ser Gly Ala Ala Glu Arg Ile Gly Ile Thr Leu Gln Arg 85 90 Cys Arg Trp Leu Ser Ala Asp Val Ile Met Val Leu Val Gly Leu Ile 110 100 105 Cys Gly Ile Thr Leu Phe Val Glu Val Gly Val Val Leu Leu Ile Pro 120 125 115 Leu Ala Phe Ser Ile Ala Lys Lys Thr Asn Thr Ser Leu Leu Lys Leu

140

```
Ala Ile Pro Leu Cys Thr Ala Leu Met Ala Val His Cys Val Val Pro
    150
                          155
Pro His Pro Ala Ala Leu Phe Val Thr Asn Lys Leu Gly Ala Asp Val
       165
                          170
Gly Thr Val Ile Val Tyr Gly Leu Met Val Gly Leu Met Ala Ser Leu
      180 185
                                      190
Val Gly Gly Pro Leu Phe Leu Lys Leu Leu Gly Asn His Leu Pro Tyr
 195 200 205
Lys Pro Val Pro Ala Glu Phe Ser Asp Leu Lys Val Arg Glu Glu His
 210 215 220
Thr Leu Pro Ser Leu Gly Ala Thr Leu Phe Thr Val Leu Leu Pro Ile
    230 235 240
Ala Leu Met Leu Val Lys Thr Ile Ala Glu Leu Asn Met Ala Lys Glu
         245 250 255
Gly Ser Leu Tyr Thr Leu Leu Glu Phe Ile Gly Asn Pro Ile Thr Ala
        260 265 270
Met Phe Ile Ala Val Phe Val Ala Tyr Tyr Leu Leu Gly Ile Arg Gln
 275 280 285
His Met Gly Met Gly Ala Met Leu Thr His Thr Glu His Gly Phe Gly
                 295
                                300
Ser Ile Ala Asn Ile Leu Leu Ile Ile Gly Ala Gly Gly Ala Phe Asn
              310
                            315
Ala Ile Leu Lys Thr Ser Gly Leu Ala Glu Thr Leu Ala His Ile Leu
           325
                          330 335
Ser Asn Leu His Met His Pro Ile Leu Leu Ala Trp Leu Val Ala Leu
                       345 350
        340
Val Leu His Ala Ala Val Gly Ser Ala Thr Val Ala Met Met Gly Ala
                    360 365
 355
Thr Ala Ile Val Ala Pro Met Leu Pro Leu Tyr Pro Asn Val Ser Pro
                 375
                                380
Glu Ile Ile Thr Ile Ala Ile Gly Ser Gly Ala Ile Gly Cys Thr Ile
                             395
              390
Val Thr Asp Ser Leu Phe Trp Leu Val Lys Gln Tyr Cys Gly Ala Thr
                          410
           405
Leu Asn Glu Thr Phe Lys Tyr Tyr Thr Thr Ala Thr Phe Ile Ala Ser
   420 425 430
Val Leu Ala Leu Gly Gly Thr Phe Leu Leu Ser Phe Ile Ile
```

<210> 9494 <211> 252 <212> PRT

<213> Enterobacter cloacae

<400> 9494 Cvs Ala Gln Arg Gly Leu Leu Val Ile Tyr Lys Ser Ile Ala Asp Arg 10 Leu Arg Leu Arg Leu Asn Ser Ser Asp Tyr Asn Ile Gly Ser Pro Leu 3.0 Pro Gly Glu Lys Ala Leu Ala Lys Glu Phe Gly Val Ala Arg Met Thr 40 Val Arg Lys Ala Leu Asp Leu Leu Val Ser Trp Gly Leu Val Glu Arg 55 Arg His Gly Ser Gly Thr Phe Val Ala Arg Lys Asp Val His His Glu 75 Thr Thr Asn Leu Thr Gly Leu Val Glu Val Leu Arg Gln Gln Gly Lys 90 85 Glu Val Gln Ser Lys Val Leu Gln Phe Glu Val Met Pro Ala Pro Pro 100 105 110 Ala Ile Ala Ser Gln Leu Arg Ile Gln Val Asp Glu Arg Ile Tyr Phe 120 125

Ser Arg Arg Val Arg Tyr Val Asp Gly Lys Pro Leu Met Leu Glu Asp 130 135 140 Ser Phe Met Pro Val Lys Leu Phe Arg Asn Leu Ser Leu Ala His Leu 150 155 Glu Gly Ser Lys Phe Asp Tyr Ile Glu Lys Glu Cys Gly Ile Thr Ile 165 170 175 Ser Gly Asn Tyr Glu Ser Leu Thr Pro Val Leu Ala Asp Lys Gln Leu 185 190 180 Ala Gly Tyr Met Asn Val Pro Glu Gln Thr Pro Leu Leu Arg Ile Thr 195 200 205 Ser Leu Ser Tyr Ser Asp Ser Gly Glu Phe Leu Asn Tyr Ser Val Met 210 215 220 Phe Arg Asn Thr Ser Asp Tyr Gln Val Asp Tyr His Leu Arg Arg Ile 225 230 235 His Pro Glu Asp Leu Leu Ala His Pro Pro Glu 245

<210> 9495 <211> 114 <212> PRT

<213> Enterobacter cloacae

<400> 9495

Ile Thr Glu Ala Asp Asp Tyr Arg Gln Leu Leu Gly Glu Asp Lys Phe I 5 10 15 Leu Asp Arg Pro Gly Asn Ala Val Phe Gln Val Arg Phe Gly His Glu 20 25 30 Val Arg His Phe Phe Tyr Arg Arg Asp Gly Val Ile His Arg His Ala 35 40 His Ala Cys Ile Phe Asp His Arg Asn Ile Val Phe Leu Val Ala Gln 50 Arg His Asp Leu Leu Arg Leu Asp Ala Gln Arg Ile Gly Lys Arg Phe

65 70 75 80
Asp Ala Arg Ala Phe Ile Asp Ala Phe Ile Glu Asp Phe Glu Glu Val
80 95
Arg Arg Thr Phe Gln Tyr Gly Val Phe Leu Phe Tyr Leu Ser Arg Asn
100 105 110

.

Ala

<210> 9496 <211> 456

<211> 430 <212> PRT

<213> Enterobacter cloacae

<400> 9496

His Phe Pro Asp Asn Phe Trp Trp Gly Ser Ala Ser Ser Ala Leu Gln 1.0 Thr Glu Gly Thr Arg Glu Gly Glu Thr Thr Trp Asp Tyr Trp Phe Ala 3.0 25 Arg Glu Pro Asn Arg Phe His Asn Gly Val Gly Pro Gln His Thr Ser 45 35 40 Thr Phe Tyr Gln His Trp Lys Thr Asp Ile Gln Leu Leu Lys Gln Leu 55 Asn His Asn Ser Phe Arg Thr Ser Ile Ser Trp Ala Arg Leu Ile Pro 75 7.0 Asp Gly Ile Gly Glu Val Asn Pro Asp Ala Val Asp Phe Tyr Asn Gln 90 Val Ile Asp Glu Leu Asn Glu Gln Gly Ile Thr Pro Phe Ile Thr Leu 105 110 100 Phe His Phe Asp Met Pro Met Ala Met Gln Glu Ile Gly Gly Trp Glu

```
115
                     120
Asn Arg Asp Val Val Asp Ala Tyr Ala Arg Tyr Ala Gln Ile Cys Phe
 130 135
                         140
Glu Leu Phe Gly Asp Arg Val Leu His Trp Phe Thr Phe Asn Glu Pro
    150 155
Ile Val Pro Val Glu Gly Gly Tyr Leu Tyr Asp Phe His Tyr Pro Asn
       1.65 170 175
Val Val Asp Phe Arg Arg Ala Ala Thr Val Ala Tyr His Thr Val Leu
       180 185 190
Ala His Ala Lys Ala Val Gln Ala Tyr Arg Ala Gly His Tyr Ala Gly
     195 200 205
Glu Ile Gly Ile Val Leu Asn Leu Thr Pro Ser Tyr Pro Arg Ser Gln
       215 220
Asn Pro Ala Asp Val Lys Ala Ala His Val Ala Asp Leu Met Phe Asn
      230 235 240
Arg Ser Phe Leu Asp Pro Val Leu Arg Gly Glu Tyr Pro Ala Asp Leu
           245 250 255
Val Ala Leu Leu Lys Ser Tyr Asp Gln Leu Pro Ala Cys Lys Pro Glu
             265 270
         260
Asp Gly Phe Leu Ile Ala Glu Gly Lys Ile Asp Leu Leu Gly Ile Asn
      275
                     280
Tyr Tyr Gln Pro Arg Arg Val Lys Cys Arg Asp Ser Ala Val Asn Pro
  290
      295
                                  300
Gln Ala Pro Phe Met Pro Glu Trp Phe Phe Asp Asn Tyr Glu Met Pro
   310
                   315
Gly Arg Lys Met Asn Pro Tyr Arg Gly Trp Glu Ile Tyr Glu Pro Gly
       325
                            330
Ile Tyr Asp Ile Leu Val Asn Leu Arg Asp His Tyr Gly Asn Pro Arg
             345
        340
Cys Phe Ile Ser Glu Asn Gly Met Gly Val Glu Asn Glu Gln Arg Phe
                      360
                         365
Ile Glu Asn Gly Gln Ile Asn Asp Gln Tyr Arg Ile Asp Phe Ile Ser
                                   380
  370
                  375
Glu His Leu Ser Trp Leu His Lys Gly Ile Ser Glu Gly Cys Asn Cys
385 390
                               395
Leu Gly Tyr His Met Trp Thr Phe Ile Asp Asn Trp Ser Trp Cys Asn
                            410
            405
Ala Tyr Lys Asn Arg Tyr Gly Phe Ile Gln Leu Asp Val Glu Thr Gln
                        425
Gln Arg Thr Ile Lys Lys Ser Gly Glu Trp Phe Ala Ala Thr Ala Leu
     435 440
Asn Asn Ser Phe Asp Lys Glu
  450
<210> 9497
<211> 285
<212> PRT
<213> Enterobacter cloacae
<400> 9497
His Phe Thr Asn Arg Tyr Ala Met Thr Ile Thr Val Phe Cys Ile Leu
Leu Phe Ala Ala Leu Leu His Ala Ser Trp Asn Ala Ile Val Lys Ala
      2.0
                         25
Gly Thr Asp Lys Leu Tyr Ser Ala Ile Gly Val Ser Gly Ser Ala Ala
      35
                      40
                                      4.5
Leu Ile Ala Leu Ile Leu Leu Pro Phe Ser Pro Gln Pro Thr Ala Ala
                 55
Ser Trp Pro Tyr Leu Phe Val Ser Cys Ala Leu Gln Val Val Tyr Thr
```

75

Val Leu Val Ala Lys Thr Tyr Gln Val Ser Asp Met Ser Gln Thr Tyr

```
8.5
Pro Leu Met Arg Gly Thr Ala Pro Leu Leu Val Ala Leu Ile Ser Val
                       105
                              110
    100
Met Val Leu Gly Asp His Leu Ser Arg Phe Ala Trp Ser Gly Ile Gly
     115 120 125
Val Ile Cys Leu Ser Ile Leu Ala Met Ala Met Asn Gly Arg Met Gln
  130 135 140
Ser Arg Lys Gly Leu Trp Leu Ala Leu Leu Asn Ala Cys Phe Ile Ala
       150 155
Gly Tyr Thr Leu Val Asp Gly Thr Gly Val Arg Leu Ser Asp Thr Ala
           165 170 175
Leu Gly Tyr Thr Leu Trp Thr Phe Phe Met Asn Gly Phe Cys Leu Leu
         180 185 190
Ser Trp Ala Met Val Ala Arg Arg Arg Glu Ala Ser Ser Tyr Leu Arg
                                    205
                    200
Leu His Trp Lys Lys Gly Leu Leu Gly Gly Val Gly Thr Met Gly Ser
                215 220
 210
Tyr Gly Leu Ala Leu Trp Ala Met Thr Gln Ala Pro Leu Ala Val Val
             230 235
Ala Ala Leu Arg Glu Thr Ser Ile Leu Phe Gly Ala Leu Ile Ala Phe
                     250
            245
Val Leu Leu Lys Glu Lys Val Ala Gly Leu Arg Ile Ala Ala Ala Leu
         260
                        265
Gly Ile Ala Ala Gly Ala Ile Leu Leu Arg Leu Ala
                     280
```

<211> 112 <212> PRT <213> Enterobacter cloacae

<210> 9498

<400> 9498 Val Met Met Arg Asn Val Leu Ile Lys Leu Ala Thr Phe Ser Gly Val 1.0 Val Leu Leu Cys Gly Cys Ser Ser Val Met Ser His Thr Gly Gly Lys 25 20 Glu Gly Thr Tyr Pro Gly Thr Arg Ala Ser Ala Ala Met Ile Ser Asp 40 Asp Glu Thr Asn Trp Gly Thr Lys Ser Leu Ala Ile Leu Asp Met Pro 60 55 Phe Thr Ala Val Ala Asp Thr Leu Leu Leu Pro Trp Asp Met Phe Arg 75 7.0 Thr Asp Ser Ser Val Arg Ser Arg Val Glu Lys Ser Glu Gln Glu Thr 85 90 Leu Ala Thr Asn Ser Val Ile Pro Pro Ala Ala Met Pro Pro Arg 105 100

<210> 9499 <211> 316 <212> PRT <213> Enterobacter cloacae

```
Asp Asn Gly Ala Leu Phe Tyr Glu Arg Cys Leu Arg Ala Leu Glu Glu
              7.0
Ile Arg Gly Ala Glu Ser Gln Leu Glu Thr Gly Lys His Gln Val Ser
          85
                          90
Gly Arg Leu Arg Val Ala Met Pro Val Leu Phe Gly Arg Gln Cys Ile
     100 105
Ala Pro Leu Leu Ile Glu Leu Ala Gln Glu His Pro Gly Leu Glu Leu
   115 120
                                  125
Glu Met Ser Phe Ser Asp Arg Ile Val Asp Leu Val Glu Glu Gly Phe
  130 135 140
Asp Met Ala Val Arg Asn Gly Thr Leu Ala Asp Ser Ala Val Leu Val
             150 155
Ala Arg Arg Leu Gly Val His Arg Met Val Leu Cys Ala Ala Pro Asp
                170 175
           165
Tyr Leu Ile Lys Asn Gly Gln Pro Gln Ser Val Asp Asp Leu Arg Gln
        180 185
                             190
Tyr Thr Ala Ile Asn Tyr Thr Arg Ala Gly Arg Val Leu Pro Trp Gln
                    200 205
     195
Leu Met Asp Tyr Asp Gly Thr Ser Arg Thr Phe Ile Pro Arg Ser Ser
                     220
  210
         215
Leu Asn Met Asp Asp Leu Gln Ala Ile Cys Asp Ala Ala Leu Ala Gly
   230 235
His Gly Ile Ala Trp Leu Pro Cys Trp Met Val Ile Lys Glu Ile His
           245
                          250 255
Gln Gly Asn Leu Val Pro Leu Phe Lys Gln Ala Pro Asp Val Arg Phe
                       265 270
        260
Asp Val His Ala Val Trp Gln Gln Thr Pro His Leu Pro Leu Arg Val
                    280 285
     275
Arg Ile Ala Ile Asp Met Leu Val Lys Arg Leu Pro Ala Val Met Ser
 290 295 300
Leu Glu Phe Pro Ala Ser Ile Lys Lys Pro Arg
               310
```

<210> 9500 <211> 482 <212> PRT

<213> Enterobacter cloacae

165

<400> 9500

Ser Ala Ala Ser Tyr Val Val Val Lys Arg Arg Leu Asn Ile Asp Ile Arg Arg Leu Gln Gly Val Leu Phe Asp Glu Gly Ala Thr Trp Phe Asn 30 Arg Ile Ala His Gln Gly Arg Glu Gln Leu Ile Arg Cys Asp Cys Val 40 Phe Asn Gly Asp Ala Gln His Ala Thr Ala Phe Arg Ile His Ser Gly 60 Phe Pro Gln Leu Ile Arg Val His Phe Ala Gln Ala Phe Ile Thr Leu 75 70 Asn Arg Glu Ala Ala Thr Gly Leu Phe His Gln Pro Leu Gln Arg Leu 90 Phe Glu Ala Gly Tyr Arg Leu Thr Thr Leu Ala Thr Phe Asp Glu Arg 110 100 105 Val Val Phe Asp Gln Thr Thr Gln Leu Leu Ala Glu Gly Ala Asp Thr 120 125 115 Ala Val Phe Arg Thr Gly Asn Lys Leu Val Leu Gln Arg Val Val Gly 130 135 140 Ile Asp Ala Val Gly Thr His Ala Asn Asn Arg Leu Glu Leu Leu Leu 150 155 Ser Val Leu Leu Asn Val Glu Leu Pro Leu Ala Ala Val Leu Leu Phe 170

```
Leu Val Gln Leu Ala His Gln Gly Val His Pro Ala Gly Asp Gly Leu
                       185
                                       190
    180
Leu Val Ala Gln Ile Gly Phe Gly Gln Gly Arg Leu Ile Asn Gln Leu
 195
                    200
                                   205
Phe Gln Gln Arg Phe Arg Ile Ala Thr Leu His Thr Ala Asn His Phe
 210 215
                                220
Leu Arg Gly Val Glu Leu Gly Asn Gln Thr Leu Gln Arg Leu Thr Gly
      230 235
Gln Arg Trp Arg Ala Gly Val Cys Val Gln Gly Arg Thr Ile Lys Gly
245 250 255
Asp Arg Asp Leu Val Leu Ile His Arg Val Val Ile Phe Asn Val Leu
       260 265 270
Phe Leu Leu Ala Phe Phe His Leu Val Gln Arg Trp Leu Arg Asn Val
     275 280 285
Asp Val Ala Ala Leu Asn Asp Phe Arg His Leu Thr Ile Glu Glu Gly
 290 295
                                 300
Gln Gln Gln Arg Thr Asp Val Arg Ala Val Asp Val Arg Ile Gly His
              310
                              315
305
Asp Asp Asp Ala Val Ile Thr Gln Phe Val Arg Val Val Leu Val Ala
            325 330
Thr Asn Ala Ala Ala Glu Arg Gly Asp Glu Arg Arg His Phe Leu Arg
                       345 350
         340
Arg Glu His Leu Val Glu Ala Arg Phe Leu Asn Val Glu Asp Phe Thr
      355 360
                         365
Leu Gln Arg Gln Asn Arg Leu Val Leu Ala Val Thr Ala Leu Leu Cys
   370
                  375
                                 380
Arg Thr Ala Arg Gly Val Pro Phe His Lys Val Gln Phe Arg Gln Arg
              390 395
Arg Val Ala Phe Leu Thr Val Ser Gln Phe Ala Arg Gln Ala Cys Gln
            405
                           410 415
Val Gln Arg Ala Phe Thr Thr Gly His Phe Thr Arg Phe Thr Arg Arg
                        425
         420
Phe Thr Gly Thr Arg Arg Ile Asp Asn Phe Thr His His Asp Phe Arg
                     440
 435
                                    445
Val Gly Arg Val Phe GIn Gln Val Phe Ala Gln Gln Phe Val His Leu
450 455 460
Leu Phe Asn Arg Arg Phe His Leu Arg Arg Asp Gln Leu Val Phe Gly
                              475
               470
```

```
<210> 9501
<211> 353
<212> PRT
```

465

Leu

<213> Enterobacter cloacae

<400> 9501 Gly Glu Leu Arg Ile Arg His Leu His Gly Asp His Gly Asn Gln Ala 15 Phe Thr Gly Ile Val Thr Gly Gly Ala Asp Phe Arg Phe Phe Thr Val 30 25 20 Ala Phe Phe Val His Val Ser Val Gln Gly Thr Gly His Arg Arg Ala 45 35 40 Glu Ala Arg Lys Val Arg Thr Ala Val Ala Leu Trp Asn Val Val Gly 55 Glu Ala Val Asn Val Phe Leu Glu Thr Val Val Pro Leu Gln Gly His 70 75 65 Phe His Ala Asp Thr Val Phe Phe Ser Arg Glu Val Glu Asp Ile Arg 85 90 Val Asn Trp Arg Phe Val Leu Val Gln Ile Leu Asn Glu Arg Leu Asp 100 105 110

```
Thr Thr Phe Val Met Glu Val Val Phe Phe Val Val Ala Phe Val Ala
           120
  115
Gln Thr Asn Arg His Ala Gly Val Gln Glu Arg Gln Phe Thr Gln Ala
 130
                 135
                                140
Phe Arg Gln Asn Val Val Leu Glu Phe Gly Asp Val Gly Glu Gly Phe
145 150 155
Lys Ala Arg Pro Glu Thr His His Gly Thr Gly Phe Leu Gly Ile Thr
         165 170
                               175
Arg Asp Gly Gln Arg Arg Phe Arg His Ala Val Leu Val Asp Leu Thr
       180 185 190
Val Asn Phe Ala Phe Ala Leu Asp Asn Gln Leu Gln Leu Leu Arg Gln
   195 200 205
Gly Val Tyr Tyr Gly Tyr Ala Tyr Ala Val Gln Thr Ala Gly Asn Phe
               215 220
Ile Gly Val Ile Ile Glu Leu Thr Ala Cys Val Gln Asn Gly His Asp
              230 235
His Phe Arg Ser Arg Tyr Ala Leu Phe Arg Val Asn Thr Gly Trp Asp
           245
               250 255
Ala Thr Ala Val Ile Gly Asn Gly His Gly Val Val Arg Met Asp Arg
                     265
        260
Asp His Asp Val Phe Thr Val Thr Arg Glu Arg Phe Val Asp Ser Val
                    280
275
Ile Tyr His Leu Glu Tyr His Val Val Gln Thr Gly Ala Val Ile Arg
290
                 295
                                300
Val Ala Asp Ile His Thr Arg Ala Leu Thr His Arg Ile Gln Pro Phe
              310 315
Gln Asp Phe Asp Thr Gly Gly Val Ile Arg Ile Arg His Gln Arg Phe
                          330 335
           325
Ser Leu Ile Ser Thr Trp Val Asn Pro Leu Phe Tyr Pro Phe Pro Arg
```

<210> 9502 <211> 97 <212> PRT

<213> Enterobacter cloacae

340

<400> 9502

Ala Ser Phe Thr Arg Arg Ser Ser Gly Cys Arg Cys Val Gly Cys Val 10 1.5 Pro Ser Pro Gln Ser Arg Thr Tyr Val Arg Ser Trp Gly Phe Ala His 30 20 25 Leu Pro Pro Ser Cys Asn Pro Asn Tyr Leu Ala Tyr Pro Gly Gly Val 4.0 35 Leu Asn Glu Lys Pro Arg Pro Val Cys Ala Gly Gly Val Leu Asp Ser 55 60 Cys Val Asp Pro Val Pro Thr Ala His Cys Arg Arg Pro Pro Pro His 75 65 Ala Arg Arg Pro Leu Arg Gln Val Ala Gln Phe Leu Val Gly Ser Lys 85

345

<210> 9503 <211> 410 <212> PRT

<213> Enterobacter cloacae

<400> 9503

Ser Leu Ile Leu His Leu Ser Leu Leu Ala Lys Val Phe Ser Asp Met

```
1.0
Lys Lys Gln Arg Asn Val Asn Leu Leu Leu Met Leu Val Leu Leu Val
       20
Ala Val Gly Gln Met Ala Gln Thr Ile Tyr Ile Pro Ala Ile Ala Asp
                     4.0
Met Ala Lys Asp Leu Ser Val Arg Glu Gly Ala Val Gln Ser Val Met
       55
Ala Ala Tyr Leu Leu Thr Tyr Gly Val Ser Gln Leu Val Tyr Gly Pro
      70
                            7.5
Leu Ser Asp Arg Val Gly Arg Arg Pro Val Ile Leu Val Gly Met Ser
                        90
         85
Ile Phe Met Val Ala Thr Met Ile Ala Ile Thr Thr His Ser Leu Thr
        100 105
Val Leu Ile Ala Ala Ser Ala Leu Gln Gly Val Gly Thr Gly Val Gly
   115 120 125
Gly Val Met Ala Arg Thr Leu Pro Arg Asp Met Tyr Gln Gly Thr Gln
 130 135 140
Leu Arg His Ala Asn Ser Leu Leu Asn Met Gly Ile Leu Val Ser Pro
145 150 155
Leu Leu Ala Pro Leu Ile Gly Gly Leu Leu Asp Thr Val Trp Ser Trp
         165 170 175
Arg Ala Cys Tyr Ala Phe Leu Leu Val Leu Cys Ile Ile Val Thr Phe
        180 185 190
Ser Met Gly Arg Trp Met Pro Glu Tnr Arg Pro Lys Asp Ala Pro Arg
195 200 205
Thr Lys Leu Ile Ala Ser Tyr Lys Thr Leu Phe Gly Asn Gly Ser Phe
210 215
Thr Cys Tyr Leu Leu Met Leu Ile Gly Gly Leu Ala Gly Ile Ala Val
225 230 235
Phe Glu Ala Cys Ser Gly Val Leu Leu Gly Ala Gly Leu Gly Leu Ser
               250 255
            245
Ser Met Val Val Ser Ile Leu Phe Ile Leu Pro Ile Pro Ala Ala Phe
         260 265 270
Phe Gly Ala Trp Phe Ala Gly Arg Pro Asn Lys Arg Phe Ser Thr Leu
      275 280 285
Met Trp Gln Ser Val Ile Ser Cys Leu Leu Ala Gly Leu Met Met Trp
                 295
 290
Ile Pro Gly Leu Phe Asp Val Met Ser Val Trp Thr Leu Leu Ile Pro
              310 315 320
Ala Ala Leu Phe Phe Gly Ala Gly Met Leu Phe Pro Leu Ala Thr
           325
                           330
Ser Gly Ala Met Glu Pro Phe Pro Phe Leu Ala Gly Thr Ala Gly Ala
                        345
         340
Leu Val Gly Gly Leu Gln Asn Ile Gly Ser Gly Ala Leu Ala Trp Leu
                     360
                                     365
      355
Ser Ala Met Met Pro Gln Thr Gly Gln Ala Ser Leu Gly Leu Leu Met
                  375
                                  380
Thr Leu Met Gly Leu Leu Ile Leu Leu Cys Trp Leu Pro Leu Ala Ser
                              395
Arg Val Ser His His Glu Gln Pro Val
```

<210> 9504

<211> 463

<212> PRT

<213> Enterobacter cloacae

<400> 9504

Asp Leu Gln Ile Leu Tyr Asp Gly Asp Val Tyr Arg Leu Gly Ala Cys I 5 10 15 15 Thr Trp Arg His Ile Pro Ala Phe Phe His Tyr Leu Ser Ala Lys Arg

Arg Ile Met Glu Asn Ala Thr Ile Thr Thr Leu Thr Ala Gln Phe Pro 35 40 45 Leu Val Glu Asp Leu Ile Ala Leu Lys Glu Thr Thr Trp Leu Asn Pro 50 55 Arg Thr Thr Thr Leu Ala Glu Gly Leu Pro Tyr Val Gly Leu Thr Lys 70 - 75 Ala Asp Val Asp Asp Ala His Ala Arg Leu Lys Arg Phe Ala Pro Tyr 90 85 Leu Ala Lys Ala Phe Pro Glu Thr Ala Ala Thr Gly Gly Ile Ile Glu 100 105 110 Ser Asp Leu Val Ala Ile Pro Ala Met Gln Ala Arg Leu Glu Lys Glu 115 120 125 Phe Ala Lys Pro Val Thr Gly Pro Leu Leu Leu Lys Lys Asp Ser His 130 135 140 Leu Pro Ile Ser Gly Ser Ile Lys Ala Arg Gly Gly Ile Tyr Glu Val 145 150 155 160 Leu Thr His Ala Glu Lys Leu Ala Leu Glu Ala Gly Leu Leu Ser Val 165 170 175 Glu Asp Asp Tyr Ser Val Leu Leu Glu Pro Arg Phe Lys Asp Phe Phe 180 185 190 Ser Gln Tyr Ser Ile Ala Val Gly Ser Thr Gly Asn Leu Gly Met Ser 195 200 205 Ile Gly Ile Met Ser Ala Arg Ile Gly Phe Lys Val Thr Val His Met 210 215 220 Ser Ala Asp Ala Arg Glu Trp Lys Lys Ala Lys Leu Arg Ser His Gly 225 230 235 240 Val Ile Val Val Glu Tyr Glu Gln Asp Tyr Gly Val Ala Val Glu Gln 250 255 245 Gly Arg Lys Ala Ala Glu Ser Asp Pro Asn Cys Phe Phe Ile Asp Asp 260 265 Glu Asn Ser Arg Thr Leu Phe Leu Gly Tyr Ala Val Ala Gly Glu Arg 275 280 Leu Lys Ala Gln Phe Ala Glu Gln Gly Arg Val Val Asp Ala Asp His 295 300 290 Pro Leu Tyr Val Tyr Leu Pro Cys Gly Val Gly Gly Gly Pro Gly Gly 310 315 Val Ala Phe Gly Leu Lys Leu Ala Phe Gly Asp Asn Val His Cys Phe 325 330 335 Phe Ala Glu Pro Thr His Ser Pro Cys Met Leu Leu Gly Val Tyr Thr 340 345 350 340 Gly Leu His Asp Glu Ile Ala Val Gln Asp Leu Gly Ile Asp Asn Val 355 360 365 Thr Ala Ala Asp Gly Leu Ala Val Gly Arg Ala Ser Gly Phe Val Gly 375 380 Arg Ala Met Glu Arg Leu Leu Asp Gly Phe Tyr Thr Leu Ser Asp Gln 390 395 Ser Met Tyr Asp Met Leu Gly Trp Leu Ala Gln Glu Glu Arg Ile Arg 415 410 405 Leu Glu Pro Ser Ala Leu Ala Gly Met Ala Gly Pro Leu Arg Val Asp 425 Ala Asp Glu Asn Val Thr His Leu Val Trp Ala Thr Gly Gly Met 435 440 445 Val Pro Glu Asp Glu Met Ala Lys Tyr Leu Ala Lys Gly Lys 455 460

<210> 9505 <211> 661

<211> 001 <212> PRT

<213> Enterobacter cloacae

<400> 9505 His Leu Thr Arg Arg Lys Lys Ala Met Ser Gln Ile His Lys His Asp 10 Ile Pro Ala Asn Ile Ala Asp Arg Cys Leu Ile Ser Pro Glu Gln Tyr 20 25 Gln Glu Lys Tyr Gln Gln Ser Val Ser Ser Pro Asp Ala Phe Trp Gly 40 45 35 Glu Gln Gly His Ile Leu Asp Trp Ile Lys Pro Tyr Gln Lys Val Lys 50 55 60 Asn Thr Ser Phe Ala Pro Gly Asn Val Ser Ile Lys Trp Tyr Glu Asp 70 75 Gly Thr Leu Asn Leu Ala Ala Asn Cys Leu Asp Arg His Leu Ala Glu 90 95 8.5 Arg Gly Asn Glu Thr Ala Ile Ile Trp Glu Gly Asp Asp Ala Ser Gln 105 100 Ser Lys His Ile Ser Tyr Lys Glu Leu His Arg Asp Val Cys Arg Phe 120 125 115 Ala Asn Val Leu Leu Ala Gln Gly Ile Lys Lys Gly Asp Val Val Ala 135 140 Ile Tyr Met Pro Met Val Pro Glu Ala Ala Val Ala Met Leu Ala Cys 150 155 Ala Arg Ile Gly Ala Ile His Ser Val Ile Phe Gly Gly Phe Ser Pro 170 175 165 Glu Ala Val Ala Gly Arg Ile Val Asp Ser Asn Ser Lys Leu Val Ile 180 185 Thr Ala Asp Glu Gly Val Arq Ala Gly Arg Gly Ile Pro Leu Lys Lys 195 200 205 Asn Val Asp Glu Ala Leu Lys Asn Pro Asn Val Lys Ser Ile Ser Asn 215 220 210 Val Ile Val Phe Lys Arg Thr Gly Gly Lys Ile Asp Trp His Glu Gly 230 235 Arg Asp Leu Trp Trp Ser Asp Leu Ile Glu Lys Ala Ser Asp Gln His 250 245 Gln Pro Glu Glu Met Asn Ala Glu Asp Pro Leu Phe Ile Leu Tyr Thr 265 260 Ser Gly Ser Thr Gly Lys Pro Lys Gly Val Leu His Thr Thr Gly Gly 280 Tyr Leu Val Tyr Ala Ala Thr Thr Phe Lys Tyr Val Phe Asp Tyr His 295 300 Pro Gly Asp Ile Tyr Trp Cys Thr Ala Asp Val Gly Trp Val Thr Gly 310 315 His Ser Tyr Leu Leu Tyr Gly Pro Leu Ala Cys Gly Ala Thr Thr Leu 330 Met Phe Glu Gly Val Pro Asn Trp Pro Thr Pro Ala Arg Met Cys Gln 345 340 Val Val Asp Lys His Gln Val Asn Ile Leu Tyr Thr Ala Pro Thr Ala 365 360 Ile Arg Ala Leu Met Ala Glu Gly Asp Lys Ala Ile Glu Gly Thr Asp 370 Arg Ser Ser Leu Arg Ile Leu Gly Ser Val Gly Glu Pro Ile Asn Pro 395 390 Glu Ala Trp Glu Trp Tyr Trp Lys Lys Ile Gly Asn Glu Lys Cys Pro 405 410 415 Val Met Asp Thr Trp Trp Gln Thr Glu Thr Gly Gly Phe Met Ile Thr 420 425 430 Pro Met Pro Gly Ala Thr Gln Leu Lys Ala Gly Ser Ala Thr Arg Pro 440 435 Phe Phe Gly Val Gln Pro Ala Leu Val Asp Asn Glu Gly Asn Pro Gln 455 460 Glu Gly Ala Thr Glu Gly Asn Leu Val Ile Val Asp Ser Trp Pro Gly 475

```
Gln Ala Arg Thr Leu Phe Gly Asp His Glu Arg Phe Glu Gln Thr Tyr
                          490
          485
Phe Ser Thr Phe Lys Asn Met Tyr Phe Ser Gly Asp Gly Ala Arg Arg
       500
                       505
Asp Glu Asp Gly Tyr Tyr Trp Ile Thr Gly Arg Val Asp Asp Val Leu
   515 520
                                  525
Asn Val Ser Gly His Arg Leu Gly Tor Ala Glu Ile Glu Ser Ala Leu
      535 540
Val Ser His Pro Lys Ile Ala Glu Ala Ala Val Val Gly Ile Pro His
545 550 555
Asn Ile Lys Gly Gln Ala Ile Tyr Ala Tyr Val Thr Leu Asn His Gly
        565 570 575
Glu Glu Pro Ser Pro Glu Leu Tyr Thr Glu Val Arg Asn Trp Val Arg
        580 585 590
Lys Glu Ile Gly Pro Leu Ala Thr Pro Asp Val Leu His Trp Thr Asp
     595 600 605
Ser Leu Pro Lys Thr Arg Ser Gly Lys Ile Met Arg Arg Ile Leu Arg
                615 620
Lys Ile Ala Ala Gly Asp Thr Ser Asn Leu Gly Asp Thr Ser Thr Leu
              630 635 640
Ala Asp Pro Gly Val Val Asp Lys Leu Leu Glu Glu Lys Gln Ala Ile
                  650 655
 645
Ala Met Pro Ser
         660
```

<210> 9506 <211> 560

<212> PRT <213> Enterobacter cloacae

<400> 9506 Gln Arg Ser Ser Ala Arg Gly Lys Ser Ile Met Lys Arg Ile Leu Thr 1.0 Ala Leu Ala Ala Thr Leu Pro Phe Ala Ala His Ala Ala Asp Ala Ile 25 20 Thr Gly Glu Val Gln Arg Gln Pro Thr Asn Trp Gln Ala Ile Ile Met 40 35 Phe Leu Ile Phe Val Val Leu Thr Leu Tyr Ile Thr Tyr Trp Ala Ser 55 Lys Gln Val Arg Ser Arg Asn Asp Tyr Tyr Thr Ala Gly Gly Asn Ile 7.0 75 65 Thr Gly Phe Gln Asn Gly Leu Ala Ile Ala Gly Asp Phe Met Ser Ala 90 Ala Ser Phe Leu Gly Ile Ser Ala Leu Val Tyr Thr Ser Gly Tyr Asp 105 100 Gly Leu Ile Tyr Ser Leu Gly Phe Leu Val Gly Trp Pro Ile Ile Leu 120 Phe Leu Ile Ala Glu Arg Leu Arg Asn Leu Gly Arg Tyr Thr Phe Ala 140 135 130 Asp Val Ala Ser Tyr Arg Leu Lys Gin Gly Pro Ile Arg Thr Leu Ser 155 150 Ala Cys Gly Ser Leu Val Val Val Ala Leu Tyr Leu Ile Ala Gln Met 170 165 Val Gly Ala Gly Lys Leu Ile Glu Leu Leu Phe Gly Leu Asn Tyr His 185 190 180 Ile Ala Val Val Leu Val Gly Val Leu Met Val Met Tyr Val Leu Phe 200 205 195 Gly Gly Met Leu Ala Thr Thr Trp Val Gln Ile Ile Lys Ala Val Leu 220 210 215 Leu Leu Phe Gly Ala Ser Phe Met Ala Phe Met Val Met Lys His Val 230 235

```
Gly Phe Ser Phe Asn Asn Leu Phe Thr Glu Ala Met Ser Val His Pro
                  250
         245
Lys Gly Glu Ala Ile Met Ser Pro Gly Gly Leu Val Lys Asp Pro Ile
        260 265
                                         270
Ser Ala Leu Ser Leu Gly Leu Gly Leu Met Phe Gly Thr Ala Gly Leu
                          285
  275 280
Pro His Ile Leu Met Arg Phe Phe Thr Val Ser Asp Ala Arg Glu Ala
       295 300
Arg Lys Ser Val Phe Tyr Ala Thr Gly Phe Met Gly Tyr Phe Tyr Ile
               310 315
Leu Thr Phe Ile Ile Gly Phe Gly Ala Ile Met Leu Val Gly Ala Asn
            325
                            330 335
Pro Ala Phe Lys Asp Ala Ala Gly Ala Leu Ile Gly Gly Asn Asn Met
         340 345 350
Ala Ala Val His Leu Ala Asp Ala Val Gly Gly Asn Leu Phe Leu Gly
 355 360 365
Phe Ile Ser Ala Val Ala Phe Ala Thr Ile Leu Ala Val Val Ala Gly
                375
 370
Leu Thr Leu Ala Gly Ala Ser Ala Val Ser His Asp Leu Tyr Ala Asn
               390
                                395
Val Phe Arg Lys Gly Ala Ser Glu Arg Asp Glu Leu Lys Val Ser Lys
            405 410 415
Ile Thr Val Leu Val Leu Gly Val Val Ala Ile Leu Leu Gly Ile Leu
         420 425
                             430
Phe Glu Lys Gln Asn Ile Ala Phe Met Val Gly Leu Ala Phe Ser Ile
      435
                      440
                           445
Ala Ala Ser Cys Asn Phe Pro Ile Ile Leu Leu Ser Met Tyr Trp Ser
          455
                                   460
  450
Lys Leu Thr Thr Arg Gly Ala Met Ile Gly Gly Trp Leu Gly Leu Leu
                                475
         470
Thr Ala Val Ile Leu Met Ile Leu Gly Pro Thr Ile Trp Val Gln Ile
                             490 495
            485
Leu Gly His Glu Ser Ala Ile Phe Pro Tyr Glu Tyr Pro Ala Leu Phe
         500
                         505
                                         510
Ser Ile Ala Val Ala Phe Ile Gly Ile Trp Val Phe Ser Ala Thr Asp
      515
                      520
                                      525
Asn Ser Pro Glu Gly Asn Leu Glu Arg Glu Lys Phe Arg Ala Gln Phe
 530 535
                                  540
Ile Arg Ser Gln Thr Gly Leu Gly Val Glu Gln Gly Arg Ala His
545
                550
                                555
<210> 9507
<211> 401
<212> PRT
<213> Enterobacter cloacae
<400> 9507
Arg Met Ala Asp Met Lys Ile Lys Thr Gly Ala Arg Val Phe Ala Leu
Ser Ala Leu Ala Ala Met Met Ile Ser Ala Pro Ala Leu Ala Lys Ile
                         25
                                        3.0
Glu Glu Gly Lys Leu Val Ile Trp Ile Asn Gly Asp Lys Gly Tyr Asn
      35
                      40
Gly Leu Ala Glu Val Gly Lys Lys Phe Glu Lys Asp Thr Gly Ile Lys
                   5.5
Val Thr Val Glu His Pro Asp Lys Leu Glu Glu Lys Phe Pro Gln Val
               7.0
                                75
65
Ala Ala Thr Gly Asp Gly Pro Asp Ile Ile Phe Trp Ala His Asp Arg
            85
                             90
Phe Gly Gly Tyr Ala Gln Ser Gly Leu Leu Ala Glu Val Thr Pro Asp
```

Lys Ala Phe Gln Asp Lys Leu Phe Pro Phe Thr Trp Asp Ala Val Arg 115 120 Tyr Asn Gly Lys Leu Ile Ala Tyr Pro Ile Ala Val Glu Ala Leu Ser 130 135 140 Leu Ile Tyr Asn Lys Asp Leu Val Pro Asn Pro Pro Lys Thr Trp Glu 145 150 155 Glu Ile Pro Ala Leu Asp Lys Glu Leu Lys Ala Lys Gly Lys Ser Ala 165 170 175 Leu Met Phe Asn Leu Gln Glu Pro Tyr Phe Thr Trp Pro Leu Ile Ala 190 180 185 Ala Asp Gly Gly Tyr Ala Pne Lys Phe Glu Asn Gly Lys Tyr Asp Val 195 200 205 Lys Asp Val Gly Val Asp Ser Ala Gly Ala Lys Lys Gly Leu Thr Phe 210 215 220 Leu Val Asp Leu Ile Lys Asn Lys His Met Asn Ala Asp Thr Asp Tyr 225 230 235 240 Ser Ile Ala Glu Ala Ala Phe Asn Lys Gly Glu Thr Ala Met Thr Ile 245 250 255 Asn Gly Pro Trp Ala Trp Thr Asn Ile Asp Lys Ser Lys Ile Asn Tyr 260 265 270 Gly Val Thr Leu Leu Pro Thr Pne Asn Gly Lys Pro Ser Lys Pro Phe 275 280 285 Val Gly Val Leu Ser Ala Gly Ile Asn Ala Ala Ser Pro Asn Lys Glu 300 295 Leu Ala Lys Glu Phe Leu Glu Asn Tyr Leu Leu Thr Asp Gln Gly Leu 305 310 315 Asp Glu Val Asn Lys Asp Lys Pro Leu Gly Ala Val Ala Leu Lys Ser 330 335 325 Phe Gln Asp Gln Leu Ala Lys Asp Pro Arg Ile Ala Ala Thr Met Asp 340 345 350 Asn Ala Gln Lys Gly Glu Ile Met Pro Asn Ile Pro Gln Met Ala Ala 355 360 365 Phe Trp Tyr Ala Thr Arg Thr Ala Val Ile Asn Ala Ala Ser Gly Arg 370 375 380 Gln Thr Val Asp Ala Ala Leu Lys Asp Ala Gln Gly Arg Ile Thr Lys 390

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<210> 9508
<211> 303
<212> PRT
<213> Enterobacter cloacae
<220>
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<221>UNSURE <222>(248)

<400> 9508 Leu Arg Arg Ala Leu Asn Met Ala Met Val Gln Pro Lys Ser Gln Lys 10 Leu Arg Leu Leu Ala Thr His Leu Gly Leu Leu Ile Phe Ile Ala Ala 25 3.0 20 Ile Met Phe Pro Leu Leu Met Val Ile Ala Ile Ser Leu Arg Ser Gly 45 Asn Phe Ala Thr Gly Ser Leu Ile Pro Asp Glu Ile Ser Trp Glu His 55 Trp Lys Leu Ala Leu Gly Phe Ser Val Glu His Ala Asp Gly Arg Val 65 70 7.5 Thr Pro Pro Pro Phe Pro Val Leu Leu Trp Leu Trp Asn Ser Val Lys 90

```
Val Ala Thr Ile Thr Ala Ile Gly Ile Val Thr Leu Ser Thr Thr Cys
          100
                          105
Ala Tyr Ala Phe Ala Arg Met Arg Phe Pro Gly Lys Ala Thr Leu Leu
           120
Lys Val Met Leu Ile Phe Gln Met Phe Pro Ala Val Leu Ser Leu Val
                   135 140
Ala Leu Tyr Ala Val Phe Asp Arg Leu Gly Gln Tyr Val Pro Phe Ile
                150 155 160
Gly Leu Asn Thr His Gly Gly Val Ile Phe Ala Tyr Leu Gly Gly Ile
            165
                             170 175
Ala Leu His Val Trp Thr Ile Lys Gly Tyr Phe Glu Thr Ile Asp Gly
     180 185 190
Ser Leu Glu Glu Ala Ala Ala Leu Asp Gly Ala Thr Pro Trp Gln Ala
  195 200
                                       205
Phe Arg Leu Val Leu Leu Pro Leu Ser Val Pro Ile Leu Ala Val Val
 210 215 220
Phe Ile Leu Ser Phe Ile Ala Ala Ile Thr Glu Val Pro Val Ala Ser
    230
                                235
Leu Leu Arg Asp Val Asn Xaa Tyr Thr Leu Ala Val Gly Met Gln
            245 250
                                              255
Gln Tyr Leu Asn Pro Gln Asn Tyr Leu Trp Gly Asp Phe Ala Ala Ala
 260
                          265
Ala Val Leu Ser Ala Ile Pro Ile Thr Val Val Phe Leu Leu Ala Gln
 275 280
                              285
Arg Trp Leu Val Asn Gly Leu Thr Ala Gly Gly Val Lys Gly
                   295
<210> 9509
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 9509
Ala Asp Leu Gln Pro Gly Cys Ser Pro Gln Ala Gly Cys Arg Arg Arg
          5
                             10
Ala Thr Phe Ser Arg Cys Gly Asn Ala Ala Ser Arg Trp Trp Pro Asp
                          25
Pro Ala Ser Pro Ile Ser Ala Ala Arg Phe His Arg Lys Arg Ala Pro
                      40
Gln Thr Val Ala Asp His Arg Leu Ala Ala Cys Thr Gly Trp His Thr
                   55
Ala Cys Ser Glu Val Arg His Arg Ser Asp Ala Arg Pro Ala Cys Arg
    70
Thr Cys Cys Pro Thr Val Ser Gly Pro Ala Leu Trp Trp
             8.5
<210> 9510
<211> 116
<212> PRT
<213> Enterobacter cloacae
<400> 9510
Asn Lys Pro Thr Leu Leu Leu Glu Ile Ser Val Met Asn Asn Asp Ile
Cys Gln Gln Ile Glu Asn Ser Ala His Tyr Arg Glu Leu Val Glu Lys
         20
                          25
```

Arg Gln Arg Phe Ala Phe Leu Leu Ser Ile Ile Met Leu Ile Ile Tyr

Pro Leu His Glu Gly Thr Ser Val Thr Arg Gly Ile Pro Ile Gly Ile

40 Val Gly Phe Ile Leu Leu Ile Ala Phe Ala Pro His Trp Leu Gly Thr

35

```
7.0
                                    7.5
Gly Val Ile Ile Ile Ser Phe Val Leu Thr Gly Val Tyr Val Trp Arg
            85
                      90
Ala Asn Gly Glu Phe Asp Arg Leu Asn Arg Glu Val Leu Arg Glu Val
           100
Lys Ala Ser
    115
<210> 9511
<211> 299
<212> PRT
<213> Enterobacter cloacae
<400> 9511
Phe Arg Gly Ile Ile Met Asp Ile Arg Thr Leu Arg Tyr Phe Val Glu
                                 10
Val Val Arg Gln Gln Ser Phe Thr Arg Ala Ala Glu Lys Leu Phe Val
                             25
                                                30
Thr Gln Pro Thr Ile Ser Lys Met Leu Lys Asn Leu Glu Asp Glu Leu
                         40
                                           4.5
Asn Cys Thr Leu Leu Ile Arg Asp Gly Arg Lys Leu Leu Leu Thr Asp
5.0
                      55
Thr Gly Arg Val Val Phe Glu Arg Gly Leu Ala Ile Leu Ala Glu Phe
               70
                                     75
Arg Gln Leu Glu Ala Glu Leu Gly Asp Ile Asn His Leu Thr Lys Gly
        8.5
                                 90
Leu Leu Arg Leu Gly Ile Pro Pro Met Val Gly Met Met Ala Gly
          100
                             105
Pro Ile Ser Leu Phe Arg Gln Arg Tyr Pro Gly Val Glu Leu Lys Ile
 115
                         120
Ser Glu Phe Gly Gly Leu Thr Val Gln Gln Ala Val Met Asn Gly Glu
                      135
                                        140
Leu Asp Val Ala Met Thr Ala Leu Pro Val Glu Glu Glu Ser Gly Leu
                  150
                                     155
Ala Thr Leu Pro Leu Phe Ser His Pro Leu Cys Val Leu Val Pro Arg
              165
                                 170
Ser Gly Asp Trp Leu Lys Ile Asp Ala Val Lys Pro Glu Leu Leu Gly
          180
                             185
                                                190
Glu His Pro Leu Leu Ile Tyr Asn Glu Asp Phe Ala Leu Ser Arg Gln
      195
                                            205
Leu Met Ala Leu Phe Asn Gln His Asn Val Lys Pro Arg Ile Ala Val
 210
                      215
                                        220
Arg Ser Gly Gln Trp Asp Phe Leu Ala Ala Met Val Gln Ala Gly Val
                  230
                                    235
Gly Ile Ala Ile Leu Pro Gln Pro Ile Cys Glu Arg Leu Asp Lys Asn
              245
                                250
Thr Leu Arg Trp Ile Pro Leu Glu Ser Asp Leu His Trp Gln Leu Gly
           260
                             265
                                               270
Met Ile Trp Arg Glu Gly Val Tyr Leu Ser His Ser Ala Gln Ala Trp
    275
                         280
Leu Gln Cys Cys Glu Gly Phe Trp Val Pro
  290
                      295
<210> 9512
<211> 80
<212> PRT
<213> Enterobacter cloacae
<400> 9512
Lys Val Gly Leu Phe Glu Arg Tyr Leu Gln Arg Met Phe Arg Thr Val
```

```
Met His Gln Thr Leu Gly Asp Tyr Ile Arg Gln Arg Arg Leu Leu Leu
                               25
Ala Ala Gln Ala Leu Arg Ser Thr Gln Arg Pro Ile Phe Asp Ile Ala
                           4.0
                                              4.5
Met Asp Leu Gly Tyr Val Ser Gln Gln Thr Phe Ser Arg Val Phe Arg
  50
                      55
                                   60
Arg Glu Phe Asp Arg Thr Pro Ser Asp Tyr Arg His Gln Leu Asn
                   7.0
                                       75
<210> 9513
<211> 111
<212> PRT
<213> Enterobacter cloacae
<400> 9513
Arg Glu Thr Leu Phe His Ser Ser Ser Ser Val Leu Ser Arg Met Ser
1 5
                                   10
Phe Met Ala Thr Ile Thr Thr Ser Met Val Leu Leu Arg Trp Pro Leu
        20
                               25
                                                  30
Leu Ser Ala Val Leu Met Phe Leu Ala Ser Thr Leu Asn Ile Gln Phe
                           4.0
Arg Lys Ser Asp Tyr Ala Gly Leu Ala Val Ile Ser Thr Leu Leu Gly
                       5.5
Leu Gly Ala Ala Cys Trp Phe Ala Thr Gly Leu Leu Gly Ile Thr Leu
                7.0
                                      75
Val Asp Ile Ala Ala Val Trp Glu Asn Ile Lys Val Val Met Val Glu
                             90
              8.5
Ala Met Ser His Thr Pro Pro Asp Trp Pro Met Val Ile Thr
           100
<210> 9514
<211> 941
<212> PRT
<213> Enterobacter cloacae
<400> 9514
Met Asp Lys Ile Glu Val Arg Gly Ala Arg Thr His Asn Leu Lys Asn
                                   1.0
Ile Asn Leu Ile Ile Pro Arg Asp Lys Leu Ile Val Val Thr Gly Leu
          20
                              25
Ser Gly Ser Gly Lys Ser Ser Leu Ala Phe Asp Thr Leu Tyr Ala Glu
                           40
Gly Gln Arg Arg Tyr Val Glu Ser Leu Ser Ala Tyr Ala Arg Gln Phe
                       5.5
Leu Ser Leu Met Glu Lys Pro Asp Val Asp His Ile Glu Gly Leu Ser
                   70
                                       75
Pro Ala Ile Ser Ile Glu Gln Lys Ser Thr Ser His Asn Pro Arg Ser
               85
                                  90
Thr Val Gly Thr Ile Thr Glu Ile His Asp Tyr Leu Arg Leu Leu Tyr
           100
                               105
                                                  110
Ala Arg Val Gly Glu Pro Arg Cys Pro Asp His Asp Val Pro Leu Ala
       115
                           120
Ala Gln Thr Val Ser Gln Met Val Asp Asn Val Leu Ser Gln Pro Glu
   130
                                          140
Gly Lys Arg Leu Met Leu Leu Ala Pro Ile Ile Lys Glu Arg Lys Gly
                   150
145
                                      155
Glu His Thr Lys Thr Leu Glu Asn Leu Ala Ser Gln Gly Tyr Ile Arg
               165
                                 170
Ala Arg Ile Asp Gly Glu Val Cys Asp Leu Ser Asp Pro Pro Lys Leu
           180
                              185
                                                  190
```

Glu Leu Gln Lys Lys His Thr Ile Glu Val Val Ile Asp Arg Phe Lys

200 205 Val Arg Glu Asp Leu Ala Thr Arg Leu Ala Glu Ser Phe Glu Thr Ala 220 215 Leu Glu Leu Ser Gly Gly Thr Ala Val Val Ser Asp Met Asp Asp Ala 230 235 Lys Ala Glu Glu Leu Leu Phe Ser Ala Asn Phe Ala Cys Pro Ile Cys 245 250 255 Gly Tyr Ser Met Arg Glu Leu Glu Pro Arg Leu Phe Ser Phe Asn Asn 260 265 270 Pro Ala Gly Ala Cys Pro Thr Cys Asp Gly Leu Gly Val Gln Gln Tyr 275 280 285 Phe Asp Pro Asp Arg Val Ile Gln Asn Pro Glu Leu Ser Leu Ala Gly 290 295 300 Gly Ala Ile Arg Gly Trp Asp Lys Arg Asn Phe Tyr Tyr Phe Gln Met 310 315 Leu Lys Ser Leu Ala Glu His Tyr Lys Phe Asp Val Glu Ala Pro Trp 325 330 Ala Ser Leu Ser Ala Asn Val His Lys Val Ile Leu Phe Gly Ser Gly 340 345 350 Lys Glu Asn Ile Glu Phe Lys Tyr Met Asn Asp Arg Gly Asp Thr Ser 355 360 365 Val Arg Arg His Pro Phe Glu Gly Val Leu His Asn Met Glu Arg Arg 370 375 380 Tyr Lys Glu Thr Glu Ser Ser Ala Val Arg Glu Glu Leu Ala Lys Phe 385 390 395 Ile Ser Asn Arg Ser Cys Ala Thr Cys Glu Gly Thr Arg Leu Arg Arg 405 410 Glu Ala Arg His Val Phe Val Glu Asn Thr Ala Leu Pro Thr Ile Ser 420 425 Asp Met Ser Ile Gly His Ala Met Asp Phe Phe Asn Asn Leu Lys Leu 440 445 Ser Gly Gln Arg Ala Lys Ile Ala Glu Lys Val Leu Lys Glu Ile Gly 455 460 Asp Arg Leu Lys Phe Leu Val Asn Val Gly Leu Asn Tyr Leu Thr Leu 470 475 Ser Arg Ser Ala Glu Thr Leu Ser Gly Gly Glu Ala Gln Arg Ile Arg 485 490 495 Leu Ala Ser Gln Ile Gly Ala Gly Leu Val Gly Val Met Tyr Val Leu 500 505 510 Asp Glu Pro Ser Ile Gly Leu His Gln Arg Asp Asn Glu Arg Leu Leu 515 520 525 Gly Thr Leu Val His Leu Arg Asn Leu Gly Asn Thr Val Ile Val Val 535 540 Glu His Asp Glu Asp Ala Ile Arg Ala Ala Asp His Val Ile Asp Ile 545 550 555 Gly Pro Gly Ala Gly Val His Gly Gly Gln Val Val Ala Glu Gly Thr 565 570 Leu Lys Asp Ile Met Ala Val Pro Glu Ser Leu Thr Gly Gln Tyr Met 585 Ser Gly Lys Arg Lys Ile Glu Val Pro Lys Gln Arg Val Ala Ala Asn 595 600 Pro Glu Lys Val Leu Lys Leu Thr Gly Ala Arg Gly Asn Asn Leu Lys 615 620 Asp Val Thr Leu Thr Leu Pro Val Gly Leu Phe Thr Cys Ile Thr Gly 630 635 Val Ser Gly Ser Gly Lys Ser Thr Leu Ile Asn Asp Thr Leu Phe Pro 650 645 Ile Ala Gln Thr Ala Leu Asn Gly Ala Thr Leu Ala Glu Pro Ala Pro 660 665 Tyr Arg Asp Ile Gln Gly Leu Glu His Phe Asp Lys Val Ile Asp Ile 680

```
Asp Gln Ser Pro Ile Gly Arg Thr Pro Arg Ser Asn Pro Ala Thr Tyr
  690
                 695
Thr Gly Val Phe Thr Pro Val Arg Glu Leu Phe Ala Gly Val Pro Glu
705
               710
                             715
Ala Arg Ser Arg Gly Tyr Thr Pro Gly Arg Phe Ser Phe Asn Val Arg
           725
                          730 735
Gly Gly Arg Cys Glu Ala Cys Gln Gly Asp Gly Val Ile Lys Val Glu
        740
            745 750
Met His Phe Leu Pro Asp Ile Tyr Val Pro Cys Asp Gln Cys Lys Gly
     755 760
                        765
Lys Arg Tyr Asn Arg Glu Thr Leu Glu Ile Lys Tyr Lys Gly Lys Thr
 770 775 780
Ile His Glu Val Leu Asp Met Thr Ile Glu Glu Ala Arq Glu Phe Phe
      790 795 800
Asp Ala Val Pro Ala Leu Ala Arg Lys Leu Gln Thr Leu Met Asp Val
           805 810 815
Gly Leu Thr Tyr Ile Arg Leu Gly Gln Ser Ala Thr Thr Leu Ser Gly
        820 825 830
Gly Glu Ala Gln Arg Val Lys Leu Ala Arg Glu Leu Ser Lys Arg Gly
 835 840
                                   845
Thr Gly Gln Thr Leu Tyr Ile Leu Asp Glu Pro Thr Thr Gly Leu His
850 855
                                860
Phe Ala Asp Ile Gln Gln Leu Leu Asp Val Leu His Gln Leu Arg Asp
              870
                             875
Gln Gly Asn Thr Ile Val Val Ile Glu His Asn Leu Asp Val Ile Lys
                         890
Thr Ala Asp Trp Ile Val Asp Leu Gly Pro Glu Gly Gly Ser Gly Gly
        900 905
                                      910
Gly Glu Ile Leu Val Ser Gly Thr Pro Glu Thr Val Ala Glu Cys Glu
   915 920 925
Ala Ser His Thr Ala Arg Phe Leu Lys Pro Leu Leu
                 935
<210> 9515
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<211> 101 <212> PRT

<213> Enterobacter cloacae

<400> 9515

Asn Leu Cys His 100

<210> 9516 <211> 370 <212> PRT

<213> Enterobacter cloacae

<400> 9516

Pro Gly Asp Leu Ile Ile Thr Leu Thr Arg Phe Ser Leu Phe Val Glu

```
Gly Phe Val Ser Cys His Ser Glu Trp Ser Tyr Arg Asp Lys Glu Trp
                          25
                                         30
Val Glu Arg Leu Pro His Ser Gly Gly Ser Met Ala Thr Arg Ile Glu
                       4.0
                                 45
Phe His Lys His Gly Gly Pro Asp Val Leu Lys Ala Val Glu Phe Thr
              55
Pro Ala Ala Pro Gly Glu Asn Glu Ile Gln Val Glu Asn Lys Ala Ile
      70
                              7.5
Gly Ile Asn Tyr Ile Asp Thr Tyr Ile Arg Gly Gly Leu Tyr Pro Pro
           8.5
                             90
Pro Ser Met Pro Ser Gly Leu Gly Thr Glu Ala Ala Gly Ile Val Ser
       100
                          105
Lys Val Gly Ser Ala Val Lys His Ile Lys Glu Gly Asp Arg Val Val
    115
                     120
Tyr Ala Gln Ser Ala Leu Gly Ala Tyr Ser Ser Ile His Asn Val Pro
 130 135 140
Ala Glu Lys Ala Ala Leu Leu Pro Asn Ala Ile Gly Phe Glu Gln Ala
                      155
    150
Ala Ala Ser Phe Leu Lys Gly Leu Thr Val Tyr Tyr Leu Leu Arg Lys
             165
                  170
Thr Tyr Glu Ile Lys Pro Asp Glu Gln Phe Leu Phe His Ala Ala Ala
       180
              185
                               190
Gly Gly Val Gly Leu Ile Ala Cys Gln Trp Ala Lys Ala Leu Gly Ala
           200
                                       205
Lys Leu Ile Gly Thr Thr Gly Ser Ala Gln Lys Ala Gln Arg Ala Leu
                    215
Asp Ala Gly Ala Trp Gln Val Ile Asn Tyr Arg Glu Glu Ser Ile Val
                230
                                 235
                                                   240
Glu Arg Leu Lys Glu Ile Thr Gly Gly Lys Lys Val Arg Val Val Tyr
             245
                             250
Asp Ser Val Gly Lys Asp Thr Trp Glu Ser Ser Leu Asp Cys Leu Gln
         260
                          265
                                           270
Arg Arg Gly Leu Met Val Ser Phe Gly Asn Ala Ser Gly Ala Val Thr
                       280
                                        285
Gly Val Asn Leu Gly Ile Leu Asn Gln Lys Gly Ser Leu Tyr Val Thr
                   295
                                     300
Arg Pro Ser Leu Gln Gly Tyr Ile Thr Asn Arg Glu Glu Leu Glu Glu
                              315
              310
Ala Ser Asn Glu Leu Phe Ser Leu Ile Ala Ser Gly Val Ile Lys Val
             325
                             330
Asp Val Ala Glu Ala Gln Lys Tyr Pro Leu Thr Asp Ala Gln Arg Ala
         340
                          345
His Glu Val Leu Glu Ser Arg Ala Thr Gln Gly Ser Ser Leu Leu Ile
                       360
  370
<210> 9517
<211> 834
<212> PRT
<213> Enterobacter cloacae
<400> 9517
Arg Val Thr Thr Glu Ile Leu Arg Ala Phe Cys Tyr Pro Cys Ala Ala
                              10
```

16 Ala Leu Leu Thr Arg Gly Phe Thr Ser Phe Met Ser Gly Trp Pro
20 25 30
Arg Ile Tyr Tyr Lys Leu Leu Asn Leu Pro Leu Ser Val Leu Val Lys
35 40
Ser Lys Ser Ile Pro Ala Glu Pro Ala Leu Glu Leu Gly Leu Asp Thr

5.5 Ser Arg Pro Ile Met Tyr Val Leu Pro Tyr Asn Ser Lys Ala Asp Leu 70 75 Leu Thr Leu Arg Ala Gln Cys Leu Ala His Asp Leu Pro Asp Pro Leu 85 90 95 Glu Pro Leu Glu Val Asp Gly Thr Leu Leu Pro Arg Tyr Val Phe Ile 100 105 110 His Gly Gly Pro Arg Val Phe Thr Tyr Tyr Thr Pro Lys Glu Glu Ser 115 120 125 Ile Lys Leu Phe His Asp Tyr Leu Asp Leu His Arg Ser Asn Pro Asp 130 135 140 Leu Asp Val Gln Met Val Pro Val Ser Val Met Phe Gly Arg Arg Pro 145 150 155 Gly Arg Glu Lys Gly Glu Glu Asn Pro Pro Leu Arg Met Leu Asn Gly 165 170 175 Ile Gln Lys Phe Phe Ala Val Ser Trp Leu Gly Arg Asp Ser Phe Val 180 185 190 Arg Phe Ser Pro Ser Val Ser Leu Arg Arg Met Ala Asp Glu His Gly 195 200 205 Thr Asp Lys Ile Ile Ala Gln Lys Leu Ala Arg Val Ala Arg Met His 215 220 Phe Ala Arg Gln Arg Leu Ala Ala Val Gly Pro Arg Leu Pro Ala Arg 225 230 235 Gln Asp Leu Phe Asn Lys Leu Leu Ala Ser Lys Ala Ile Ala Arg Ala 245 250 Val Glu Asp Glu Ala Arg Ser Lys Lys Ile Ser His Glu Lys Ala Gln 260 265 270 Gln Asn Ala Ile Ala Leu Met Glu Glu Ile Ala Ala Asn Phe Ser Tyr 275 280 285 Glu Met Ile Arg Leu Ser Asp Arg Ile Leu Gly Phe Thr Trp Asn Arg 290 295 300 Leu Tyr Gln Gly Ile Asn Val His Asn Ala Glu Arg Val Arg Gln Leu 305 310 315 Ala His Asp Gly His Glu Ile Val Tyr Val Pro Cys His Arg Ser His 325 330 Met Asp Tyr Leu Leu Ser Tyr Val Leu Tyr His Gln Gly Leu Val 350 345 340 Pro Pro His Ile Ala Ala Gly Ile Asn Leu Asn Phe Trp Pro Ala Gly 355 360 365 Pro Ile Phe Arg Arg Leu Gly Ala Phe Phe Ile Arg Arg Thr Phe Lys 370 375 380 Gly Asn Lys Leu Tyr Ser Thr Val Phe Arg Glu Tyr Leu Gly Glu Leu 390 395 Phe Ser Arg Gly Tyr Ser Val Glu Tyr Phe Val Glu Gly Gly Arg Ser 405 410 Arg Thr Gly Arg Leu Leu Asp Pro Lys Thr Gly Thr Leu Ser Met Thr 420 425 Ile Gln Ala Met Leu Arg Gly Gly Thr Arg Pro Ile Thr Leu Val Pro 440 Ile Tyr Ile Gly Tyr Glu His Val Met Glu Val Gly Thr Tyr Ala Lys 450 455 460 Glu Leu Arg Gly Ala Thr Lys Glu Lys Glu Ser Leu Pro Gln Met Leu 465 470 475 Arg Gly Leu Ser Lys Leu Arg Asn Leu Gly Gln Gly Tyr Val Asn Phe 485 490 Gly Glu Pro Leu Pro Leu Met Thr Tyr Leu Asn His His Val Pro Glu
500 505 510 Trp Arg Glu Ser Ile Asp Pro Ile Glu Ala Val Arg Pro Ala Trp Leu 520 525 Thr Pro Thr Val Asn Gly Ile Ala Ser Glu Leu Met Val Arg Ile Asn 530 535

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Asn Ala Gly Ala Ala Asn Ala Met Asn Leu Cys Cys Thr Ala Leu Leu
545
                          555
Ala Ser Arg Gln Arg Ser Leu Thr Arg Glu Gln Leu Thr Glu Gln Ile
           565
Asp Cys Tyr Leu Asp Ile Met Arg Asn Val Pro Tyr Ser Val Asp Ser
                       585
        580
Thr Val Pro Ser Ala Thr Ala Ser Glu Leu Ile Asp His Ala Leu Gln
      595
                    600
Met Asn Lys Phe Glu Val Glu Lys Asp Thr Ile Gly Asp Ile Ile Ile
      615
                               620
Leu Pro Arg Glu Gln Ala Val Leu Met Thr Tyr Tyr Arg Asn Asn Ile
    630 635
Thr His Met Leu Met Leu Pro Ser Leu Met Ala Ala Ile Ile Thr Gln
        645 650 655
His Arg Arg Ile Ser Arg Gln Glu Leu Leu Arg His Ile Gln Ala Ile
  660 665
Tyr Pro Met Leu Lys Ala Glu Leu Phe Leu Arg Trp Ser Lys Asp Glu
 675 680
                                  685
Leu Ala Ala Glu Leu Asp Lys Met Thr Ala Glu Met His Arg Gln Gly
 690 695 700
Leu Ile Thr Ile Ser Asp Asp Glu Leu His Ile Asn Pro Ser Arg Ser
705 710 715
Arg Thr Leu Gln Leu Leu Ala Ser Gly Ala Arg Glu Thr Leu Gln Arg
           725 730
Tyr Ala Ile Thr Phe Trp Leu Leu Ser Ala Asn Pro Ser Ile Asn Arg
        740 745 750
Gly Thr Leu Glu Lys Glu Ser Arg Thr Leu Ala Gln Arg Leu Ser Val
755 760
Leu His Gly Ile Asn Ala Pro Glu Phe Phe Asp Lys Ala Val Phe Ser
770 775 780
Ser Leu Val Leu Thr Leu Arg Asp Glu Gly Tyr Ile Ser Asp Thr Gly
785 790
                            795
Asp Ala Glu Pro Glu Glu Thr Met Lys Val Tyr Gln Met Leu Ala Glu
    805 810 815
Leu Ile Thr Ala Asp Val Arg Leu Thr Ile Glu Ser Ser Thr Gln Gly
                      825
Glu
```

<210> 9518 <211> 519 <212> PRT

<213> Enterobacter cloacae

<400> 9518 Arg Lys Asn Pro Met Asp Val Ile Lys Lys Lys His Trp Trp Gln Ser 10 15 Asp Ala Leu Lys Trp Ser Val Ile Gly Leu Leu Cys Leu Leu Val Gly 25 3.0 Tyr Leu Val Val Leu Met Tyr Val Gln Gly Glu Tyr Leu Phe Ala Ile 35 40 Met Thr Leu Ile Leu Ser Ser Val Gly Leu Tyr Ile Phe Ala Asn Arg 50 55 Lys Ala Tyr Ala Trp Arg Tyr Val Tyr Pro Gly Val Ala Gly Met Gly 75 65 70 Leu Phe Val Leu Phe Pro Leu Ile Cys Thr Ile Ala Ile Ala Phe Thr 85 Asn Tyr Ser Ser Thr Asn Gln Leu Ala Gln Glu Arg Ala Thr Gln Val 100 105 Leu Leu Asp Arg Ser Tyr Gln Ala Gly Lys Thr Phe Asn Phe Gly Leu

120

```
Tyr Pro Ala Gly Asp Glu Trp Lys Leu Ala Leu Thr Asp Gly Glu Ser
              135
Gly Lys Thr Tyr Leu Ser Asp Ala Phe Lys Phe Gly Gly Glu Gln Lys
145
            150
                            155
Leu Thr Leu Lys Glu Ala Ala Ala Leu Pro Glu Gly Glu Arg Ala Asn
           165
               170 175
Leu Arg Ile Ile Thr Gln Asn Arg Gln Ala Leu Thr Gln Leu Thr Ala
            185 190
        180
Val Leu Pro Asp Glu Ser Lys Val Ile Met Ser Ser Leu Arg Gln Phe
         200 205
    195
Ser Gly Thr Gln Pro Leu Tyr Tar Leu Ala Asp Asp Gly Thr Leu Thr
 210
      215 220
Asn Asn Gln Ser Gly Val Lys Tyr Arg Pro Asn Asn Asp Ile Gly Phe
225 230 235
Tyr Gln Ser Val Asn Ala Asp Gly Ser Trp Gly Asp Asp Lys Leu Ser
           245 250 255
Pro Gly Tyr Thr Val Thr Ile Gly Trp Asp Asn Phe Thr Arg Val Phe
        260 265 270
Thr Asp Glu Gly Ile Gln Lys Pro Phe Phe Ala Ile Phe Val Trp Thr
 275 280 285
Val Val Phe Ser Val Leu Thr Val Ile Leu Thr Val Ala Val Gly Met
290 295 300
Val Leu Ala Cys Leu Val Gln Trp Glu Ser Leu Lys Gly Lys Ala Ile
305 310 315
Tyr Arg Val Leu Leu Ile Leu Pro Tyr Ala Val Pro Ser Phe Ile Ser
           325
                          330
Ile Leu Ile Phe Lys Gly Leu Phe Asn Gln Ser Phe Gly Glu Ile Asn
                       345 350
Met Met Leu Ser Ala Leu Phe Gly Ile Lys Pro Ala Trp Phe Ser Asp
     355 360 365
Pro Thr Thr Ala Arg Ser Met Ile Ile Ile Val Asn Thr Trp Leu Gly
                 375
                                380
Tyr Pro Tyr Met Met Ile Leu Cys Met Gly Leu Leu Lys Ala Ile Pro
              390
                             395
Asp Asp Leu Tyr Glu Ala Ser Ala Met Asp Gly Ala Gly Pro Phe Gln
           405 410 415
Asn Phe Phe Lys Ile Thr Leu Pro Leu Leu Ile Lys Pro Leu Thr Pro
        420 425 430
Leu Met Ile Ala Ser Phe Ala Phe Asn Phe Asn Asn Phe Val Leu Ile
                   440 445
Gln Leu Leu Thr Asn Gly Gly Pro Asp Arg Leu Gly Thr Thr Thr Pro
                 455
                     460
Ala Gly Tyr Thr Asp Leu Leu Val Ser Tyr Thr Tyr Arg Ile Ala Phe
              470
                             475
Glu Gly Gly Gly Gln Asp Phe Gly Leu Ala Ala Ala Ile Ala Thr
           485 490 495
Leu Ile Phe Leu Leu Val Gly Ala Leu Ala Ile Val Asn Leu Lys Ala
        500
                    505
Thr Arg Met Lys Phe Asp
<210> 9519
<211> 184
<212> PRT
<213> Enterobacter cloacae
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<400> 9519

Gly Ala Ala Ala Thr Gly Gln Asp Phe Leu Arg Pro Asp Ala Leu Thr 1 5 10
Pro Ala Leu Ser His Arg Glu Arg Glu Ile Ile Ser Ser Glu Tyr Leu 20 20 30

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His His Ser Cys Lys Arg Leu Arg His Ala Leu Asp Val Ala Glv Ile
                        40
Gln Thr Arg His Ala His Thr Ala Ala Gly Asp Gln Val Asp Thr Glu
                     5.5
Leu Phe Thr Gln Ala Ile Asp Leu Arg Cys Ala Gln Ser Gly Val Ala
Glu His Pro Ala Leu Leu Glu Lys Ile Ile Lys Val Met Pro Arg His
             8.5
                               90
Gly Leu Phe Gln Asp Val Asn Gln Leu Leu Thr His Arg Gln Asp Ala
        100
              105 110
Leu Thr His Arg Phe His Phe Arg Lys Pro Gly Gly Phe Gln Ser Phe
      115 120
                                         125
Val Thr Glu Asn Cys Arg His His Leu Arg Thr Lys Val Arg Arg Ala
  130
       135 140
Gly Val Asp Thr Ala Asp Arg Arg Phe Gln Leu Ala Glu Tyr Ala Ser
       150 155
Arg Gly Phe Gly Val Phe Thr His His Gly Gln Thr Ala Asn Ala Leu
        165 170
Ala Val Gln Gly Glu Asp Phe
 180
<210> 9520
<211> 174
<212> PRT
<213> Enterobacter cloacae
<400> 9520
Glu Gly Val Ala Asp Gln Ser Gly Lys Pro Arg Ala Gly Asn Arg Ala
                              10
Asn Gly Val Gly Val Phe Phe His Ala Arg Ala Lys Ala Leu Ile Gly
          20
                           25
                                              30
Asp Val Glu Glu Arg Asp Gln Val Thr Arg Leu Gln Tyr Leu Asp His
                                       4.5
Arg Ile Pro Leu Gly Ile Gly Glu Val Arg Thr Arg Arg Val Met Ala
                     55
Ala Arg Met Gln Gln Tyr Asp Ala Ala Leu Arg Gln Gly Val Gln Phe
                 70
                                75
Phe Gln Gln Arg Ile Asn Ala His Ala Val Arg Phe Ala Val Glu Pro
                               90
                                                 95
Arg Ile Ser Phe Asn Leu Lys Ala Arg Ala Leu Glu Asp Arg Asn Val
         100
                           105
                                             110
Val Phe Pro Arg Arg Val Ala Asp Pro His Ala Gly Ile Arg Glu Val
      115
                        120
                                          125
Leu Phe Gln Glu Ile Cys Ala Tyr Leu Gln Arg Thr Arg Ala Thr Gln
                    135
                                      140
Arg Leu Asp Ser Arg Tyr Ala Leu Leu Arg Glu His Arg Val Val Arg
                 150
                                  155
Thr Lys Gln Gln Arg Arg Asp Ser Val Ala Val Gly Val
              165
<210> 9521
<211> 184
<212> PRT
<213> Enterobacter cloacae
<400> 9521
Ser Glu Ser Phe His Pro Leu Pro His Pro Arg Cys Pro Met Asp Lys
```

10 Ser Thr Lys Glu Leu Leu Ala Gln Ala Glu Lys Leu Cys Ala Gln Arg 20 25 Asn Val Arg Leu Thr Pro Gln Arg Leu Glu Val Leu Arg Leu Met Ser

```
Leu Gln Gln Gly Ala Ile Ser Ala Tyr Asp Leu Leu Asp Leu Leu Arg
                     55
Glu Ser Glu Pro Gln Ala Lys Pro Pro Thr Val Tyr Arg Ala Leu Asp
                70
                                   75
Phe Leu Leu Glu Gln Gly Phe Val His Lys Val Glu Ser Thr Asn Ser
            8.5
                      90
Tyr Val Leu Cys His Leu Phe Asp Gln Pro Thr His Thr Ser Ala Met
        100 105 110
Phe Ile Cys Asp Arg Cys Gly Val Val Lys Glu Glu Cys Ala Glu Gly
      115 120
                                125
Val Glu Asp Ile Met His Thr Leu Ala Ala Arg Met Gly Phe Ala Leu
 130 135 140
Arg His Asn Val Ile Glu Ala His Gly Leu Cys Ser Ala Cys Val Glu
145 150 155
Val Glu Ser Cys Arg His Gln Asp Asp Cys Gln His Asp His Ser Ile
                              170
           1.65
Leu Val Lys Lys Lys Pro Arg
         180
<210> 9522
<211> 72
<212> PRT
<213> Enterobacter cloacae
<400> 9522
Ser Gly Ser Gly Thr Thr Thr Ser Ser Ala Leu Lys Pro Lys Arg Phe
                              1.0
Cys Arg Thr Thr Ser Thr Cys Thr Ala Leu Arg Pro Thr Ser Ser Arg
        2.0
                         2.5
                                             30
Ala Thr Trp Asn Pro Thr Ala Ser Thr Leu Thr Val Thr Ala Thr Arg
35
                       40
                               4.5
Trp Ile Thr Arg Leu Ala Gln Ser Ser Gly Ala Ser Arg Ala Pro Thr
50 55
Val Ser Thr Arg Ser Thr Ser
<210> 9523
<211> 713
<212> PRT
<213> Enterobacter cloacae
<400> 9523
Cys Arg Tyr Pro Ser Leu Pro Asp Thr Ala Asp Thr Gly Ile Met Lys
                              10
Lys Thr Tyr Leu Tyr Ser Met Leu Ala Leu Cys Val Ser Ala Ala Cys
          20
                           25
                                             30
His Ala Glu Thr Tyr Pro Ala Pro Ile Gly Pro Ser Gln Ser Asp Phe
      3.5
                       4.0
                                         45
Gly Gly Val Gly Leu Leu Gln Thr Pro Thr Ala Arg Met Ala Arg Glu
                  55
                                     60
Gly Glu Ile Ser Leu Asn Tyr Arg Asp Asn Asp Gln Tyr Arg Tyr Tyr
               7.0
                                  75
Ser Ala Ser Val Gln Leu Phe Pro Trp Leu Glu Thr Thr Leu Arg Tyr
             85
                               90
Thr Asp Val Arg Thr Lys Gln Tyr Ser Ser Val Asp Ala Phe Ser Gly
Asp Gln Thr Tyr Lys Asp Lys Ala Phe Asp Val Lys Leu Arg Leu Trp
                       120
                                          125
Glu Glu Ser Tyr Trp Met Pro Gln Val Ser Val Gly Ala Lys Asp Ile
   130
                     135
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Gly Gly Thr Gly Leu Phe Asp Ala Glu Tyr Ile Val Ala Ser Lys Ala 155 Trp Gly Pro Phe Asp Phe Ser Leu Gly Leu Gly Trp Gly Tyr Leu Gly 170 165 Thr Ser Gly Asn Val Lys Asn Pro Phe Cys Ser Tyr Ser Asp Lys Tyr 185 Cys Tyr Arg Asp Asn Ser Tyr Gln Lys Ala Gly Ser Ile Asn Gly Asp 195 200 205 Gln Met Phe His Gly Pro Ala Ser Leu Phe Gly Gly Val Glu Tyr Gln 215 220 Thr Pro Trp Gln Pro Leu Arg Leu Lys Leu Glu Tyr Glu Gly Asn Asn 230 235 240 Tyr Ser Glu Asp Phe Ala Gly Lys Ile Glu Gln Lys Ser Lys Phe Asn 245 250 255 Val Gly Ala Ile Tyr Arg Val Thr Asp Trp Ala Asp Val Asn Leu Ser 260 265 270 Tyr Glu Arg Gly Asn Thr Leu Met Phe Gly Phe Thr Leu Arg Thr Asn 275 280 285 Phe Asn Asp Met Arg Pro His Tyr Asn Asp Asn Pro Arg Pro Lys Tyr 290 295 300 Gln Pro Glu Pro Gln Asp Ala Ile Ile Gln His Ser Val Val Ala Asn 310 315 Gln Leu Thr Leu Leu Lys Tyr Asn Ala Gly Leu Ala Asp Pro Lys Ile 325 330 335 Gln Thr Lys Gly Asp Thr Leu Tyr Val Thr Gly Glu Gln Val Lys Tyr 340 345 350 Arg Asp Ser Arg Glu Gly Ile Glu Arg Ala Asn Arg Ile Val Met Asn 355 360 365 Asp Leu Pro Glu Gly Ile Arg Thr Ile Arg Val Thr Glu Asn Arg Leu 375 380 Asn Leu Pro Gln Val Thr Thr Glu Thr Asp Val Ala Ser Leu Lys Arg 390 395 His Leu Glu Gly Glu Pro Leu Gly His Glu Thr Glu Leu Val Gln Lys 405 410 415 Arg Val Glu Pro Val Val Pro Glu Thr Thr Glu Gln Gly Trp Tyr Ile 420 425 Asp Lys Ser Arg Phe Asp Phe His Ile Asp Pro Val Leu Asn Gln Ser 435 440 445 Val Gly Gly Pro Glu Asn Phe Tyr Met Tyr Gln Leu Gly Ala Met Ala 450 455 460 Thr Ala Asp Leu Trp Val Thr Asp His Leu Leu Thr Thr Gly Ser Leu 470 475 Phe Gly Asn Ile Thr Asn Asn Tyr Asp Lys Phe Lys Tyr Thr Asn Pro 485 490 Pro Asn Asp Ser Lys Leu Pro Arg Val Arg Thr Arg Val Arg Glu Tyr 500 505 510 Val Gln Asn Asp Ile Tyr Val Asn Asn Leu Gln Ala Asn Tyr Phe Gln 520 525 Tyr Phe Gly Asn Gly Phe Tyr Gly Gln Val Tyr Gly Gly Tyr Leu Glu 530 535 540 Thr Met Phe Gly Gly Ala Gly Ala Glu Val Leu Tyr Arg Pro Val Asp 550 555 Ser Asn Trp Ala Phe Gly Val Asp Ala Asn Tyr Val Lys Gln Arg Asp 570 565 Trp Arg Ser Ala Gln Asp Met Met Lys Phe Thr Asp Tyr Ser Val Lys 580 585 590 Thr Gly His Leu Thr Ala Tyr Trp Thr Pro Ser Phe Ala Gln Asp Val 595 600 Leu Val Lys Ala Ser Val Gly Gln Tyr Leu Ala Gly Asp Lys Gly Gly 615 Thr Leu Asp Ile Ser Lys His Phe Asp Ser Gly Val Val Val Gly Gly

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630
                                  635
Tyr Ala Thr Ile Thr Asn Val Ser Pro Asp Glu Tyr Gly Glu Gly Asp
                      650
            645
                                        655
Phe Thr Lys Gly Val Tyr Val Ser Ile Pro Leu Asp Leu Phe Ser Ser
         660
                        665
                                670
Gly Pro Thr Arg Ser Arg Ala Ala Val Gly Trp Thr Pro Leu Thr Arg
 675 680 685
Asp Gly Gly Gln Gln Leu Gly Arg Lys Phe Gln Leu Tyr Asp Met Thr
 690 695
Ser Asp Lys Asn Ile Asn Phe Arg
<210> 9524
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 9524
Ile Pro Val Thr Phe Leu Arg Tyr Thr Gly Thr Ser Pro Trp Arg Met
                             1.0
Arg Cys Cys Met Thr Ser Leu Thr Arg Pro Arg Val Glu Phe Ile Ser
       20
                           25
                                             3.0
Thr Ile Leu Gln Thr Val Leu Asn Leu Gly Leu Leu Ser Leu Gly Leu
35
                        40
                                          45
Ile Leu Val Val Phe Leu Gly Lys Glu Thr Val His Leu Ala Asp Val
                    55
Leu Phe Ala Pro Glu Gln Thr Ser Lys Tyr Ala Leu Val Glu Gly Leu
                 70
                                  75
                                                    80
Val Val Tyr Phe Leu Tyr Phe Glu Phe Ile Ala Leu Ile Val Lys Tyr
                 90
                                                 95
             8.5
Phe Gln Ser Gly Phe His Phe Pro Leu Arg Tyr Phe Val Tyr Ile Gly
          100
                           105
                                              110
Ile Thr Ala Ile Val Arg Leu Ile Ile Val Asp His Lys Ser Pro Leu
115
                        120
                                          125
Asp Val Leu Ile Tyr Ser Ala Ala Ile Leu Leu Leu Val Ile Thr Leu
130 135 140
Trp Leu Cys Asn Ser Lys Arg Leu Lys Arg Glu
145
                 150
<210> 9525
<211> 190
<212> PRT
<213> Enterobacter cloacae
<400> 9525
Ile Leu Phe Val Arg Pro His Phe Val Asn Leu Arg Tyr Asn Ala Phe
                            10
                                              1.5
Thr Leu Cys Ile Gly Glu Ser Gly Met Ser His Pro Ala Leu Thr Gln
                            25
                                             30
Leu Arg Ala Leu Arg Tyr Phe Asp His Ile Pro Ala Leu Asp Pro Glu
       35
                        4.0
Gln Leu Asp Trp Leu Leu Glu Asp Ser Met Thr Lys Arg Phe Glu
 50
                    5.5
Gln Gln Gly Lys Thr Val Thr Val Thr Met Ile Gln Glu Glv Phe Val
                 70
                                   75
Ser Pro Ala Glu Ile Ala Ser Glu Leu Pro Leu Leu Pro Gln Glu Glu
             85
                             90
Arg Tyr Trp Leu Arg Glu Ile Leu Leu Cys Ala Asp Gly Glu Pro Trp
          100
                        105
Leu Ala Gly Arg Thr Val Val Pro Glu Ser Thr Leu Ser Gly Pro Glu
```

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Leu Ala Leu Gln Arg Leu Gly Lys Thr Pro Leu Gly Arg Tyr Leu Phe
                    135
                                     140
Thr Ser Ser Glu Leu Thr Arg Asp Phe Ile Glu Ile Gly Cys Asp Ala
145
                150
                                155
Asp Leu Trp Gly Arg Arg Ser Arg Leu Arg Leu Ser Gly Lys Pro Leu
          165 170
Ile Leu Thr Glu Leu Phe Leu Pro Ala Ser Pro Leu Tyr
        180 185
<210> 9526
<211> 294
<212> PRT
<213> Enterobacter cloacae
<400> 9526
Glu Gly Glu Lys Met Glu Trp Ser Leu Thr Gln Asn Lys Leu Leu Ala
                           10
Tyr His Arg Leu Met Arg Thr Asp Lys Pro Ile Gly Ala Leu Leu Leu
                           25
Leu Trp Pro Thr Leu Trp Ala Leu Trp Val Ala Thr Pro Gly Val Pro
                       40
Pro Leu Trp Ile Leu Ala Val Phe Val Ala Gly Val Trp Leu Met Arg
                   5.5
Ala Ala Gly Cys Val Val Asn Asp Tyr Ala Asp Arg Lys Phe Asp Gly
                 70
                                  7.5
His Val Lys Arg Thr Ala Asn Arg Pro Leu Pro Ser Gly Gln Val Thr
             85
                               90
Gly Lys Glu Ala Arg Ile Leu Phe Val Val Leu Val Leu Leu Ser Phe
          100
                         105
                                             110
Met Leu Val Leu Thr Leu Asn Thr Met Tnr Ile Leu Leu Ser Val Ala
   115
                        120
                                         125
Ala Leu Ala Leu Ala Trp Val Tyr Pro Phe Met Lys Arg Tyr Thr His
                    135
                                    140
 130
Leu Pro Gln Val Val Leu Gly Ala Ala Phe Gly Trp Ser Ile Pro Met
145 150
                                  155
                                                    160
Ala Phe Ala Ala Val Ser Glu Ser Val Pro Leu Ser Cys Trp Leu Met
                 170
             165
                                                 175
Phe Leu Ala Asn Ile Leu Trp Ala Val Ala Tyr Asp Thr Gln Tyr Ala
          180
                          185
                                             190
Met Val Asp Arg Asp Asp Asp Leu Lys Ile Gly Ile Lys Ser Thr Ala
      195 200
                                         205
Ile Leu Phe Gly Arg His Asp Lys Leu Ile Ile Gly Ile Leu Gln Val
   210
                    215
                                      220
Ala Val Leu Ala Leu Met Val Ala Ile Gly Arg Leu Asn Gly Leu Asn
      230
225
                                  235
Trp Glu Phe Tyr Trp Ser Val Leu Val Ala Gly Leu Leu Phe Ala Tyr
             245
                               250
Gln Gln Lys Leu Ile Ala Lys Arg Glu Arg Glu Ala Cys Phe Lys Ala
          260
                           265
Phe Leu Asn Asn Asn Tyr Val Gly Leu Val Leu Phe Leu Gly Leu Ala
      275
                        280
                                285
Met Ser Tyr Trp Ser
   290
<210> 9527
<211> 127
<212> PRT
<213> Enterobacter cloacae
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<400> 9527

Lys Val Leu Leu Met Ala Asn Asn Thr Thr Gly Leu Thr Arg Ile Ile

```
10
Lys Ala Ala Gly Tyr Ser Trp Lys Gly Phe Arg Ala Ala Trp Val Asn
          20
Glu Ala Ala Phe Arg Gln Glu Ala Val Ala Ala Ile Val Ala Val Val
                        40
Ile Ala Cys Phe Leu Asp Val Asp Ala Ile Thr Arg Val Leu Leu Ile
                  5.5
                                       60
Gly Ser Val Phe Leu Val Met Ile Val Glu Ile Leu Asn Ser Ala Ile
              7.0
                                 7.5
Glu Ala Val Val Asp Arg Ile Gly Ser Glu Phe His Glu Leu Ser Gly
            85
                            90
Arg Ala Lys Asp Met Gly Ser Ala Ala Val Leu Leu Ala Ile Ile Thr
         100 105 110
Ala Ala Ile Thr Trp Val Thr Leu Leu Trp Ser His Phe Arg
<210> 9528
<211> 211
<212> PRT
<213> Enterobacter cloacae
<400> 9528
Leu Tyr Ile His Pro Gly Gly Gly Met Lys Ala Leu Thr Thr Arg Gln
                                10
Gln Glu Val Phe Asp Leu Ile Arg Asp His Ile Gly Gln Thr Gly Met
Pro Pro Thr Arg Ala Giu Ile Aia Gln Arg Leu Gly Phe Arg Ser Pro
 3.5
                         4.0
Asn Ala Ala Glu Glu His Leu Lys Ala Leu Ala Arg Lys Gly Val Ile
5.0
                     5.5
                                       60
Glu Ile Val Ser Gly Ala Ser Arg Gly Ile Arg Leu Leu Val Glu Glu
                  70
                                    75
Glu Ser Gly Ile Pro Leu Val Gly Arg Val Ala Ala Gly Glu Pro Leu
              85
                                90
Leu Ala Gln Gln His Ile Glu Gly His Tyr Gln Val Asp Pro Gly Met
          100
                            105
                                              110
Phe Lys Pro Ser Ala Asp Phe Leu Leu Arg Val Ser Gly Met Ser Met
       115
                        120
                                           125
Lys Asp Ile Gly Ile Leu Asp Gly Asp Leu Leu Ala Val His Lys Thr
                     135
                                       140
Gln Asp Val Arg Asn Gly Gln Val Val Val Ala Arg Ile Asp Asp Glu
                 150
                                    155
Val Thr Val Lys Arg Leu Lys Lys Gln Gly Asn Thr Val Gln Leu Leu
              165
                                170 175
Pro Glu Asn Asn Glu Phe Ser Pro Ile Val Val Asp Leu Arg Glu Gln
          180
                         185 190
Ser Phe Ser Ile Glu Gly Leu Ala Val Gly Val Ile Arg Asn Gly Glu
                                           205
Trp Leu
   210
<210> 9529
<211> 460
<212> PRT
<213> Enterobacter cloacae
<400> 9529
Phe Leu Tyr Ser Leu Ala Cys Phe Leu Ile Pro Val Ile Ser Met Ala
                              10
Leu Leu Thr Ser Ala Asp Lys Ala Leu Trp Arg Leu Ala Leu Pro Met
                             25
```

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Ile Phe Ser Asn Ile Thr Val Pro Leu Leu Gly Leu Val Asp Thr Ala
                     4.0
Val Ile Gly His Leu Asp Ser Pro Ile Tyr Leu Gly Gly Val Ala Ile
 5.0
                5.5
Gly Ala Thr Ala Thr Ser Phe Leu Ile Met Leu Leu Leu Phe Leu Arg
             70
                               75
Met Ser Thr Thr Gly Leu Thr Ala Gln Ala Tyr Gly Ala Lys Asp Pro
         85 90
Leu Arg Leu Ala Arg Ala Leu Val Gin Pro Leu Ile Leu Ala Phe Gly
  100 105
Ala Gly Ala Leu Ile Val Leu Leu Arg Thr Pro Leu Ile Asp Phe Ala
 115 120 125
Leu His Ile Val Gly Gly Ser Asp Ala Val Leu Glu Gln Ala Arg Arg
130 135 140
Phe Leu Glu Ile Arg Trp Leu Ser Ala Pro Ala Ser Leu Ala As<br/>n Leu 145 $150$ $150$ $155$
Val Leu Leu Gly Trp Leu Leu Gly Val Gln Tyr Ala Arg Ala Pro Val
165 170 175
Ile Leu Leu Val Val Gly Asn Leu Leu Asn Ile Met Leu Asp Leu Trp
        180 185 190
Leu Val Met Gly Leu His Met Asn Val Arg Gly Ala Ala Leu Ala Thr
195 200
                          205
Ala Ile Ala Glu Tyr Gly Thr Leu Leu Ile Gly Leu Gly Met Val Trp
210 215 220
Arg Val Leu Ala Met Arg Gly Ile Thr Leu Asp Leu Leu Lys Ser Ala
               230
                               235
Trp Arg Gly Asn Ile Arg Lys Leu Leu Ala Leu Asn Arg Asp Ile Met
            245
                            250 255
Leu Arg Ser Leu Leu Gln Leu Cys Phe Gly Ala Leu Thr Val Phe
 260
                        265 270
Gly Ala Arg Leu Gly Pro Glu Ile Val Ala Val Asn Ala Val Leu Met
275
                      280
                            285
Thr Leu Leu Thr Phe Thr Ala Tyr Ala Leu Asp Gly Phe Ala Tyr Ala
290
                   295
                                   300
Val Glu Ala His Ser Gly Gln Ala Tyr Gly Ala Arg Glu Ser Gly Gln
305
               310 315
Leu Arg Glu Val Trp Arg Ala Ala Cys Arg Gln Ala Gly Leu Val Ala
            325 330
                                             335
Leu Ala Phe Ala Leu Val Tyr Ala Cys Phe Gly Gly His Ile Val Ala
                         345
                                         350
         340
Leu Leu Thr Ser Leu Pro Ala Leu Arg Glu Leu Ala Asp Arg Tyr Ile
                      360
355
                                      365
Leu Trp Gln Val Val Leu Pro Val Val Gly Val Trp Cys Tyr Leu Leu
 370
                   375
                                   380
Asp Gly Met Phe Ile Gly Ala Thr Arg Gly Ala Glu Met Arg Asn Ser
                390
                                395
385
Met Ala Val Ala Ala Ala Gly Phe Gly Leu Thr Leu Leu Thr Leu Pro
            405
                            410
Tyr Leu Gly Asn His Gly Leu Trp Leu Ala Leu Ala Val Phe Leu Ser
                         425 430
         420
Leu Arg Gly Leu Ser Leu Ala Val Ile Trp His Arg His Trp Arg Asn
 435 440
                                      445
Asn Thr Trp Phe Pro Ala Pro His Asp Ile Ser
                   455
                                   460
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<210> 9530

<211> 335

<212> PRT

<213> Enterobacter cloacae

<400> 9530

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Asn Phe Ala Met Ser Ser Glu Phe Gln Thr Val Phe Pro Ala His Arq
Phe Ser Ile Ala Pro Met Leu Asp Trp Thr Asp Arg His Cys Arg Tyr
         20
                          2.5
                                           3.0
Phe Leu Arg Gln Leu Ser Arg His Thr Leu Leu Tyr Thr Glu Met Val
 35
                       4.0
                                        45
Thr Thr Gly Ala Ile Ile His Gly Lys Gly Asp Tyr Leu Ala Tyr Ser
                   55
                                    60
Glu Glu Glu His Pro Val Ala Leu Gln Leu Gly Gly Ser Asp Pro Ala
             70 75
Ala Leu Ala Gln Cys Ala Lys Leu Ala Glu Glu Arg Gly Tyr Asp Glu
            8.5
                             90
Ile Asn Leu Asn Val Gly Cys Pro Ser Asp Arg Val Gln Asn Gly Met
         100 105 110
Phe Gly Ala Cys Leu Met Gly Asn Ala His Leu Val Ala Asp Cys Ile
     115
                      120
                                       125
Lys Ala Met Arg Asp Val Val Ser Ile Pro Val Thr Val Lys Thr Arg
       135
Ile Gly Ile Asp Asp Gln Asp Ser Tyr Glu Phe Leu Cys Asp Phe Ile
                                 155
                150
Asn Thr Val Ser Gly Lys Gly Glu Cys Glu Met Phe Ile Ile His Ala
             165
                             170 175
Arg Lys Ala Trp Leu Ser Gly Leu Ser Pro Lys Glu Asn Arg Glu Ile
              185 190
         180
Pro Pro Leu Asp Tyr Pro Arg Val Tyr Gln Leu Lys Arg Asp Phe Pro
      195
                       200
                                        205
His Leu Thr Met Ser Ile Asn Gly Gly Ile Lys Ser Leu Asp Glu Ala
  210
                    215
                                     220
Lys Ala His Leu Glu His Met Asp Gly Val Met Val Gly Arg Glu Ala
                230
                                 235
Tyr Gln Asn Pro Gly Ile Leu Ala Thr Val Asp Arg Glu Ile Phe Gly
             245
                              250
Val Glu Gly Ala Asp Thr Asp Pro Val Ala Val Val Arg Ala Met Tyr
          260
                          265
Pro Tyr Ile Glu Arg Glu Leu Ser His Gly Thr Tyr Leu Gly His Ile
      275
                       280
                                        285
Thr Arg His Met Leu Gly Leu Phe Gln Gly Ile Pro Gly Ala Arg Gln
 290
                    295
                                     300
Trp Arg Arg Tyr Leu Ser Glu Asn Ala His Lys Ala Gly Ala Asp Ile
305 310
                                 315
Glu Val Leu Glu His Ala Leu Arg Leu Val Ala Asp Lys Arg
```

```
<210> 9531
<211> 363
<212> PRT
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<213> Enterobacter cloacae

325

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His Leu His Thr Ala Val His Asn Glu Glu Gln Leu Ala Ala Leu Glu
   100
                 105
Thr Ala Glu Leu Ser Glu Pro Val Thr Val Trp Met Lys Leu Asp Thr
  115
                   120
                                  125
Gly Met His Arg Leu Gly Val Arg Pro Glu Ser Ala Glu Ala Phe Tyr
                               140
 130 135
Gln Arg Leu Cys Gln Cys Lys Asn Val Arg Gln Pro Val Asn Ile Val
                 155 160
145 150
Ser His Phe Ala Arg Ala Asp Glu Pro Glu Cys Gly Ala Thr Glu Gln
    165 170 175
Gln Leu Asp Ile Phe Asn Thr Phe Cys Glu Gly Lys Pro Gly Met Arg
   180 185 190
Ser Ile Ala Ala Ser Gly Gly Ile Leu Leu Trp Pro Gln Ser His Phe
   195 200 205
Asp Trp Ala Arg Pro Gly Ile Ile Leu Tyr Gly Val Ser Pro Leu Glu
210 215 220
Asn Lys Pro Trp Gly Pro Asp Phe Gly Phe Lys Pro Val Met Ser Leu
225 230 235 240
Val Ser Lys Leu Ile Ala Val Arg Glu His Lys Ala Gly Glu Pro Val
        245 250 255
Gly Tyr Gly Gly Thr Trp Ile Ser Glu Arg Asp Thr Arg Leu Gly Val
   260
                      265 270
Val Ala Met Gly Tyr Gly Asp Gly Tyr Pro Arg Ala Ala Pro Thr Gly
275
                   280
                       285
Thr Pro Val Leu Val Asn Gly Arg Glu Val Lys Ile Val Gly Arg Val
              295 300
290
Ala Met Asp Met Ile Cys Val Asp Leu Gly Pro Asp Ala Gln Asp Lys
             310 315
Ala Gly Asp Asp Ala Val Met Trp Gly Glu Gly Leu Pro Val Glu Arg
           325
                         330 335
Ile Ala Glu Ile Thr Lys Val Ser Ala Tyr Glu Leu Ile Thr Arg Leu
 340 345
Thr Ser Arg Val Ala Met Lys Tyr Val Asp
```

<210> 9532 <211> 149 <212> PRT

355

<213> Enterobacter cloacae

 $<\!400>9532$ Lys Asp Ser Pro Phe Ile Met Glu Gln His Met Trp Tyr Gln Gln Thr 1 5 10 15

1.0 Leu Thr Leu Ser Ala Lys Pro Arg Gly Phe His Leu Val Thr Asp Glu Val Ile Gly Gln Ile Arg Asp Leu Ser Arg Val Lys Thr Gly Leu Leu 40 35 45 His Leu Leu Ceu Gln His Thr Ser Ala Ser Leu Thr Leu Asn Glu Asn 50 5.5 Cys Asp Pro Thr Val Arg Ser Asp Met Glu Arg His Phe Leu Lys Thr 70 75 Val Pro Asp Asn Ala Pro Tyr Glu His Asp Tyr Glu Gly Ala Asp Asp 95 85 90 Met Pro Ser His Ile Lys Ser Ser Leu Leu Gly Val Ser Leu Met Leu 100 105 Pro Val His Asn Gly Arg Leu Gln Leu Gly Thr Trp Gln Gly Ile Trp 120 Leu Gly Glu His Arg Ile His Gly Gly Ser Arg Lys Ile Ile Ala Thr 130 135 140

360

Leu Gln Gly Glu 145

```
<210> 9533
<211> 75
<212> PRT
<213> Enterobacter cloacae
<400> 9533
Arg Arg Cys Pro Ser Ala Tyr Lys Val Ser Lys Ala Ser Glu Asp Leu
                                   10
Pro Asp Pro Glu Ser Pro Val Thr Thr Met Ser Leu Ser Arg Gly Ile
                                                    30
            20
                              25
Met Arg Leu Ile Phe Leu Arg Leu Trp Val Arg Ala Pro Arg Thr Ser
                          40
                                             4.5
Ile Leu Ser Ile His Leu Ser Arg Leu Glu His Gly Leu Pro Asp Leu
                      5.5
Phe Glu Gly Gln Thr Ala Val Arg Asn Gly
                    70
<210> 9534
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 9534
Arg Gly Phe Met Glu Lys Arg Leu Pro Arg Ile Lys Ala Leu Leu Thr
                                   10
Pro Gly Glu Val Ala Lys Arg Ser Gly Val Ala Val Ser Ala Leu His
            2.0
                                25
Phe Tyr Glu Ser Lys Gly Leu Ile Lys Ser Ile Arg Asn Ala Gly Asn
        35
                           4.0
                                                4.5
Gln Arg Arg Tyr Thr Arg Asp Val Leu Arg Tyr Val Ala Ile Ile Lys
  50
                        55
                                            60
Ile Ala Gln Arg Ile Gly Ile Pro Leu Ala Thr Ile Gly Asp Ala Phe
                                        75
                   7.0
Gly Val Leu Pro Glu Gly His Ser Leu Ser Ala Lys Glu Trp Lys Gln
                85
                                    90
Leu Ser Ser Gln Trp Arg Glu Glu Leu Asp Arg Arg Ile His Thr Leu
                               105
                                                   110
            100
Val Ala Leu Arg Asp Glu Leu Asp Gly Cys Ile Gly Cys Gly Cys Leu
                            120
                                                125
        115
Ser Arg Ser Asp Cys Pro Leu Arg Asn Pro Gly Asp Arg Leu Gly Glu
 130
                       135
Gln Gly Thr Gly Ala Arg Leu Leu Glu Glu Asp
145
                    150
                                        155
<210> 9535
<211> 598
<212> PRT
<213> Enterobacter cloacae
<400> 9535
Leu Phe Met Arg Lys Arg Val Ala Lys Ala Ala Arg Phe Tyr Phe Gln
                                    10
Asp Ser Ser Cvs Cvs Leu Leu Arg Tyr Ser Gly Glu Asp Arg Ile Arg
                                                    30
                                25
Gly Thr Thr Pro Gln Val Trp Leu Ile Arg Asn Thr Ala Asn Arg Glu
        35
                            40
Arg Met Glu Ile Phe Phe Thr Ile Leu Ile Met Thr Leu Val Val Ser
                        5.5
Leu Ser Gly Val Val Thr Arg Val Leu Pro Phe Gln Val Pro Leu Pro
                                        75
```

Leu Met Gln Ile Ala Ile Gly Ala Leu Leu Ala Trp Pro Thr Phe Gly 8.5 Leu His Val Glu Phe Asp Pro Glu Leu Phe Leu Val Leu Phe Ile Pro 100 105 Pro Leu Leu Phe Ala Asp Gly Trp Lys Thr Pro Thr Arg Glu Phe Leu 115 120 125 Glu His Gly Arg Glu Ile Phe Gly Leu Ala Leu Ala Leu Val Val Val 130 135 140 Thr Val Val Gly Ile Gly Phe Leu Ile Tyr Trp Ala Val Pro Gly Ile 145 150 155 160 Pro Leu Ile Pro Ala Phe Ala Leu Ala Ala Val Leu Ser Pro Thr Asp 165 170 175 Ala Val Ala Leu Ser Gly Ile Val Gly Glu Gly Arg Ile Pro Lys Lys 180 185 190 Ile Met Gly Ile Leu Gln Gly Glu Ala Leu Met Asn Asp Ala Ser Gly 195 200 205 Leu Val Ala Leu Lys Phe Ala Val Ala Val Ala Met Gly Thr Met Val 210 215 Phe Thr Val Gly Gly Ala Thr Leu Glu Phe Phe Lys Val Ala Ile Gly 225 230 235 240 Gly Ile Leu Ala Gly Phe Val Val Ser Trp Leu Tyr Gly Arg Ser Leu 245 250 255 Arg Phe Leu Ser Arg Trp Gly Gly Asp Glu Pro Ala Thr Gln Ile Val 260 265 270 Leu Leu Phe Leu Leu Pro Phe Ala Ser Tyr Leu Ile Ala Glu His Ile 275 280 285 Gly Val Ser Gly Ile Leu Ala Ala Val Ala Ala Gly Met Thr Ile Thr 300 290 295 Arg Ser Gly Val Met Arg Arg Ala Pro Leu Ala Met Arg Leu Arg Ala 305 310 315 Asn Ser Thr Trp Ala Met Leu Glu Phe Val Phe Asn Gly Met Val Phe 325 330 335 Leu Leu Gly Leu Gln Leu Pro Gly Ile Met Glu Ser Ser Leu Ile 340 345 350 Ala Ala Glu Ala Asp Pro Asn Val Glu Val Trp Met Leu Phe Thr Asp 355 360 365 Ile Val Leu Ile Tyr Leu Ala Leu Met Leu Val Arg Phe Gly Trp Leu 370 375 380 Trp Thr Met Lys Lys Phe Ser Val Arg Phe Leu Thr Lys Lys Pro Met 395 385 390 Glu Phe Gly Ser Trp Thr Thr Arg Glu Leu Leu Ile Ala Ser Phe Ala 410 405 Gly Val Arg Gly Ala Ile Thr Leu Ala Gly Val Leu Ser Ile Pro Leu 420 425 430 Leu Leu Pro Thr Gly Asp Val Phe Pro Ala Arg Tyr Glu Leu Val Phe 435 440 445 Leu Ala Ala Gly Val Ile Leu Phe Ser Leu Phe Val Gly Val Ile Met 455 460 Leu Pro Ile Leu Leu Gln His Ile Asp Ala Gly Asp Ser Ser Gln Gln 470 475 His Lys Glu Glu Arg Ile Ala Arg Ala Ala Thr Ala Glu Val Ala Ile 485 490 Val Ala Ile Glu Lys Met Glu Glu Arg Leu Ala Ala Asp Ala Glu Glu 505 500 510 Asn Ile Asp Asn Gln Leu Leu Lys Glu Val Ser Ser Arg Val Ile Gly 515 520 525 Asn Leu Arg Arg Arg Ala Asp Gly Arg Asn Asp Val Glu Ser Ser Leu 535 540 Gln Glu Glu Asn Leu Glu Arg Arg Phe Arg Leu Ala Ala Leu Arg Ser 555 550 Glu Arq Ala Glu Leu Tyr His Leu Arq Ala Thr Arg Gln Ile Ser Asn

5130 565 570 Glu Thr Leu Gln Lys Leu Leu His Asp Leu Asp Leu Leu Glu Ala Leu 580 585 Leu Ile Glu Asn Gln 595 <210> 9536 <211> 252 <212> PRT <213> Enterobacter cloacae <400> 9536 Trp Cys Trp Ala Pro Pro Pro Gly Trp Trp Ile Arg Cys Ile Ala Leu 10 Lys Ser Ala Gly Arg Ser Met Thr Asn Phe Gln Ile Ser Leu Leu Cys 25 Leu Ile Ala Thr Val Val Ile Tyr Phe Ala Asn Lys Arg Leu Tyr Arg 40 35 Arg Phe Arg Ala Leu Pro Leu Met Pro Leu Val Phe Thr Pro Ile Leu 50 55 Leu Val Leu Met Leu Val Phe Gly His Ile Ser Trp Gln Asn Tyr Ile 70 75 Gly Glu Ser His Trp Leu Leu Trp Leu Leu Gly Pro Ala Thr Ile Ala 90 85 Phe Ala Val Pro Val Tyr Asp Asn Leu Ala Ile Ile Arg Arg His Trp 105 100 Met Ser Leu Ser Ala Gly Val Val Thr Ala Thr Val Val Ala Val Cys 120 125 115 Ser Ser Val Trp Leu Ala Arg Leu Phe Thr Leu Ser Asp Glu Ile Gln 135 140 130 Arg Ser Leu Ala Val Arg Ser Val Thr Thr Pro Phe Ala Leu Ala Ala 150 155 145 Ala Lys Pro Leu Gly Gly Gln Pro Asp Leu Val Ala Leu Phe Val Val 165 170 175 Val Thr Gly Val Phe Gly Met Ala Val Gly Asp Met Leu Phe Leu Arg 185 190 180 Leu Ser Ile Arg Glu Gly Met Ala Lys Gly Ala Gly Phe Gly Ala Ala 205 195 200 Ser His Gly Ala Gly Thr Ala Arg Ser Tyr Glu Leu Gly Gln Glu Glu 210 215 220 Gly Val Val Ala Ser Leu Val Met Met Leu Ser Gly Val Thr Met Val 235 230 Leu Ile Ala Pro Leu Val Ala Trp Met Met Phe 245 <210> 9537 <211> 420 <212> PRT <213> Enterobacter cloacae <400> 9537 Ile Thr Asp Asn Asp Thr Phe Cys Ser Glu Met Pro Cys Ser Leu Arg 10 Leu Ala Gln His Ala Val Gln Met Ile Leu Ile Arg Arg Val Lys Lys 20 25 Ser His Lys Pro Thr Gln His Asn Ser Tyr Pro Phe Ser Met Ser Pro 35 4.0 Tyr Ser Cys Ser Phe Asp Gly Ala Glu Ile Ser Leu Arg Lys Ser Val 50 55 Ser Met Lys Asn Leu Lys Val Ser Leu Ala Trp Gln Ile Leu Leu Ala

```
Leu Val Leu Gly Ile Leu Leu Gly Ser Tyr Leu His Tyr His Ser Asp
                   90
         8.5
Ser Arg Glu Trp Leu Ile Ala Asn Leu Leu Ser Pro Ala Gly Asp Ile
       100
           105 110
Phe Ile His Leu Ile Lys Met Ile Val Val Pro Ile Val Ile Ser Thr
 115 120 125
Leu Val Val Gly Ile Ala Gly Val Gly Asp Ala Lys Gln Leu Gly Arg
 130 135 140
Ile Gly Val Lys Thr Ile Leu Tyr Phe Glu Val Ile Thr Thr Val Ala
   150 155 160
Ile Val Leu Gly Ile Thr Leu Ala Asn Val Phe Gln Pro Gly Ala Gly
      165 170 175
Ile Asp Met Ser Gln Leu Ala Thr Val Asp Ile Ser Lys Tyr Gln Ser
       180 185 190
Thr Thr Ala Asp Val Gln Ser His Ser His Gly Leu Met Gly Thr Ile
                   200 205
Leu Ser Leu Val Pro Thr Asn Ile Ile Ala Ser Met Ala Lys Gly Glu
               215
                               220
 210
Met Leu Pro Ile Ile Phe Phe Ser Val Leu Phe Gly Leu Gly Leu Ser
              230
                            235
Ser Leu Pro Ala Thr His Arg Glu Pro Leu Val Thr Val Phe Arg Ser
           245 250 255
Ile Ser Glu Thr Met Phe Lys Val Thr His Met Val Met Arg Tyr Ala
                      265
        260
Pro Val Gly Val Phe Ala Leu Ile Ala Val Thr Val Ala Asn Phe Gly
275
                   280
Phe Ala Ser Leu Trp Pro Leu Ala Lys Leu Val Ile Leu Val His Phe
290 295
                               300
Ala Ile Leu Phe Phe Ala Leu Val Val Leu Gly Ile Val Ala Arg Leu
305 310
                          315
Cys Gly Leu Ser Ile Trp Ile Leu Ile Arg Ile Leu Lys Asp Glu Leu
                         330
           325
Ile Leu Ala Tyr Ser Thr Ala Ser Ser Glu Ser Val Leu Pro Arg Ile
  340
                       345
                                     350
Ile Glu Lys Met Glu Ala Tyr Gly Ala Pro Ala Ser Ile Thr Ser Phe
                   360 365
355
Val Val Pro Thr Gly Tyr Ser Phe Asn Leu Asp Gly Ser Thr Leu Tyr
 370
                 375
                               380
Gin Ser Ile Ala Ala Ile Phe Ile Ala Gin Leu Tyr Gly Ile Asp Leu
             390 395
385
Ser Leu Trp Gln Glu Ile Val Leu Val Leu Thr Leu Met Val Thr Ser
           405
                         410
Lys Gly Ile Ala
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<210> 9538

<211> 280 <212> PRT

<213> Enterobacter cloacae

420

<400> 9538

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Val Gly Gln Pro Arg Leu Ala Lys Ser Trp Trp Thr Gly Ala Val Ile
            8.5
                               90
Ser Glu Arg Gln Ala Thr Ile Val Ala Glu Gln Lys His Gln Ala Leu
         100
                           105
Leu Ala Arg Leu Ser Gly Leu Ala Gln Gln Glu Asp Ala Asp Asp Ala
   115 120
                                          125
Ala Ala Ile Thr Ser Leu Arg Gln Gln Leu Gln Ala Val Lys Val Thr
 130 135 140
Gly Arg Gln Lys Val Asn Leu Asp Pro Asp Glu Val Arg Val Ala Glu
    150 155
145
Asn Gly Asn Pro Ser Leu Glu Gly Asp Tyr Thr Leu Trp Leu Pro Ala
      165 170 175
Gln Pro Ser Thr Val Thr Val Met Gly Leu Leu Ser Ser Pro Gly Lys
    180 185 190
Lys Pro Phe Thr Pro Gly Arg Asp Val Ala Ser Tyr Leu Asp Glu Gln
      195 200 205
Ser Leu Leu Ser Gly Ala Asp Lys Ser Tyr Ala Trp Val Val Tyr Pro
210 215 220
Asp Gly His Thr Gln Lys Ala Pro Val Ala Tyr Trp Asn Lys Arg His 225 230 235
Ile Glu Pro Met Pro Gly Ser Ile Ile Phe Val Gly Phe Ala Asp His
             245 250 255
Phe Trp Thr Lys Ala Tyr Asp Gly Leu Asn Ala Asp Ile Leu Arg Ser
       260
                           265
Leu Ile Gln Arg Ile Pro Glu
<210> 9539
<211> 123
<212> PRT
<213> Enterobacter cloacae
<400> 9539
Lys Met Val Lys Tyr Ala Thr Pro Cys Asn Thr Leu Arg Gly Val Leu
                               10
Leu Ser Glu Gln Gln Leu Ile Phe Gly Met Ile Leu Val Thr Ile Ala
         20
                            25
Ala Ser Phe Gly Asn Ser Trp Glu Ser Thr Met Leu Glu Leu Leu Phe
                      40
Val Ile Gly Phe Phe Ile Met Leu Met Val Thr Gly Val Ser Leu Leu
                     55
                                    60
Gly Ile Leu Ala Ala Leu Val Val Ala Thr Val Val Met Phe Val Gly
              70
                                   75
65
Gly Leu Phe Ala Leu Thr Ile Lys Leu Leu Pro Trp Leu Leu Leu Ala
             8.5
                               90
Ile Ala Val Val Trp Ala Ile Arg Ala Ile Lys Ser Pro Lys Leu Pro
          100
                           105
Ser Tyr Gln Arg Asn Asn Arg Phe Arg Tyr
<210> 9540
<211> 403
<212> PRT
<213> Enterobacter cloacae
<400> 9540
Ser Gly Glu His Arg Val Phe Gln Lys Val Asp Ala Tyr Ala Gly Asp
                               10
Pro Ile Leu Ser Leu Met Glu Arg Phe Lys Glu Asp Pro Arg Ser Asp
         20
Lys Val Asn Leu Ser Ile Gly Leu Tyr Tyr Asn Glu Asp Gly Ile Ile
```

4.0 Pro Gln Leu Lys Ala Val Ala Glu Ala Glu Ala Arg Leu Asn Ala Thr 5.5 60 Pro His Gly Ala Ser Leu Tyr Leu Pro Met Glu Gly Leu Asn Thr Tyr 7.0 7.5 Arg Asn Thr Ile Ala Pro Leu Leu Phe Gly Ala Asp His Ala Val Leu 85 90 95 Ala Gln Lys Arg Val Ala Thr Ile Gln Thr Leu Gly Gly Ser Gly Ala 100 105 110 Leu Lys Val Gly Ala Asp Phe Leu Lys Lys Tyr Phe Pro Asp Ser Gly 120 125 Val Trp Val Ser Asp Pro Thr Trp Glu Asn His Val Ala Ile Phe Glu 130 135 140 Gly Ala Gly Phe Lys Val Glu Thr Tyr Pro Trp Phe Asp Ser Glu Thr 150 155 Asn Gly Val Arg Val Asp Ala Leu Leu Glu Lys Leu Asn Thr Leu Pro 170 175 165 Glu Arg Ser Ile Val Leu Leu His Pro Cys Cys His Asn Pro Thr Gly 185 190 180 Ala Asp Leu Thr Asn Ala Gln Trp Asp Ala Val Ile Glu Ile Leu Lys 200 195 205 Ala Arg Asn Leu Ile Pro Phe Leu Asp Ile Ala Tyr Gln Gly Phe Gly 210 215 220 Ala Gly Met Glu Glu Asp Ala Tyr Ala Ile Arg Ala Ile Ala Ser Ala 230 235 Gly Leu Pro Ala Leu Val Ser Asn Ser Phe Ser Lys Ile Phe Ser Leu 250 245 Tyr Gly Glu Arg Val Gly Gly Leu Ser Val Val Cys Glu Asp Ala Glu 265 270 260 Ala Ala Gly Arg Val Leu Gly Gln Leu Lys Ala Thr Val Arg Arg Ile 280 285 275 Tyr Ser Ser Pro Pro Asn Phe Gly Ala Gln Val Val Ala Thr Val Leu 300 295 290 Gly Asp Glu Arg Leu Lys Ala Thr Trp Leu Ala Glu Val Glu Ala Met 315 305 310 Arg Lys Arg Ile Leu Ser Met Arg Gln Glu Leu Val Asn Val Leu Lys 330 325 Glu Ala Val Pro Gly His Asn Phe Asp Tyr Leu Leu Lys Gln Arg Gly 345 350 340 Met Phe Ser Tyr Thr Gly Leu Ser Ala Ala Gln Val Asp Arg Leu Arg 365 360 355 Glu Glu Phe Gly Val Tyr Leu Ile Ala Ser Gly Arg Met Cys Val Ala 375 380 Gly Leu Asn Ala Ser Asn Val Gln Arg Val Ala Gln Ala Phe Ala Ala 390 395 385

<210> 9541 <211> 183 <212> PRT <213> Enterobacter cloacae

Val Met

 Arg Val Val Leu Phe Gly Lys Leu Ala Glu Val Ala Gly Glu Tyr Leu 75 70 Arg Lys Gly Ser Gln Val Tyr Ile Glu Gly Gln Leu Arg Thr Arg Lys 85 90 Trp Thr Asp Gln Ser Gly Gln Glu Lys Tyr Thr Thr Glu Val Val Val 100 105 110 Asn Val Gly Gly Thr Met Gln Met Leu Gly Gly Arg Gln Gly Gly 115 120 125 Ala Pro Ala Gly Gly Gly Gln Gln Gly Gly Trp Gly Gln Pro Gln 130 135 140 Gln Pro Gln Gly Gly Asn Gln Phe Ser Gly Gly Ala Gln Ser Arg Pro 145 150 155 160 Gln Gln Gln Ser Ala Pro Ala Pro Ser Asn Glu Pro Pro Met Asp Phe 165 170 175 Asp Asp Asp Ile Pro Phe 180 <210> 9542 <211> 492 <212> PRT <213> Enterobacter cloacae <400> 9542 Phe Arg Gly Leu Ile Leu Leu Phe Arg Tyr Glu Leu Leu Arg Leu Leu 1 5 10 15 Ser Arg Leu Met Thr Cys Glu Lys Ile Met Lys Glu Gln Arg Arg Glu 20 25 Ile Ile Asn Asp Ser Met Gln Ala Leu His Ala Leu Ala Lys Leu Met 35 4.0 Pro Gln Leu Asn Ala Gln Cys Ser Pro Val Glu Met Leu Glu Thr Ile 5.5 Asn Ser Ala Leu Gly Ala Asn Leu Ser Trp Val Ser Val Glu Ser Ala 65 70 75 80 Asp Gly Pro Arg Val Val Cys Ala Gly Asp Val Thr Cys His Ala Phe 85 Asn Val Ala Asp Phe Leu Ala Ser Thr Leu Leu Gln Arg His His Arg 100 105 110 Ala Trp Arg Val Ile Tyr Trp Lys Ala His Ile Gly Arg Ala Val Phe 115 120 125 115 Ser Pro Gln His Pro Gly Tyr Ala Arg Leu Gln Ser Gly Val Leu Cys 130 135 140 Lys Leu Ser Ala His Gly Arg Gln Cys Ser Gly Tyr Phe Phe Leu Ala 145 150 155 Phe Asn Gly Lys Leu Thr Ser Leu Pro Ile Leu Lys Asn Ile Val Val 165 170 175 Val Leu Val Glu Lys Leu Lys Asp Tyr Phe Asp Asp Ile Ile Val Arg 180 185 Glu Lys Thr Ala Gln Glu Met Gln Arg Val Val Thr Gln Tyr Lys Thr 200 205 Leu Phe Glu Arg Ala Pro Val Leu Met Asn Ala Phe Asp Arg His Asn 215 220

245 250 255

Asp Pro Glu Glu Arg Gln Arg Val Gln Glu Ser Val Arg Phe Ala Pro 260 260 270

Leu Lys Asp Met Tyr Glu Trp His Pro Val Arg Lys Asp Gly Thr Gln 275 280

Leu Thr Ile Leu Trp Ser Asn Ile Leu Leu Pro Asp Asn Ser Ile Leu

Arg Cys Val Leu Trp Asn Ala Glu Cys Glu Lys Val Phe Gly Trp Ser 225 230 235 235 Met Thr Glu Ile Asp Glu His Pro Asp Pro Leu Ala Leu Phe Tyr Pro

```
295
Asn Ile Gly Leu Asp Ile Thr Glu Arg Lys Lys Ala Glu Gln Gln Leu
   310 315 320
Thr Val Lys Ala Thr Thr Asp Asp Leu Thr Gly Cys Leu Asn Arg Ser
        325 330 335
Thr Ile Leu Gln Gln Leu Lys Met Ala Leu Ala Ala Ser Ser Pro Gln
       340 345 350
Asp Val Ser Ser His Phe Cys Leu Leu Met Phe Asp Leu Asp Tyr Phe
    355 360 365
Lys Gln Ile Asn Asp Arg Trp Gly His Gln Val Gly Asp Ala Ala Leu
370 375 380
Ile His Phe Cys Asp Arg Ile Arg Glu Val Ser Pro Ala Gly Ser Ala
     390 395
Leu Gly Arg Val Gly Gly Glu Glu Phe Val Leu Leu Leu Ala Arg Thr
          405 410 415
Asp Gly Met Ala Ala Thr Leu Leu Ser Ser Arg Leu Arg Ala Ala Leu
           425 430
        420
Ile Ser Lys Pro Leu Arg Val Gly Asp Lys Thr Leu Val Leu Ser Phe
        440 445
Ser Ala Gly Val Val Glu Val Cys Gln Gly Gln Arg Asp Thr Ser Ala
450
              455
                    460
Ile Leu Met Arg Ala Asp Lys Ala Leu Tyr Asp Ala Lys Arg Thr Gly
465 470
                 475
Arg Gly Lys Thr Val Leu Ala Ser Asp Tyr Leu
           485
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<210> 9543 <211> 246 <212> PRT

<213> Enterobacter cloacae

<400> 9543

Pro Asn Phe Phe Arg Glu Val Ala Gln Phe Ser Ile Val Lys Lys Tyr Glu Ser Ser Glu Asn Ile Met Leu Thr Val His His Leu Asn Gln Ser 25 3.0 Arg Ser His Arg Val Leu Trp Ala Leu Glu Glu Leu Gly Leu Thr Tyr 4.5 35 4.0 Asp Ile Val Arg Tyr Gln Arg Glu Lys Thr Met Leu Ala Pro Asp Ser 55 60 Leu Lys Lys Val His Pro Leu Gly Lys Ser Pro Val Leu Glu Asp Asn 75 70 Gly Leu Val Leu Ala Glu Ser Gly Ala Ile Met Glu Tyr Leu Gin Glu 90 Thr Tyr Asp Ser Ala Ser Arg Phe Lys Pro Leu Asp Pro Ala His Lys 100 105 110 Val Gln Tyr Arg Phe Trp Leu His Tyr Ala Glu Gly Ser Leu Met Pro 120 125 115 Leu Leu Leu Met Lys Leu Val Phe Asn Ser Leu Gly Lys Pro Pro Val 135 140 130 Pro Phe Gly Leu Arg Thr Leu Gly Lys Ala Leu Gly Gln Gly Val Gln 150 155 Lys Ala Tyr Leu Asn Arg Gln Leu Glu Thr His Ala Arg Phe Ile Asn 165 170 175 Asp His Leu Ala Glu Asn Ser Trp Phe Ala Gly Asp Thr Leu Thr Met 190 180 185 Ala Asp Ile Gln Met Ser Phe Pro Leu Phe Ala Leu Leu Ala Arg Gly 195 200 205 Gly Ile Asp Asn Leu Asp His Ile Ala Ala Trp Lys Gln Arg Val Glu 215 220 Ala Arg Pro Gly Trp Gln Thr Thr Leu Ala Lys Gly Gly Pro Leu Thr

240 230 Ile Pro Gly Glu Gly 245

<210> 9544 <211> 473 <212> PRT

<213> Enterobacter cloacae

<400> 9544 Arg Leu Ala Gly Ser Gly Val Ser Thr Ser Leu Thr Asp Phe Leu Lys 10 Asn Ser Gln Gly Met Phe Ser Met Ser Thr Pro Ser Ala Arg Thr Gly 20 25 Gly Ser Leu Asp Ala Met Phe Lys Ile Ser Ala Arg Gly Ser Thr Val 40 35 Arg Gln Glu Val Val Ala Gly Leu Thr Thr Phe Leu Ala Met Val Tyr 55 50 Ser Val Ile Val Val Pro Gly Met Leu Gly Lys Ala Gly Phe Pro Pro 70 75 Ala Ala Val Phe Val Ala Thr Cys Leu Val Ala Gly Val Gly Ser Ile 85 90 95 Val Met Gly Leu Trp Ala Asn Leu Pro Leu Ala Ile Gly Cys Ala Ile 100 105 110 Ser Leu Thr Ala Phe Thr Ala Phe Ser Leu Val Leu Gly Gln Gln Ile 120 125 115 Ser Val Pro Val Ala Leu Gly Ala Val Phe Leu Met Gly Val Leu Phe 135 140 130 Thr Val Ile Ser Ala Thr Gly Ile Arg Ser Trp Ile Leu Arg Asn Leu 150 155 160 Pro Gln Gly Val Ala His Gly Thr Gly Ile Gly Ile Gly Leu Phe Leu 165 170 Leu Leu Ile Ala Ala Asn Gly Val Gly Leu Val Ile Lys Asn Pro Leu 180 185 190 Asp Gly Leu Pro Val Ala Leu Gly Asn Phe Ala Ser Phe Pro Val Ile 200 205 195 Met Ser Leu Val Gly Leu Ala Val Ile Ile Gly Leu Glu Lys Leu Lys 215 220 Val Pro Gly Gly Ile Leu Leu Thr Ile Ile Gly Val Ser Ile Val Gly 230 235 240 Leu Ile Phe Asp Pro Thr Val His Phe Ser Gly Ile Phe Ala Met Pro 245 250 Ser Leu Ser Asp Asp Lys Gly Asn Ser Leu Ile Gly Ser Leu Asp Ile 260 265 270 Met Gly Ala Leu Asn Pro Val Ile Leu Pro Ser Val Leu Ala Leu Val 280 285 275 Met Thr Ala Val Phe Asp Ala Thr Gly Thr Ile Arg Ala Val Ala Gly 300 290 295 Gln Ala Asn Leu Leu Asp Lys Asp Gly Gln Ile Ile Asp Gly Gly Lys 310 315 Ala Leu Thr Thr Asp Ser Leu Ser Ser Val Phe Ser Gly Leu Val Gly 335 325 330 Ala Ala Pro Ala Ala Val Tyr Ile Glu Ser Ala Ala Gly Thr Ala Ala 340 345 350 Gly Gly Lys Thr Gly Leu Thr Ala Ile Thr Val Gly Val Leu Phe Leu 365 355 360 Leu Ile Leu Phe Leu Ser Pro Leu Ser Tyr Leu Val Pro Ala Tyr Ala 375 380

Thr Ala Pro Ala Leu Met Tyr Val Gly Leu Leu Met Leu Ser Asn Val

Ala Lys Ile Asp Phe Ala Asp Phe Val Asp Ala Met Ser Gly Leu Ile

385 390 395

410 Thr Ala Val Phe Ile Val Leu Thr Cys Asn Ile Val Thr Gly Ile Met 430 420 425 Ile Gly Phe Ala Ser Leu Val Ile Gly Arg Leu Val Ser Gly Glu Trp 440 445 Arg Lys Leu Asn Ile Gly Thr Val Val Ile Ala Val Ala Leu Val Ala 455 Phe Tyr Ala Gly Gly Trp Ala Ile 470 <210> 9545 <211> 631 <212> PRT <213> Enterobacter cloacae <400> 9545 His Arg Gly Thr Phe Gln Ala Pro Gly Val Lys Thr Thr Gly Pro Tyr 10 Phe Met Leu Leu Val Tyr Pro Leu Phe Asp Gln His Phe Ala Thr Pro 20 2.5 3.0 Glu Gly Arg Asp Ser Ser Tyr Thr Phe Arg Val Phe Ser Pro Ala Phe 4.5 4.0 Asp Ala Asp Gln Gly Asn Gly Ile Lys Thr Ile Thr Ile Phe Ile Cys 55 60 Arg Arg Tyr Asn Arg Pro Gln Ser Gln Phe Ser Asn Gln Lys Ser Ile 75 7.0 Ala Met Lys Asn Ile Asn Pro Thr Gln Thr Ala Ala Trp Gln Ala Leu 90 8.5 Gln Lys His Phe Asp Glu Met Lys Asp Val Thr Ile Ala Asp Leu Phe 100 105 110 Ala Lys Asp Ala Asp Arg Phe Ser Lys Phe Ser Ala Thr Phe Asp Asp 125 115 120 Leu Met Leu Val Asp Phe Ser Lys Asn Arg Ile Thr Glu Glu Thr Leu 130 135 140 Ala Lys Leu Gln Asp Leu Ala Lys Glu Thr Glu Leu Ala Asp Ala Ile 145 150 155 160 Lys Ser Met Phe Ser Gly Glu Lys Ile Asn Arg Thr Glu Asp Arg Ala 165 170 175 Val Leu His Val Ala Leu Arg Asn Arg Ser Asn Thr Pro Ile Ile Val 185 190 180 Asp Gly Lys Asp Val Met Pro Glu Val Asn Ala Val Leu Glu Lys Met 195 200 205 Lys Thr Phe Ser Glu Ala Ile Ile Ser Gly Ser Trp Lys Gly Tyr Thr 215 220 210 Gly Lys Ala Ile Thr Asp Val Val Asn Ile Gly Ile Gly Gly Ser Asp 230 235 Leu Gly Pro Phe Met Val Thr Glu Ala Leu Arg Pro Tyr Lys Asn His 245 250 Leu Asn Met His Phe Val Ser Asn Val Asp Gly Thr His Ile Ala Glu 265 260 Val Leu Lys Lys Val Asn Pro Glu Thr Thr Leu Phe Leu Val Ala Ser 275 280 285 Lys Thr Phe Thr Thr Gln Glu Thr Met Thr Asn Ala His Ser Ala Arg 300 295 290 Asp Trp Phe Leu Lys Thr Ala Gly Asp Glu Lys His Val Ala Lys His 310 315 305 Phe Ala Ala Leu Ser Thr Asn Gly Lys Ala Val Gly Glu Phe Gly Ile 325 330 335 Asp Thr Ala Asn Met Phe Glu Phe Trp Asp Trp Val Gly Gly Arg Tyr 345 340 Ser Leu Trp Ser Ala Ile Gly Leu Ser Ile Ile Leu Ser Val Gly Phe

```
360
Asp Asn Phe Val Glu Leu Leu Ser Gly Ala His Ala Met Asp Lys His
               375
                               380
Phe Ser Thr Thr Ala Pro Glu Lys Asn Leu Pro Val Leu Leu Ala Leu
           390
                            395
Ile Gly Ile Trp Tyr Asn Asn Phe Phe Gly Ala Glu Thr Glu Ala Ile
         405 410
Leu Pro Tyr Asp Gln Tyr Met His Arg Phe Ala Ala Tyr Phe Gln Gln
       420 425 430
Gly Asn Met Glu Ser Asn Gly Lys Tyr Val Asp Arg Asn Gly Asn Ala
   435 440
                        445
Val Asp Tyr Gln Thr Gly Pro Ile Ile Trp Gly Glu Pro Gly Thr Asn
      455 460
Gly Gln His Ala Phe Tyr Gln Leu Ile His Gln Gly Thr Lys Met Val
     470 475
Pro Cys Asp Phe Ile Ala Pro Ala Ile Thr His Asn Pro Leu Ser Asp
        485 490
                             495
His His Pro Lys Leu Leu Ser Asn Phe Phe Ala Gln Thr Glu Ala Leu
       500 505 510
Ala Phe Gly Lys Ser Arg Glu Val Val Glu Gln Glu Tyr Arg Asp Gln
   515 520 525
Gly Lys Asp Pro Ala Thr Leu Glu His Val Val Pro Phe Lys Val Phe
530 535 540
Glu Gly Asn Arg Pro Thr Asn Ser Ile Leu Leu Arg Glu Ile Thr Pro
545 550 555
Phe Ser Leu Gly Ala Leu Ile Ala Leu Tyr Glu His Lys Ile Phe Thr
         565 570 575
Gln Gly Ala Ile Leu Asn Ile Phe Thr Phe Asp Gln Trp Gly Val Glu
        580 585 590
Leu Gly Lys Gln Leu Ala Asn Arg Ile Leu Pro Glu Leu Gly Asp Asp
595 600 605
Lys Ala Ile Asp Ser His Asp Ser Ser Thr Asn Gly Leu Ile Asn Arg
610 615
Tyr Lys Ala Trp Arg Ala
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<210> 9546 <211> 227 <212> PRT

625

<213> Enterobacter cloacae

<400> 9546 Pro His Phe Gly Val Val Ile Ser Pro Leu Arg Arg Arg Val Val Lys 10 Arg Pro Ala Ile Ile Leu Ile Cys Leu Leu Leu Gln Ala Cys Ser Ala 20 2.5 Thr Thr Lys Gly Leu Gly His Ser Leu Trp Asp Ser Met Phe Gly Thr 40 Pro Gly Val His Leu Thr Asp Asp Glu Leu Gln Asn Met Pro Tyr Ala 5.0 55 Ser Gln Tyr Met Gln Leu Asn Asp Gly Pro Gln Leu Phe Val Val Leu 7.0 75 Ala Phe Asp Glu Asn Gly Gln Gln Lys Trp Val Thr Gln Asp Gln Ala 90 8.5 Thr Ile Val Thr Gln His Ser Arg Ile Val Lys Thr Leu Leu Gly Gly 100 105 Asp Asn Leu Leu Glu Val Asn Asn Leu Ala Glu Asp Pro Leu Ile Lys 120 125 115 Pro Asn Gln Ile Val Asp Gly Ala Ser Trp Thr Arg Thr Met Gly Trp 140 135 Thr Glu His Lys Gln Val Arg Tyr Ala Thr Ala Arg Ser Thr Phe Arg

150 Trp Asp Gly Thr Asp Ser Val Lys Val Gly Ser Asp Glu Thr Gln Val 165 170 Arg Val Leu Asp Glu Glu Val Thr Thr Asp Gln Ala Thr Trp His Asn 180 185 190 Arg Phe Trp Val Asp Glu Glu Gly Gln Ile Arg Gln Ser Leu Gln Tyr 195 200 205 Leu Gly Ala Gly Phe Phe Pro Val Lys Thr Thr Leu Ile Lys Ala Ala 215 Lys Ser <210> 9547 <211> 375 <212> PRT <213> Enterobacter cloacae <400> 9547 Arg Arg Glu Lys Gly Met Ala Ser Val Gln Leu Arg Asn Val Thr Lys 10 Ala Trp Gly Asp Val Val Val Ser Lys Asp Ile Asn Leu Asp Ile His 20 25 3.0 Glu Gly Glu Phe Val Val Phe Val Gly Pro Ser Gly Cys Gly Lys Ser 35 40 Thr Leu Leu Arg Met Ile Ala Gly Leu Glu Thr Ile Thr Arg Gly Asp 50 55 60 Leu Phe Ile Gly Asp Thr Arg Met Asn Asp Ile Pro Pro Ala Glu Arg 70 75 Gly Val Gly Met Val Phe Gln Ser Tyr Ala Leu Tyr Pro His Leu Ser 90 95 85 Val Ala Glu Asn Met Ser Phe Gly Leu Lys Leu Ala Gly Ala Lys Lys 100 105 110 Glu Thr Ile Asn Gln Arg Val Thr Gln Val Ala Glu Val Leu Gln Leu 120 125 115 Ala His Leu Leu Glu Arg Lys Pro Lys Ala Leu Ser Gly Gly Gln Arg 135 140 130 Gln Arg Val Ala Ile Gly Arg Thr Leu Val Ala Glu Pro Arg Val Phe 150 155 Leu Leu Asp Glu Pro Leu Ser Asn Leu Asp Ala Ala Leu Arg Val Gln 165 170 175 Met Arg Ile Glu Ile Ser Arg Leu His Lys Arg Leu Gly Arg Thr Met 180 185 190 180 Ile Tyr Val Thr His Asp Gln Val Glu Ala Met Thr Leu Ala Asp Lys 195 200 205 Ile Val Val Leu Asp Ala Gly Arg Val Ala Gln Val Gly Lys Pro Leu 215 210 220 Glu Leu Tyr His Tyr Pro Ala Asp Arg Phe Val Ala Gly Phe Ile Gly 230 235 Ser Pro Lys Met Asn Phe Leu Pro Val Lys Val Thr Ala Thr Ala Ile 245 250 255 Glu Gln Val Gln Val Glu Leu Pro Asn Arg Gln Gln Val Trp Leu Pro 260 265 270 Val Asp Ser Ala Asn Val Gln Val Gly Ala Asn Met Ser Leu Gly Ile 280 285 Arg Pro Glu His Leu Leu Pro Ser His Ile Ala Asp Val Thr Leu Glu 295 300 290 Gly Glu Val Gln Val Val Glu Gln Leu Gly His Glu Thr Gln Ile His 310 315 Ile Gln Ile Pro Ala Ile Arg Gln Asn Leu Val Tyr Arg Gln Asn Asp 325 330 Val Val Leu Val Glu Glu Gly Ala Thr Phe Ala Ile Gly Leu Pro Pro

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340
                         345
Glu Arg Cys His Leu Phe Arg Glu Asp Gly Thr Ala Cys Arg Arg Leu
  355
             360
His Lys Glu Pro Gly Val
  370
<210> 9548
<211> 451
<212> PRT
<213> Enterobacter cloacae
<400> 9548
Ala Phe Gln Leu Gln Arg Lys Ala Met Ile Ser Gly Asp Arg Ile Met
                            10
Ile Thr Leu Arg Lys Val Pro Leu Ala Val Ala Ile Ala Ala Gly Ile
                      25
Leu Ser Ala Gln Ala Gly Ala Val Asp Phe Lys Gly Tyr Ala Arg Ser
                   40
Gly Ile Gly Trp Thr Gly Ser Gly Gly Glu Gln Gln Cys Phe Gln Ala
                   55
 5.0
Thr Gly Ala Gln Ser Lys Tyr Arg Leu Gly Asn Glu Cys Glu Thr Tyr
                       75 80
             7.0
Ala Glu Leu Lys Leu Gly Gln Glu Val Trp Lys Glu Gly Asp Lys Ser
            85
                            90
Phe Tyr Phe Asp Thr Asn Val Ala Tyr Ser Val Ser Gln Gln Asn Asp
 100 105 110
Trp Glu Ser Thr Ser Pro Ala Pne Arg Glu Ala Asn Val Gln Gly Lys
 115
                      120
Asn Leu Ile Glu Trp Leu Pro Gly Ser Thr Ile Trp Ala Gly Lys Arg
                135
                                   140
 130
Phe Tyr Gln Arg His Asp Val His Met Ile Asp Phe Tyr Tyr Trp Asp
                150 155
Ile Ser Gly Pro Gly Ala Gly Ile Glu Asn Ile Asp Leu Gly Phe Gly
            165 170
Lys Leu Ser Leu Ala Ala Thr Arg Ser Ser Glu Ser Gly Gly Ser Ala
         180 185 190
Thr Phe Ala Asp Arg Asp Ala Asn Gly Asp Arg Ile Tyr Asp Asn Val
             200 205
      195
Val Pro Asn Asp Val Phe Asp Val Arg Leu Ala Gly Leu Glu Thr Asn
                   215 220
Pro Gly Gly Thr Leu Glu Leu Gly Val Asp Tyr Gly His Thr Asn Ile 225 $230$
Pro Asp Asp Tyr Tyr Leu Gln Pro Gly Ala Ser Lys Asp Gly Trp Leu
                             250 255
             245
Phe Thr Ala Glu His Thr Gln Ser Met Met Lys Gly Phe Asn Lys Phe
                          265 270
         260
Val Leu Gln Tyr Gly Thr Asp Ser Met Thr Ser Asn Gly Lys Gly Ile
      275
                      280
                          285
Pro Gln Gly Gly Ser Ile Asp Asn Asp Gly Ser Met Trp Arg Val Leu
                   295
                                    300
Asp His Gly Ala Ile Thr Leu Ala Asp Arg Trp Asp Leu Met Tyr Val
                310
                                315
Gly Met Tyr Gln Asn Ile Asp Arg Asp Asn Asn Asn Gly Thr Glu Trp
                             330
                                             335
             325
Trp Thr Val Gly Val Arg Pro Met Phe Lys Trp Thr Pro Ile Met Ser
                          345
                                          350
          340
Thr Leu Leu Glu Val Gly Tyr Asp Asn Val Lys Ser Gln Lys Thr Asp
                       360
                                       365
    355
Asp Lys Asn Ser Gln Tyr Lys Ile Thr Leu Ala Gln Gln Trp Gln Ala
                             380
                   375
Gly Asp Ser Ile Trp Ser Arg Pro Ala Ile Arg Val Phe Ala Thr Tyr
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390
Ala Lys Trp Asp Glu Lys Trp Gly Tyr Ala Asn Asn Asp Ser Gly Ala
                        410 415
         405
Gly Tyr Thr Ser Gly Val Ala Tyr Ser Asp Thr Ser Ala Lys Thr Phe
       420 425
                             430
Ser Arg Gly Asp Asn Asp Glu Trp Thr Phe Gly Ala Gln Met Glu Ile
          440
Trp Trp
  450
<210> 9549
<211> 332
<212> PRT
<213> Enterobacter cloacae
<400> 9549
Gly Ala Ala Arg Tyr Cys Leu Ala Thr Ala Val Leu Thr Leu Ser Glu
                 10
Val Ile Thr Met Lys Met Lys Lys Ser Leu Val Ala Leu Cys Leu Ser
            25
                                     30
Ala Gly Leu Leu Ala Cys Ala Pro Ala Leu Thr Tyr Ala Asp Val Asn
35 40
                                 4.5
Phe Val Pro Gln Asn Thr Ser Ala Ala Pro Ala Ile Pro Ala Ala Ala
                     60
50 55
Leu Gln Gln Leu Val Trp Thr Pro Val Asp Gln Ser Lys Thr Gln Thr
65 70
                  75
Thr Gln Leu Ala Ala Gly Gly Gln Ser Leu Asn Val Pro Gly Ile Ser
         85 90
Gly Pro Val Ala Ala Phe Ser Val Pro Ala Asn Ile Gly Glu Leu Thr
        100 105 110
Leu Thr Leu Thr Ser Glu Val Asn Lys Gln Thr Ser Val Phe Ala Pro
115 120 125
Asn Val Leu Ile Leu Asp Gln Ser Met Thr Pro Ser Ala Phe Phe Pro
130 135 140
Ser Asp Tyr Phe Ser Tyr Gln Glu Pro Gly Val Met Ser Ala Asp Arg
145 150 155 160
Leu Glu Gly Val Met Arg Leu Thr Pro Ala Leu Gly Gln Gln Lys Ile
           165
                         170 175
Tyr Val Leu Val Phe Thr Thr Glu Lys Asp Leu Gln Gln Thr Thr Lys
      180 185
Leu Val Asp Pro Ala Lys Ala Tyr Ala Lys Gly Thr Gly Asn Ala Val
                   200 205
 195
Pro Asp Ile Pro Asp Pro His Ala Arg His Thr Thr Asp Gly Leu Ile
      215
                                220
Lys Leu Lys Val Ser Thr Asn Ser Ala Ser Ser Val Leu Val Gly Pro
              230 235 240
Leu Phe Gly Ser Ser Gly Pro Gly Pro Val Thr Val Gly Asn Thr Ala
           245
                          250 255
Ala Pro Val Tyr Ala Ala Pro Ala Ala Thr Pro Ala Ala Ala Pro Ala
         260
                       265
Pro Ala Lys Lys Ala Glu Pro Val Leu Asn Asp Thr Glu Thr Tyr Phe
                    280
                                   285
     275
Asn Asn Ala Ile Lys Gln Ala Val Lys Asn Gly Asp Val Asp Lys Ala
                 295 300
 290
Leu Lys Leu Leu Asp Glu Ala Glu Arg Leu Gly Ser Thr Thr Ala Arg
305 310 315
Ser Thr Phe Ile Ser Ser Val Lys Gly Lys Gly
                          330
            325
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<212> PRT <213> Enterobacter cloacae

<400> 9550

His Glu Asp Thr Ile Met Asn Lys Asp Glu Ile Gly Gly Asn Trp Lys Gln Phe Lys Gly Lys Ala Lys Glu Gln Trp Gly Lys Leu Thr Asp Asp 20

Asp Met Thr Val Ile Glu Gly Lys Arg Asp Gln Leu Val Gly Lys Ile 35 40

Gln Glu Arg Tyr Gly Tyr Glu Lys Asp Gln Ala Glu Asn Glu Val Lys 55 Asp Trp Glu Thr Arg Asn Asp Tyr Arg Trp

70

<210> 9551

<211> 484 <212> PRT

<213> Enterobacter cloacae

<400> 9551 Ser Phe Asp Pro Leu Phe Ile Ser Val Thr Pro Phe Thr Met Ala Gly Asn Lys Pro Phe Asn Lys Gln Thr Glu Pro Arg Glu Arg Asp Tyr Gln 30 20 25 Val Ala Gly Leu Lys Val Pro Pro His Ser Ile Glu Ala Glu Gln Ser 40 45 Val Leu Gly Gly Leu Met Leu Asp Asn Glu Arg Trp Asp Asp Val Ala 5.5 Glu Arg Val Val Ala Glu Asp Phe Tyr Thr Arg Pro His Arg His Ile 70 7.5 Phe Thr Glu Met Ala Arg Leu Gln Glu Ser Gly Ser Pro Ile Asp Leu 85 90 95 Ile Thr Leu Ala Glu Ser Leu Glu Arg Leu Gly Gln Leu Asp Ser Val 100 105 110 Gly Gly Phe Ala Tyr Leu Ala Glu Leu Ser Lys Asn Thr Pro Ser Ala 120 125 Ala Asn Ile Ser Ala Tyr Ala Asp Ile Val Arg Glu Arg Ala Val Val 135 Arg Glu Met Ile Ser Val Ala Asn Glu Ile Ala Glu Ala Gly Phe Asp 150 155 160 Pro Gln Gly Arg Thr Ser Glu Asp Leu Leu Asp Leu Ala Glu Ser Arg 165 170 Val Phe Lys Ile Ala Glu Ser Arg Ala Asn Lys Asp Glu Gly Pro Lys 185 190 180 Asn Ile Ala Asp Val Leu Asp Ala Thr Val Ala Arg Ile Glu Gln Leu 200 205 195 Phe Gln Gln Pro His Asp Gly Val Thr Gly Val Asn Thr Gly Tyr Asp 210 215 220 Asp Leu Asn Lys Lys Thr Ala Gly Leu Gln Pro Ser Asp Leu Ile Ile 230 235 225 Val Ala Ala Arg Pro Ser Met Gly Lys Thr Thr Phe Ala Met Asn Leu 250 245 Val Glu Asn Ala Ala Met Leu Gln Asp Lys Pro Val Leu Ile Phe Ser 270 265 260 Leu Glu Met Pro Ser Glu Gln Ile Met Met Arg Ser Leu Ala Ser Leu 280 285 275 Ser Arg Val Asp Gln Thr Arg Ile Arg Thr Gly Gln Leu Asp Asp Glu 300 290 295 Asp Trp Ala Arg Ile Ser Gly Thr Met Gly Ile Leu Leu Glu Lys Arg 305 310 315

Asn Ile Tyr Ile Asp Asp Ser Ser Gly Leu Thr Pro Thr Glu Val Arg 330 Ser Arg Ala Arg Arg Ile Ala Arg Glu His Gly Gly Ile Gly Leu Ile 345 350 340 Met Ile Asp Tyr Leu Gln Leu Met Arg Val Pro Ser Leu Ser Asp Asn 360 365 355 Arg Thr Leu Glu Ile Ala Glu Ile Ser Arg Ser Leu Lys Ala Leu Ala 380 375 Lys Glu Leu His Val Pro Val Val Ala Leu Ser Gln Leu Asn Arg Ser 390 395 Leu Glu Gln Arg Ala Asp Lys Arg Pro Val Asn Ser Asp Leu Arg Glu 405 410 415 Ser Gly Ser Ile Glu Gln Asp Ala Asp Leu Ile Met Phe Ile Tyr Arg 420 425 Asp Glu Val Tyr His Glu Asn Ser Asp Leu Lys Gly Ile Ala Glu Ile 435 440 445 Ile Ile Gly Lys Gln Arg Asn Gly Pro Ile Gly Thr Val Arg Leu Thr 450 455 460 Phe Asn Gly Gln Trp Ser Arg Phe Asp Asn Tyr Ala Gly Pro Gln Tyr 470 475 Asp Asp Glu

<210> 9552 <211> 246 <212> PRT

<213> Enterobacter cloacae

245

<400> 9552 Gln Thr Glu Tyr Ser Gly Glu Asn Met Arg Lys Ile Thr Leu Ala Leu 10 1 Ser Ala Ala Cys Leu Leu Phe Ser Leu Asn Ser Thr Val Val Ala Arg 30 20 25 Ala Ser Ala Pro Thr Pro Leu Tyr Thr Gly Thr Thr Ala Ala Ile Leu 35 40 4.5 Ala Glu Gln Ala Pro Ile His Trp Val Ser Val Ala Gln Ile Glu Asn 55 60 Ser Leu Thr Gly Arg Pro Pro Met Ala Val Gly Phe Asp Ile Asp Asp 70 75 Thr Val Leu Phe Ser Ser Pro Gly Phe Trp Arg Gly Lys Lys Thr Tyr 85 90 Ser Pro Asp Ser Glu Ala Tyr Leu Lys Asn Pro Glu Phe Trp Glu Lys 105 110 Met Asn Asn Gly Trp Asp Glu Phe Ser Ile Pro Lys Glu Val Ala Arg 115 120 125 Ala Leu Ile Ala Met His Val Lys Arg Gly Asp Ser Ile Tyr Phe Val 130 135 140 Thr Gly Arg Ser Gln Thr Lys Thr Glu Thr Val Ser Lys Thr Leu Gln 150 155 160 Asp Asp Phe Leu Ile Pro Ala Ala Ser Met Asn Pro Val Ile Phe Ala 165 170 175 Gly Asp Gln Glu Gly Gln Asn Thr Lys Thr Gln Trp Leu Glu Lys Lys 185 190 180 Asn Ile Lys Val Phe Tyr Gly Asp Ser Asp Asn Asp Ile Thr Ala Ala 200 205 195 His Asp Val Gly Ala Arg Gly Ile Arg Val Leu Arg Ala Ser Asn Ser 210 215 220 Thr Tyr Arg Pro Leu Pro Met Ala Gly Lys Phe Gly Glu Glu Val Ile 230 235 Val Asn Ser Glu Tyr

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<210> 9553
<211> 128
<212> PRT
<213> Enterobacter cloacae
<400> 9553
Asn Tyr Arg Asn Ala Thr Arg Gly Ile Lys Met Thr Ile Ser Glu Ile
Leu Gln Tyr Cys Met Ser Lys Pro Gly Ala Glu Gln Ser Val His Ser
          20
                            25
                                             30
Asp Trp Lys Ala Thr Gln Ile Lys Val Gly Asp Val Leu Phe Ala Met
      3.5
                        40
Val Lys Glu Val Asp Ala Arg Pro Ala Ala Ser Leu Lys Thr Ser Pro
                 5.5
Glu Leu Ala Asp Leu Leu Arg Gln Gln His Asp Asp Val Arg Pro Ser
              70
                                  7.5
Lys His Leu Asn Lys Ala His Trp Ser Thr Val Phe Leu Asp Gly Ser
                        90
            85
Leu Pro Asp Ser Gln Ile Tyr Tyr Leu Val Asp Ala Ser Tyr Gln Gln
         100 105 110
Ala Val Glu Leu Leu Pro Glu Thr Ile Arg Gln Gln Leu Ser Val
                        120
<210> 9554
<211> 196
<212> PRT
<213> Enterobacter cloacae
<400> 9554
His His Arg Arg Ala Ala Arg Gln Phe Gln Arg Arg Phe Lys Gly Phe
Arg Gln Thr Arg Arg Gln Ile Phe Thr Asp Leu Lys Pro Val Asn His
       20
                           2.5
                                             3.0
His Phe Asp Gly Val Phe Leu Leu Gln Leu Gln Leu Trp Arg Ile Gly
              40
                                          45
Gln Val Thr His Phe Ala Val Asp Thr Gly Ala Asp Ile Ala Leu Ala
                    55
                                      60
Cys Gln Ile Phe Gln Arg Phe Ser Met Phe Ala Leu Thr Leu Phe Asn
65
                70
                                  75
Asp Arg Arg Gln Gln His Gln Ala Phe Ala Phe Arg Leu Arg Gln His
             85
                               90
Val Ile His His Leu Ala Asp Gly Leu Gly Arg Gln Arg Asn Val Val
          100
                           105 110
Ile Arg Ala Ala Arg Leu Ala His Ala Arg Ile Gln Gln Thr Gln Val
                        120 125
       115
Val Met Asp Phe Gly Asn Gly Thr Asp Arg Gly Ser Arg Val Met Arg
   130
                     135 140
Arg Gly Phe Leu Leu Asn Gly Asp Ser Arg Arg Gln Pro Phe Asn Val
                 150
                                  155 160
145
Val Asp Ile Arg Phe Phe His Gln Arg Gln Glu Leu Thr Arg Val Arg
              165 170
Arg Glu Arg Phe Asn Val Thr Thr Leu Ser Phe Gly Ile Gln Ser Val
                            185
Glu Ser Gln
      195
<210> 9555
<211> 550
<212> PRT
<213> Enterobacter cloacae
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<400> 9555 Phe Met Gln Arg Asn His Leu Phe Ile Lys Ala Ala Gly Leu His Cys Tyr Arg Arg Thr Thr Cys Arg Asp Thr Glu Arg Glu Met Asn Arg Ser 20 Ala Arg Arg Lys Met Leu Lys Val Val Gly Ile Ile Met Val Val Met 35 40 Leu Pro Val Met Leu Ala Leu Trp Phe Ala Gln Leu Ser Ala Val Ser 50 55 Glu Ile Ser Ala Gln Leu Arg Thr Phe Ala Glu Leu Ala Leu Asn Lys 65 70 75 Thr Glu Arg Val Ile Gln Gln Val Asp Leu Ala Arg Lys Asp Ala Glu 85 90 95 Lys Tyr Gln Gly Lys Val Cys Thr Pro Glu His Arg Gln Tyr Met Leu 105 100 Asn Val Ser Arg Gly Arg Leu Phe Val Ala Asp Leu Ile Tyr Ala Asp 120 125 Gly Gln Asp Phe Leu Cys Ser Thr Leu Phe Thr Pro Glu His Pro Tyr 135 140 Ile Ile Pro Ala Ala Asn Tyr Thr Arg Lys Pro Asp Val Ala Ile Tyr 145 150 155 Tyr Phe Arg Asp Thr Pro Phe Phe Asn Gly Tyr Lys Met Ile Tyr Met 165 170 175Gln Arg Gly Asn Tyr Val Ala Val Val Asn Pro Leu Ser Tyr Ser Glu 185 190 180 Val Met Ser Asp Asp Arg Ser Leu Ser Trp Gly Val Tyr Asp Thr Val 195 200 205 Ser Asn Ala Phe Phe Ser Val Ser Gln Lys Ala Asn Ile Ser Leu Leu 210 215 220 His Ser Met Leu Arg His Gln Glu Thr Thr Phe Gln Lys Asp Asp Arg 225 230 235 Phe Tyr Thr Ile Val Lys Ser Glu Gln Arg Pro Ile Ala Ala Ile Val 245 250 255 Ser Thr Ser Ser Ala Arg Phe Tyr Lys Thr Leu Tyr His Gln Ala Thr 265 270 260 Leu Thr Leu Pro Leu Gly Ile Ile Cys Ser Ile Ile Ile Leu Leu Val 275 280 285 Trp Ser Arg Thr His Arg Glu Phe Asn Ser Pro Gly Arg Leu Leu His 295 300 Arg Ala Leu Asn Lys Arg Gln Leu Cys Val His Tyr Gln Pro Ile Ile 310 315 305 Asp Ile Lys Asn Asn Gln Cys Val Gly Ala Glu Ala Leu Leu Arg Trp 330 335 325 Pro Gly Phe Asn Gly Gln Val Met Ser Pro Ala Glu Phe Ile Pro Leu 345 350 340 Ala Glu Lys Glu Gly Met Ile Glu Arg Ile Thr Asp Tyr Val Val Glu 355 360 365 Glu Val Phe Ser Asp Leu Gly His Phe Leu Ala Ala His Pro Asp Leu 375 380 Tyr Val Ser Ile Asn Leu Ser Ala Ser Asp Phe His Ser Ser Arg Leu 390 395 Ile Ala Leu Ile Ser Asp Lys Ala Arg Phe Tyr Ser Val Arg Ala Gln 405 410 415 Gln Ile Lys Ile Glu Val Thr Glu Arg Gly Phe Ile Asp Val Pro Lys 425 430 420 Thr Thr Pro Val Ile Gln Ala Phe Arg Gln Ala Gly Tyr Glu Val Ala 440 445 435 Ile Asp Asp Phe Gly Thr Gly Tyr Ser Asn Leu His Asn Leu Tyr Ser 460 455

Leu Asn Val Asp Ile Leu Lys Ile Asp Lys Ser Phe Ile Asp Thr Leu

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470
                                   475
Thr Thr Asn Ser Thr Ser His Leu Ile Ala Glu His Ile Ile Glu Met
             485
                                490
Ala Gln Ser Leu Arg Leu Lys Thr Ile Ala Glu Gly Val Glu Thr Gly
         500
                           505
Glu Gln Val Ser Trp Leu Leu Lys Arg Gly Val Gln Tyr Cys Gln Gly
 515
                     520
Trp His Phe Ala Lys Ala Met Pro Pro Gln Ala Phe Met Ala Trp Gln
 530 535 540
Gln Gln Pro Leu Arg
<210> 9556
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 9556
Phe Ile Ser Val Asp Thr Val Arg Ser Leu Tyr Trp Arg Leu Val Ser
                            10
Phe Leu Arg Lys Thr Pro Met Ala Val Ala Leu Ser Arg Val Thr Pro
20
                           25
Ala Val Val Gln Arg Leu Gln Val Pro Val Gln Val Leu Leu Tyr Ala
                        40
                                          45
Gly Leu Phe Val Phe Ala Glu Tyr Leu Val Asp Trp Leu His Leu Pro
                     5.5
Leu Pro Ala Asn Leu Val Gly Met Val Leu Met Leu Thr Leu Ile Leu
               7.0
                                   75
Cys Arg Ala Leu Pro Leu Asn Trp Val Arg Ala Gly Ala Arg Trp Leu
           8.5
                             90
Leu Ala Glu Met Leu Leu Phe Phe Val Pro Ala Val Val Ala Val Val
         100 105
Asn Tyr Ala Gln Leu Leu Met Val Asp Gly Trp Arg Ile Phe Ala Val
                        120
                                          125
115
Ile Ala Leu Ser Thr Leu Met Val Leu Gly Ala Thr Ala Trp Val Val
130
                 135 140
Asp Lys Val Tyr Arg Phe Glu Ile Ser Arg Gln Lys His Asp
145
                 150
<210> 9557
<211> 511
<212> PRT
<213> Enterobacter cloacae
<400> 9557
Arg Leu Asn Ile Asn Asp Ala Gly Leu Ala Lys Ile Ser Ser Ser Val
                               1.0
Pro Leu Val Val Ser Phe Leu Ile Leu Ile Ser Lys Asp Trp Thr Phe
                            25
          20
Ile Arq His Ile Ser Ala Ser Phe Leu Leu Ile Ile Cys Leu Ser Gly
       35
                        40
                                           4.5
Ser Lys Glu Thr Gly Glu Ile Met Leu Thr Phe Leu Glu Leu Leu Ile
   50
Gly Val Val Val Ile Val Gly Val Ala Arg Tyr Ile Ile Lys Gly Tyr
                 70
                                    75
                                                     80
Ser Ala Thr Gly Val Leu Phe Val Gly Gly Leu Thr Leu Leu Ile Ile
                                90
              8.5
Ser Ala Leu Met Gly His Gln Val Leu Pro Ala Ser Glu Ala Ser Thr
        100
                            105
                                              110
Gly Tyr Thr Ala Thr Asp Ile Val Glu Tyr Ile Lys Ile Leu Leu Met
       115
                                           125
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Ser Arg Gly Gly Asp Leu Gly Met Met Ile Met Met Leu Cys Gly Phe
        135
 130
Ala Ala Tyr Met Thr His Ile Gly Ala Asn Asp Met Val Val Lys Leu
         150
145
                              155
Ala Ser Lys Pro Leu Gln Tyr Ile Asn Ser Pro Tyr Leu Leu Met Val
        165 170
                                           175
Ala Ala Tyr Phe Leu Ala Cys Leu Met Ser Leu Ala Val Ser Ser Ala
        180 185
                                        190
Thr Gly Leu Gly Val Leu Leu Met Ala Thr Leu Phe Pro Val Met Val
 195 200 205
Asn Val Gly Ile Ser Arg Gly Ala Ala Ala Ala Ile Cys Ala Ser Pro
                 215 220
Ala Ala Ile Ile Leu Ser Pro Thr Ser Gly Asp Val Val Leu Ala Ala
225 230 235
Lys Ala Ala Glu Met Ser Leu Ile Asp Phe Ala Phe Lys Thr Thr Leu
            245 250 255
Pro Ile Ser Ile Thr Ala Ile Leu Gly Met Gly Val Ala His Phe Phe
         260
                        265 270
Trp Gln Arg Tyr Leu Asp Lys Lys Glu Asn Val Ser His Glu Met Met
                     280 285
      275
Asp Val Ser Glu Ile Thr Thr Thr Ala Pro Ala Phe Tyr Ser Ile Leu
 290 295
                                  300
Pro Phe Met Pro Ile Ile Gly Val Leu Ile Phe Asp Gly Lys Trp Gly
               310
                               315
305
Pro Gln Leu His Ile Ile Thr Ile Leu Val Ile Cys Met Leu Leu Ala
                            330 335
            325
Ala Ile Leu Glu Phe Val Arg Gly Phe Asn Thr Gln Lys Val Phe Thr
                         345
         340
Gly Leu Glu Val Ala Phe Arg Gly Met Ala Asp Ala Phe Ala Gly Val
                     360
                                     365
      355
Val Met Leu Leu Val Ala Ala Gly Val Phe Ala Gln Gly Leu Ser Thr
                   375
                                  380
 370
Ile Gly Phe Ile Gln Ser Leu Ile Ser Ile Ala Thr Ser Phe Gly Ser
                               395
               390
385
Ala Ser Ile Ile Leu Met Leu Val Leu Val Val Leu Thr Met Leu Ala
            405
                            410 415
Ala Met Thr Thr Gly Ser Gly Asn Ala Pro Phe Tyr Ala Phe Val Glu
                         425
                                         430
         420
Met Ile Pro Lys Leu Ala His Ser Ser Gly Ile Asn Pro Ala Tyr Leu
                      440
      435
Ser Ile Pro Met Leu Gln Ala Ser Asn Leu Gly Arg Thr Ile Ser Pro
                   455 460
Val Ser Gly Val Val Val Ala Val Ala Gly Met Ala Lys Ile Ser Pro
               470
                             475
Phe Glu Val Val Lys Arg Thr Ser Val Pro Val Leu Val Gly Leu Ile
                           490 495
            485
Ile Val Ile Ile Ala Thr Glu Val Leu Val Pro Gly Ala Ala
          500
                         505
<210> 9558
<211> 118
<212> PRT
<213> Enterobacter cloacae
<400> 9558
Ser Trp Arg Tyr Leu Gln Glu Glu Phe His Met Ala Lys Lys Leu Ile
                            10
Ala Leu Cys Ala Cys Pro Met Gly Leu Ala His Thr Phe Met Ala Ala
                                         30
                         25
Gin Ala Leu Glu Asp Ala Ala Thr Glu Ala Gly Tyr Glu Val Lys Ile
                      40
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Glu Thr Gln Gly Ala Asp Gly Ile Gln Asn Arg Leu Thr Pro Gln Asp 55 Ile Ala Asp Ala Asp Ile Ile Ile His Ala Ile Ala Ile Thr Pro Glu 7.0 75 Asp Asn Glu Arg Phe Glu Met Arg Asp Val Tyr Glu Ile Thr Leu Gln 85 90 Asp Ala Ile Lys Asn Ala Ala Gly Thr Leu Lys Glu Ile Glu Glu Met 100 105 Ile Ala Ala Glu Gln 115

<210> 9559 <211> 425 <212> PRT <213> Enterobacter cloacae

<400> 9559 Ser Ser His Pro Gly Val Phe Val Met Ala Ile Lys Lys Arg Ser Ala 10 Val Arg Pro Asp Ser His Glu Gly Asp Thr Leu Ala Ile Lys Ser Ala 25 3.0 Pro Val Ala Ala Gly Ala Ser Phe Trp Lys Glu Leu Pro Gln His Ile 4.5 35 40 Met Ser Gly Ile Ser Arg Met Val Pro Thr Leu Ile Met Gly Gly Val 50 55 Ile Leu Ala Ile Ser Gln Leu Ile Ala Tyr Val Trp Leu Glu Ile Pro 70 75 Pro Asp Thr Gly Ile Leu Asp Ala Leu Asn Ser Gly Lys Phe Thr Gly 85 90 Phe Asn Leu Ser Leu Leu Lys Phe Gly Tyr Leu Thr Glu Ser Phe Gly 100 105 Gly Leu Leu Phe Ser Phe Ala Ile Pro Met Phe Ala Ala Phe Val Ala 115 120 125 Asn Ser Ile Gly Gly Lys Leu Ala Phe Pro Ala Gly Phe Ile Gly Gly 135 140 130 Leu Val Ala Thr Gln Pro Thr Leu Val Leu Asn Phe Asp Ala Glu Lys 150 155 Leu Thr Trp Leu Ala Thr Lys Pro Val Pro Ser Thr Phe Ile Gly Ala 165 170 175 Leu Ile Ile Ala Ile Ala Ala Gly Tyr Leu Val Lys Trp Leu Asn Ser 185 180 Arg Ile Asn Val Pro Gln Tyr Leu Leu Ala Phe Lys Ser Thr Phe Leu 200 205 195 Ile Pro Ile Leu Ser Ala Leu Phe Val Met Leu Ala Met Tyr Tyr Ile 220 215 210 Ile Thr Pro Ile Gly Gly Trp Leu Asn Ala Gly Met Arg Thr Val Leu 225 230 235 Leu Ala Ala Gly Gln Ala Gly Ser Met Met Tyr Ala Ile Gly Met Ala 245 250 Ala Ala Thr Ala Ile Asp Leu Gly Gly Pro Ile Asn Lys Ala Ala Gly 265 270 Phe Val Gly Leu Gly Leu Thr Thr Asp His Val Leu Pro Ile Thr Ser 285 275 280 Arg Ala Val Ala Ile Val Ile Pro Pro Ile Gly Leu Gly Leu Ala Thr 300 290 295 Leu Ile Asp His Arg Leu Thr Gly Lys Arg Leu Phe Ser Pro Gln Leu 315 Tyr Pro Gln Gly Lys Thr Ala Met Phe Leu Ala Phe Met Gly Ile Ser 325 330 Glu Gly Ala Ile Pro Phe Leu Leu Glu Asn Pro Leu Ala Thr Leu Pro 340 345

Ala Tyr Met Ala Gly Ala Ile Ala Gly Ala Met Thr Ala Thr Ala Leu 355

Gly Ala Val Gin Trp Phe Pro Glu Ser Ala Ile Trp Ala Trp Pro Leu 370

Val Thr Asn Leu Gly Ala Tyr Met Leu Ser Ile Val Val Gly Ala Ala 385

Tle Thr Ala Leu Leu Val Val Ile Ile Arg Asn Ser Leu His Lys Arg 405

Gly Lys Leu Ala Ile Asp Thr Leu 425

426

<210> 9560 <211> 374 <212> PRT

<213> Enterobacter cloacae

<400> 9560 Arg Cys Gly Ala Gly Asp Gly Asn Gly Arg Arg Gly Ala Leu Tyr Leu Arg Gln Thr Ala Ile Ala Asp Gly Arg Ile Arg Val Asp Arg Asp Leu 25 20 30 Leu Arg Ala Leu Ser Glu Ala Asp Ala Ile Ala Ala Ser Glu Gln Glu 35 40 45 Val Arg Asp Ile Leu Leu Ser Glu Ala Gln Lys Tyr His Lys Glu Val 55 60 Gln Phe Asp Gly Leu Gly Ser Val Leu Ile Arg Val Asn Gln Ser Arg 75 7.0 Gly Pro Lys Val Met Val Cys Ala His Met Asp Glu Val Gly Phe Met 85 90 Val Arg Ser Val Ser Arg Glu Gly Ala Ile Asp Val Leu Pro Ile Gly 100 105 110 Asn Val Arg Met Met Ala Arg Thr Leu Gln Pro Val Arg Ile Thr Thr 115 120 125 Arg Asn Gly Glu Lys Ile Pro Gly Leu Leu Asp Gly Asp Leu Lys Gly 135 140 Glu Asn Val Asp Asn Leu Arg Val Asp Ile Gly Ala Thr Ser Ala Glu 150 155 Glu Val Phe Ala Ala Gly Ile Asp Ala Gly Asp Arg Val Thr Phe Asp 165 170 Thr Pro Phe Gln Thr Leu Pro His Asn Arg Val Met Gly Lys Ala Phe 190 180 185 Asp Asp Arg Leu Gly Cys Tyr Leu Leu Ile Ala Leu Leu Arg Glu Leu 200 205 His Gln Thr Pro Leu Asp Cys Glu Leu Trp Leu Val Ala Ser Ser Ser 215 220 210 Glu Glu Val Gly Leu Arg Gly Gly Gln Thr Ala Thr Arg Ala Ile His 235 225 230 Pro Asp Ile Ala Leu Val Leu Asp Thr Ala Cys Trp Ser Lys Asn Phe 245 250 Asp Tyr Gly Ser Ala Asn His Arg Gln Ile Gly Ala Gly Pro Met Leu 265 260 Val Leu Tyr Asp Lys Thr Leu Ile Ala Pro Ala Lys Leu Ile Ala Leu 280 275 Ala Glu Thr Ile Ala Arg Ser Gln Gly Ile Pro Leu Gln Lys Asp Met 295 300 290 Phe Ser Asn Gly Gly Thr Asp Gly Gly Ala IIe His Leu Ser Gly Thr 315 310 Gly Val Pro Thr Leu Val Leu Gly Pro Pro Thr Arg His Gly His Cys 325 330 Ala Ala Ser Ile Ala Asp Glu Lys Asp Ile His His Thr Gln Gln Leu 340 345

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Leu Val Ala Leu Val Ala Gly Met Asn Arg Glu Thr Val Asp His Leu
                     360
   355
Thr Asp Phe Arg Cys
  370
<210> 9561
<211> 328
<212> PRT
<213> Enterobacter cloacae
<400> 9561
Leu Pro Ser Val Val Leu Gln Asp Gly Ile Thr Thr Ala Asn Ser Thr
                           10
1 5
His Ser Gly Arg Asn Met Ala Asn Leu Tyr Asp Leu Lys Lys Phe Asp
                      25
                                       30
        2.0
Leu Asn Leu Leu Val Ile Phe Glu Cys Ile Tyr Gln His Leu Ser Ile
               40 45
Ser Arg Ala Ala Glu Thr Leu Tyr Ile Thr Pro Ser Ala Val Ser Gln
                        60
                5.5
Ser Leu Gln Arg Leu Arg Gly Gln Leu Asn Asp Pro Leu Phe Ile Arg
              70
                   75
Ser Gly Lys Gly Ile Thr Pro Thr Thr Val Gly Thr Asn Leu His His
           85 90 95
His Leu Glu Lys Asn Leu Asn Gln Leu Glu Gln Thr Ile Asn Met Met
      100 105 110
His His Ser Asp Ile Lys Lys Lys Phe Val Ile Tyr Cys Ser Gln Met
115 120 125
Val Ser Pro Gly Ser Met Leu Glu Pro Leu Lys Leu Leu Ile Ser Glu
                135
Glu Asn Tyr Glu Ile Glu Gln Arg Asp Met Leu Ile Ser Ser Glu Ser
             150 155 160
Ala Glu Asp Leu Leu Ala Tyr Arg Lys Ala Asp Leu Ile Phe Ser Ile
          165
                         170 175
Ala Pro Ile His Asn Arg Ser Val Val Cys Thr His Phe Thr Thr Val
        180 185
Pro Ile Ala Leu Ile Cys Arg Ala Asp His Pro Arg Leu Ala Asp Ala
      195 200 205
Val Thr Leu Glu Val Leu Tyr Gln Glu Lys Phe Thr Phe Tyr Gln Ser
                  215
 210
Ala His Pro Gly Val Lys Glu Phe Gln Ser Arg Ala Asn Asp Ala Phe
225 230 235
Pro Glu Arg Asn Ile Ala Phe Arg Thr Asp Ser Leu Ser Ser Leu Ile
            245 250
Ser Met Val Cys Ser Ser Asp Leu Leu Gly Phe Ile Pro Val Ser Ile
         260 265 270
Tyr Glu Thr Tyr Lys Glu Pro Leu Lys Leu Lys Arg Leu Glu Pro Pro
 275
                     280 285
Phe Glu Leu Pro Glu Leu Lys Ile Tyr Met Leu Tyr Ser Arg Ser Ser
                295
                                 300
Leu Asn Ser Thr Val Phe Ser Thr Phe Ile Glu Lys Met His Lys Leu
305 310
                              315
                                              320
Cys Val Ser Pro Pro Ser Ala
<210> 9562
<211> 207
<212> PRT
<213> Enterobacter cloacae
<400> 9562
Lys Glu Met Thr Asp Asn Leu Gln Leu Thr His Leu Val Glu Ala Cys
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10 Arg Trp Ile Gly Ala Lys Gly Trp Ala Pro Ala Thr Gly Gly Asn Met 25 Ser Met Arg Gln Asp Glu His Leu Cys Trp Leu Ser Glu Ser Gly Lys 35 4.0 Asp Lys Gly Ser Leu Thr Thr Ala Asp Phe Leu Gln Val Glu Ile Ala 55 Thr Asn Arg Ala Pro Ser Gly Arg Lys Pro Ser Ala Glu Thr Gly Leu 7.0 7.5 His Thr Leu Ile Tyr Arg Leu Phe Pro Glu Ala Asn Ala Val Leu His 90 Val His Thr Val Asn Ala Thr Val Leu Ser Arg Leu Val Asn Glu Ala 100 105 Glu Leu Lys Ile Thr Gly Phe Glu Met Gln Lys Ser Leu Thr Gly Gln 115 120 125 Thr Thr His Arg Asp Thr Val Ala Ile Pro Val Phe Asp Asn Asp Gln 130 135 140 Asp Ile Asp Ala Leu Ala Ser Arg Ile Ala His Tyr Ala Gln Glu Arg 145 150 155 Pro Leu Asn Tyr Gly Phe Leu Leu Arg Gly His Gly Leu Thr Cys Trp 165 170 175 Gly Arg Asp Val Ala Glu Ala Arg Arg His Leu Glu Gly Leu Glu Phe 180 185 190 Leu Phe Glu Cys Glu Met Arg Leu Arg Gln Trp Glu Arg Val

<210> 9563 <211> 437 <212> PRT

<213> Enterobacter cloacae

<400> 9563

Cys Leu His Val Val Asn Ser Leu Leu Arg Cys Cys Ser Thr Leu Cys 10 Gln Asp Glu Ile Gln Met Tyr Arg Arg Leu His Val Leu Ile Ser Lys 25 Thr Glu Glu Gln Ala Met Ser Gln Tyr Arg Thr Phe Thr Ala Gln Asp 40 Ala Val Glu Tyr Ala Arg Gln Phe Gly Gly Leu Asp Asp Pro Ser Ser 55 Leu Val Glu Ala Gln Glu Val Gly Asp Gly Asn Leu Asn Leu Val Phe 7.0 75 Lys Ile Phe Asp Ser Ala Gly Val Ser Arg Ile Val Val Lys Gln Ala 85 90 Leu Pro Tyr Val Arg Cys Val Gly Glu Ser Trp Pro Leu Thr Leu Asp 100 105 Arg Ala Arg Leu Glu Ala Gln Thr Leu Val Glu His Tyr Gln His Ser 115 120 125 Pro Gln His Thr Val Lys Ile His His Phe Asp Pro Glu Leu Ala Val 135 140 Met Val Met Glu Asp Leu Ser Ser His Arg Ile Trp Arg Gly Glu Leu 145 150 155 Ile Arg Asn Asn Tyr Tyr Pro Gln Ala Ala Arg Gln Leu Gly Glu Tyr 165 170 175 Leu Ala His Thr Leu Phe His Thr Ser Asp Phe Tyr Leu His Pro His 180 185 190 Glu Lys Lys Ala Gln Val Ala Lys Phe Ile Asn Pro Glu Met Cys Glu 195 200 205 Ile Thr Glu Asp Leu Phe Phe Asn Asp Pro Tyr Gln Ile His Ala Arg 210 215 220

Asn Ser Tyr Pro Ala Glu Leu Glu Asn Asp Val Ala Ala Leu Arg Asp

235 230 Asp Ala Gln Leu Lys Ile Ala Val Ala Ser Leu Lys His Arg Phe Phe 250 245 Ser His Ala Glu Ala Leu Leu His Gly Asp Ile His Ser Gly Ser Ile 260 265 Phe Val Ala Asp Gly Ser Leu Lys Ala Ile Asp Ala Glu Phe Gly Tyr 275 280 Phe Gly Pro Ile Gly Phe Asp Val Gly Thr Ala Ile Gly Asn Leu Leu 290 295 300 Leu Asn Phe Cys Gly Leu Pro Gly His Leu Gly Ile Arg Asp Ala Ala 305 310 315 Ala Ala Arg Glu Gln Arg Leu Thr Asp Ile Gln Glu Leu Trp Asn Thr 325 330 Phe Ala Glu Arg Phe Gln Val Leu Ala Asn Glu Lys Ala Arg Asp Ala 345 350 340 Ala Leu Ser Ala Pro Gly Tyr Ala Ser Ala Phe Leu Lys Lys Val Trp 355 360 365 His Asp Ala Ile Gly Phe Cys Gly Thr Glu Leu Ile Arg Arg Ser Val 375 380 Gly Leu Ser His Val Ala Asp Ile Asp Thr Ile Gln Asp Glu Ala Met 395 400 385 390 Arg His Glu Cys Leu Arg His Ala Ile Ser Leu Gly Lys Ala Leu Ile 405 410 415 Val Ile Ala Asp Arg Ile Asp Ser Ala Glu Glu Leu Val Ala Arg Val 420 425

Arg Gln Tyr Ser 435

<210> 9564 <211> 371 <212> PRT

<213> Enterobacter cloacae

<400> 9564

Arg Leu Leu Lys Lys Asp Asn Phe Met Ser Asn Thr Asp Ile Arg Val 10 Val Pro Gly Pro Ala Asn Tyr Phe Ser His Pro Gly Ser Leu Ala His 20 2.5 Leu Asp Asn Phe Phe Thr Pro Glu Gln Leu Ser Arg Ala Val Trp Ile 35 40 Tyr Gly Glu Arg Ala Ile Glu Gly Ala Arg Pro Tyr Leu Pro Gln Ser 60 5.5 Phe Asn Ala Thr Gly Ala Lys His Leu Leu Phe Lys Gly His Cys Ser 7.0 7.5 Glu Arg Asp Val Thr Arg Leu Val Asn Glu Ser Gly Ser Glu Thr Ser 85 90 Val Val Ile Gly Val Gly Gly Gly Ala Val Met Asp Thr Val Lys Ala 100 105 Val Ala Arg Arg Leu Gly Val Pro Phe Val Gly Ile Pro Thr Ile Ala 120 115 Ala Thr Cys Ala Ala Trp Thr Pro Leu Ser Val Trp Tyr Asn Asp Ala 135 140 130 Gly Gln Ala Leu Gln Phe Glu Ile Phe Asp Asp Ala Asn Phe Leu Val 155 160 145 150 Leu Val Glu Pro Gln Ile Ile Leu Asn Ala Pro Ala Glu Tyr Leu Leu 170 165 Ala Gly Ile Gly Asp Thr Leu Ala Lys Trp Tyr Glu Ala Ala Val Leu 185 190 180 Ala Pro Gln Pro Glu Ser Leu Pro Leu Thr Val Arg Leu Gly Leu Asn 200 205 Gly Ala Leu Ala Ile Arg Asp Val Leu Leu Glu Arg Ser Glu Glu Ala

215 Leu Ala Asp Gln Gln Arg Gly Glu Gln Thr Gln Ala Phe Arg Asp Val 235 230 Val Asp Ala Ile Ile Ala Gly Gly Gly Met Val Gly Gly Leu Gly Glu 250 245 Arg Tyr Thr Arg Val Ala Ala Ala His Ala Val His Asn Gly Leu Thr 260 265 Val Leu Pro Gln Thr Glu Lys Tyr Leu His Gly Thr Lys Val Ala Tyr 280 285 275 Gly Ile Leu Val Gln Ser Ala Leu Leu Gly Gln Asp Asp Val Leu Ala 300 295 Gln Leu Val Ala Ala Tyr Arg Arg Phe Asn Leu Pro Ile Thr Leu Arg 315 305 310 Glu Leu Asp Val Asp Ile His Asn Arg Asp Glu Leu Asp Lys Val Ile 325 330 335 Gly His Thr Leu Arg Pro Val Glu Ser Ile His Tyr Leu Pro Val Thr 340 345 350 Leu Thr Pro Glu Val Leu Arg Ala Ala Phe Ala Lys Val Glu Ser Phe 360 Ser Ara

370

<210> 9565 <211> 267

<212> PRT <213> Enterobacter cloacae

<400> 9565 Leu Arg Arg Arg Ala Ile Pro Asn Asp Asp Ser Leu His Ser Cys Asn 10 Glu Val Ile Met Gln Ile Asp Leu Ser Gly Lys Lys Ala Leu Val Thr 25 Gly Ala Ser Arg Gly Leu Gly Arg Ala Ile Ala Leu Ser Leu Ala Arg 4.0 4.5 Ala Gly Ala Asp Val Val Ile Thr Tyr Glu Lys Ser Val Asp Lys Ala 55 60 Gln Ala Val Ala Asp Glu Ile Lys Ala Leu Gly Arg His Gly Glu Ala 75 70 Ile Gln Ala Asp Ser Ala Ser Ala Gln Ala Ile Gln Asp Ala Val Thr 90 95 Gln Ala Ala Arg Ser Leu Gly Gly Leu Asp Ile Leu Val Asn Asn Ala 100 105 110 Gly Ile Ala Arg Gly Gly Pro Leu Glu Ser Met Thr Leu Ala Asp Ile 120 115 Asp Ala Leu Ile Asn Val Asn Ile Arg Gly Val Val Ile Ala Ile Gln 130 135 140 Glu Ala Leu Val His Met Ser Asp Gly Gly Arg Ile Ile Asn Ile Gly 150 155 Ser Cys Leu Ala Asn Arg Val Ala Gln Pro Gly Ile Ala Val Tyr Ser 165 170 175 Met Thr Lys Ser Ala Leu Asn Ser Leu Thr Arg Gly Leu Ala Arg Asp 180 185 190 Leu Gly Pro Arq Gly Ile Thr Val Asn Leu Val His Pro Gly Pro Thr 200 205 195 Asn Ser Asp Met Asn Pro Glu Asp Gly Glu Gln Ala Asp Ser Gln Arg 215 210 220 Gln Leu Ile Ala Leu Gly His Tyr Gly Gln Pro Glu Asp Ile Ala Ala 230 235 Ala Val Thr Phe Leu Ala Ser Pro Ala Ala Gly Gln Ile Ser Gly Thr 245 250 Gly Leu Asp Val Asp Gly Gly Leu Asn Ala

<210> 9566 <211> 124 <212> PRT <213> Enterobacter cloacae

<400> 9566

Lys Phe Gly Ile Tyr Leu Ile Val Leu Leu Phe Pro Tyr Ile Leu Cys 1 5 10 15 Gly Arg Thr Val Glu Val Arg Met Lys Ile Val Trp Ser Lys Thr Ala 20 Glu Lys Gln Phe Ser Lys Ile Asp Pro Arg Tyr Gln Asn Arg Ile Lys 30 30 40 45 45

Phe Arg Leu Glu Lys Met Asp Asp Lys Thr Ser Pro Val Ala Asp Ile 50 55 60

Lys Leu Ser Ser Pro Glu Asn His Tyr Arg Leu Arg Leu Gly Asp 65 75 80 Tyr Arg Val Ile Tyr Thr Phe Gly Asp Pro Gly Asp Ile Cys Tyr

Tyr Arg Val Ile Tyr Thr Phe Gly Asp Pro Pro Gly Asp Ile Cys Tyr $90 \\ 95$ Val Val Ala Val Lys Arg Arg Thr Thr Thr Thr Tyr Leu His Glu Glu

100 105 110 His Thr Glu Tyr Asp Tyr Ser Val His Gln Gly

115

<210> 9567 <211> 297

<212> PRT <213> Enterobacter cloacae

<400> 9567

Tyr Pro Lys Ser Ala Cys Gly Arg Phe Leu Cys Phe Asn Asn Pro Gln $1 \\ 5 \\ 10 \\ 15$ Lys Leu Ile Ala Pro Asn Gln Ser Gly Lys Gln Met Phe Arg Lys Asp

20 25 30

Ile Val Ile Pro Ser Gly Ala Val Ala Leu Ala Leu Cys Val Phe Ser

35 40 45

Ile Gln Ala Asp Pro Leu Lys Pro Thr Gln Tyr Gly Asp Phe Asp Arg
50 50 60

Tyr Val Leu Ala Leu Ser Trp Gln Thr Gly Phe Cys Gln Ser Met Val 65 70 75 80

65 70 75 80 Glu Arg Asn Arg Asp Glu Pro Glu Glu Cys Arg Leu Gln Lys Glu Ser

85 90 95 Ser Asn Lys Thr Asp Phe Leu Thr Val His Gly Leu Trp Pro Ala Leu 100 105 110

Pro Lys Ser Ile Ala Ala Arg Gly Val Asp Glu Arg Arg Trp Met Arg 115 120 125

Phe Gly Cys Ala Thr Arg Pro Val Pro Asn Met Pro Glu Ala Lys Ala 130 140 Ser Arg Lys Cys Asp Ala Ala Glu Thr Gly Leu Ser Leu Thr Gly Ala

145 150 155 160 Ala Lys Leu Asn Ser Val Met Pro Gly Ala Gly Gly Asn Ser Cys Leu 165 170 170

Glu Arg Tyr Glu Tyr Ala Lys His Gly Val Cys Phe Gly Phe Asp Pro

Asp Ala Tyr Phe Gly Thr Met Val Arg Met Asn Gln Glu Val Lys His

Ser Ala Ala Gly Lys Phe Leu Ala Glu Asn Tyr Gly Lys Ser Val Arg

Arg Ser Asp Phe Asp Ala Ala Val Ala Lys Ser Trp Gly Lys Gln Ser 225 230 235 240

Val Lys Ala Phe Lys Leu Thr Cys His Gly Asn Pro Ala Tyr Leu Thr 250 245 Glu Met Gln Ile Ser Leu Asn Ala Ser Thr Ile Asn Asn Pro Leu Ser 260 265 Ala Gly Ser Phe Ala Pro Gln Pro His Pro Gly Asn Cys Gly Lys Gln 275 280 Phe Val Ile Asp Lys Ala Gly Tyr

<210> 9568

<211> 149 <212> PRT

<213> Enterobacter cloacae

<400> 9568

Phe Arg Arg Pro Thr Pro Gly Val Leu Leu Gly Tyr Asp Lys Asp Leu 1.0 Ser Cys Arg Arg Ala Lys His Ala Ala Gly Gly Thr Pro Leu Tyr Ala 25 20

Val Tyr Gln Ile Val Leu Ala Ala Gln Gln Ala Ala Ile Asp Ala Ile 40 4.5

Arg Pro Gly Val Ser Cys His Glr. Ile Asp Ser Ala Val Arg Ser Val 55 60

Ile Glu Arg Ala Gly Tyr Gly Pro Gln Phe Gly His Asn Thr Gly His 75 70 Ala Ile Gly Ile Asp Val His Glu Asn Pro Arg Phe Ser Pro Thr Asp

85 90 Arg Thr Pro Leu Gln Pro Gly Met Val Leu Thr Val Glu Pro Gly Ile

100 105 Tyr Leu Glu His Leu Gly Gly Val Arg Ile Glu Asp Val Val Leu Val 115 120

Thr Glu Thr Gly Ala Glu Val Leu Tyr Thr Phe Asp Lys Arg Leu Leu 135 130

Leu Thr Gly Glu

145

<210> 9569 <211> 819

<212> PRT

<213> Enterobacter cloacae

<400> 9569

Arg Thr Ser Asp Ala Asp Leu Thr Arg Pro Gly Gly Ser Met Leu Ser 10 Ile Glu Phe Phe Cys Pro Leu Pro Asn Gly Leu His Ala Arg Pro Ala 30 2.5

Trp Ala Leu Lys Glu Gln Cys Ser Ala Trp Arg Ser Asp Ile Arg Phe 35 40 45 Ile Asn Arg Arg Leu His Thr His Ala Asp Ala Lys Ser Ser Leu Ala

55 60 50 Leu Ile Ser Thr Gly Thr Leu Phe Asn Asp Ser Cys Val Leu Glu Ile 7.0 75

Asn Gly Ser Asp Glu Glu Gln Ala Arg Arg Val Leu Glu Ala Tyr Leu 90 95 85

Thr Gly Ala Phe Ile Asp Ser Asp Ser Ile Pro Ser Gly Asp Ala Pro 105 100 110

His Val Ala His Pro Leu Pro Arg Ser Leu Val Arg Leu Ala Pro His 120 125 115 Leu Gln His Gly Ile Thr Leu Ala Ser Gly Ile Gly Ala Gly Thr Leu 135 140

Arg Gly Trp Gln Ser Asp Asn Leu Lys Arg Tyr Cys Gln Ile Pro Ala

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155
             150
Ser Pro Glu Asp Ile Thr Arg Leu Glu His Ser Leu Ala Thr Leu Ala
                 170
         165
Glu Gln Leu Asn Tyr Arg Leu Arg Gly Leu Asp Gly Glu Ser Lys Thr
            185 190
      180
Ile Leu Ser Ala His Leu Ser Leu Ile Gln Asp Glu Glu Phe Gly Gly
 195 200
                       205
Thr Ile Arg Arg Leu Ile Ala Glu Glu Arg Leu Ser Leu Ala Glu Ala
210 215 220
Ile Ile Arg Asn Met Glu Leu Ile Cys Asp Lys Leu Ser Leu Ser Ala
225 230 235
Ser Asp Tyr Leu Arg Glu Arg Val Ser Asp Ile Arg Asp Ile Ser Glu
      245 250 255
Gln Leu Leu Asn Ile Thr Trp Pro Glu Leu Gln Gln Thr Ser Ala Phe
  260 265 270
Thr Leu Ser Ala Pro Thr Ile Leu Val Ala Glu Asp Leu Thr Pro Ser
  275 280 285
Gln Phe Leu Ser Leu Asp Thr Gln Tyr Leu Lys Gly Met Val Leu Glu
 290 295 300
Lys Thr Gly Arg Thr Ser His Thr Leu Ile Leu Ala Arg Ala Ala Ser
305 310 315 320
Val Pro Val Leu Ser Gly Leu Thr Val Ala Ser Leu Ala Pro Leu Met
        325 330 335
Gly Lys Glu Val Ile Leu Asp Gly Ile Cys Ser Val Leu Val Val Glu
 340 345 350
Pro Asn Asp Ala Val Asn Asp Tyr Tyr Ser Val Ala Gln Arg Leu Ala
                       365
355 360
Asp Arg Arg His Gln Gln Gln Ile Lys Asp Ala Gly Leu Pro Ala Leu
370 375 380
Thr Arg Asp Asn Val Pro Val Glu Ile Ala Ala Asn Ile Gly Ser Ala
385 390 395 400
Leu Glu Ala Pro Gly Ala Phe Thr Cys Gly Ala Gln Gly Ile Gly Leu
         405 410 415
Phe Arg Thr Glu Met Leu Tyr Met Asp Arg Asp Thr Ala Pro Asp Glu
     420 425 430
Gln Glu Gln Phe Glu Ala Tyr Gln Gln Val Leu Leu Ser Ala Gln Gly
    435 440 445
Lys Pro Val Ile Phe Arg Thr Met Asp Ile Gly Gly Asp Lys Gln Ile
 450 455 460
Pro Tyr Leu Asn Ile Pro Gln Glu Glu Asn Pro Phe Leu Gly Tyr Arg
465 470 475 480
Ala Val Arg Ile Tyr Pro Glu Phe Ala Asp Leu Phe Arg Thr Gln Leu
         485 490 495
Arg Ala Ile Leu Arg Ala Gly Ala Ser Gly Asn Ala Leu Leu Met Ile
  500 505 510
Pro Met Val His Ser Leu Asp Gln Ile Leu Trp Ile Lys Gln Glu Leu
                   520 525
 515
Gln Asn Val Arg Asp Ala Leu Ala Ser Gln Gly Leu Arg His Thr Ala
              535 540
Arg Leu Pro Leu Gly Ile Met Val Glu Val Pro Ser Val Cys Phe Ile
             550 555 560
545
Ile Asp His Phe Cys Glu Glu Val Asp Phe Phe Ser Ile Gly Ser Asn
           565 570 575
Asp Met Thr Gln Tyr Leu Tyr Ala Val Asp Arg Asn Asn Pro Arg Val
                      585 590
        580
Ser Gly Leu Tyr Asn Pro Ile Thr Pro Ser Phe Leu Arg Met Val Arg
                       605
     595
                   600
Gln Ile Val Thr Ala Ala His Arg His Gly Lys Trp Val Gly Ile Cys
      615 620
Gly Glu Leu Gly Gly Glu Gln Arg Tyr Leu Pro Leu Leu Gly Leu
              630
                           635
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Gly Leu Asp Glu Phe Ser Met Ser Gly Pro Arg Ile Pro Ala Val Lys
                            650
                                          655
           645
Thr Gln Leu Arg Gln Leu Asp Met Ala Thr Cys Arg Ala Leu Ala Asp
         660
                         665
Lys Ala Cys Asp Ser Arg Ser Ala Glu Glu Ile Glu Ala Leu Leu Ala
                     680
     675
Asp Phe Thr Pro Glu Ala Pro Pro Arg Pro Leu Leu Ala Leu Glu Thr
                  695
Ile Val Val Asn Glu Pro Leu Thr Ser Lys Glu Gln Val Leu Gln Phe
705 710
                               715
Leu Cys Gly Asn Leu Ala Ile His Gly Arg Thr Gly Asn Pro Leu Glu
         725 730 735
Leu Glu Glu Asp Leu Trp Gln Arg Glu Glu Ile Val Thr Thr Ala Val
         740 745 750
Gly Phe Gly Val Ala Ile Pro His Thr Lys Ser Gln Trp Ile Arg His
      755
          760
                                     765
Ser Ser Ile Ser Ile Ala Arg Leu Asp Lys Ala Ile Asp Trp Glu Ser
                  775
                        780
Asp Leu Gly Asp Val Glu Leu Val Ile Met Leu Thr Leu Gly Ala Gln
785 790 795
Glu Gly Ile Asn His Val Lys Val Phe Ser Pro Ala Gly Ala Glu Ala
            805
                    810
Gly Gln
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<210> 9570 <211> 142 <212> PRT

<213> Enterobacter cloacae

<400> 9570 Arg His Gly Val Lys Met Ser Arg Pro Thr Ile Ile Ile Asn Glu Leu 1 Asp Ala Glu Arg Ile Asp Arg Leu Leu Glu Lys Pro Glu Phe Ala Ser 20 25 3.0 Leu Pro Val Ala Asp Ala Leu Asn Glu Glu Leu Asp Arg Ala Gln Met 40 Cys Thr Pro Glu Thr Met Pro His Asp Val Val Thr Met Asn Ser Gln 55 Val Lys Phe Arg Asn Leu Thr Thr Gly Glu Glu Leu Thr Arg Thr Leu 7.0 75 65 Val Tyr Pro Ala Gln Met Thr Asp Ser Ser Thr Gln Leu Ser Val Leu 8.5 90 Ala Pro Val Gly Ala Ala Leu Leu Gly Leu Arg Thr Gly Asp Thr Ile 100 105 His Trp Glu Leu Pro Gly Gly Ala Ser Ala His Leu Glu Val Leu Glu 120 Leu Phe Tyr Gln Pro Glu Ala Ala Gly Asp Tyr Leu Arg 135

<210> 9571 <211> 228 <212> PRT <213> Enterobacter cloacae

 $<\!400>9571$ Thr Leu Ser Ala Leu Gln Arg Gln Ser Glu Ser Lys Thr Gln Gly Met 1 5 10 15 Gly Asp Phe Met Gln Gln Arg Ile Ile Thr Glu Met Glu Thr Tyr Leu 20 30 Gln Ala Leu Ser Glu Glu Glu Arg Ile Ala Ala Ile Asn Ala Phe Arg

Gln Ala Leu His Glu Ile Ser Pro Phe Arg Asp Gln Pro Val Asp Cys 55 Val Leu Trp Ile Lys Lys Thr Asn Ile Thr Ala Asn Asp Tyr Asn Pro 7.0 75 Asn Asn Val Ala Pro Pro Glu Lys Arg Leu Leu Ser Lys Ser Leu Glu 85 90 Leu Asp Gly Phe Thr Gln Pro Ile Val Val Thr Glu Asn Ala Pro Gln 105 110 100 His Tyr Glu Ile Val Asp Gly Phe His Arg His Asp Ile Gly Ser Asn 115 120 125 Arg Ala Ile Leu Lys Arg Gln Leu Lys Gly Tyr Leu Pro Val Thr Cys 130 135 140 Leu Arg Lys Ala Arg Gln Glu Lys Phe Asp Arg Met Ala Ala Thr Ile 150 155 160 Arg His Asn Arg Ala Arg Gly Arg His Gln Ile Asn Ala Met Ser Glu 170 175 165 Ile Val Arg Glu Leu Val Leu Met Gly Trp Ser Glu Gln Lys Ile Gly 180 185 Gln Glu Leu Gly Met Asp Ser Asp Glu Val Leu Arg Leu Lys Gln Ile 200 205 195 Asn Gly Leu Leu Glu Leu Phe Ala Asp Arg Arg Phe Ser Glu Ala Trp 210 Thr Val Lys 225 <210> 9572 <211> 194 <212> PRT <213> Enterobacter cloacae <400> 9572 Glu Ala Gln Leu Arg Gln Asn Arg His His Gln His Asp Asp His Asn 1.0 Gly Arg His Leu Pro Gln Gln Ala Glu Arg Arg Arg Asn Gly Pro Phe 25 20

Arg His Val Ala Ala Arg Gln His His Val Leu Ser Asn Arg Pro Ala 35 4.0 Val Ala Val Gly His Arg His Ala Leu Asp Asp Lys Gln Ala Gly Lys 55 Gly Arg Glu His Val Arg Asn Ala Gln Asp Asp Asp Gln Lys Arg Val 75 70 Lys Gln Ala Asp Gln Arg Thr Glu Arg Glu Ser Asp Tyr Asn Arg Leu 90 8.5 Gly Gly Ala Glu Ala Val Pro Asp Glu Glu Arg Asn His Gln Arg Val 100 105 110 Arg Gln Arg Arg Gly Gly Ser His Arg Glu Ile Glu Pro Ala Asp Gly 115 120 125 Gln Gly Asp Arg His Ala Asp Gly Asn His Arg His Asp Gly Asn Arg 135 140 130 Ala Gln Asn Val Asn Asp Val Val Arg Ile Glu Glu Ala Val Arg Arg 145 150 155 Gln Ala Lys Asn Gly His Gln Arg Asp Asp Gly Gln Gln His Ala Pro 165 170 175 Leu Val Glu Lys Ile Glu Asn Leu Leu Thr Ala Arg Arg Arg Ala 180 185 His

<210> 9573 <211> 277 <212> PRT <213> Enterobacter cloacae

<400> 9573 Thr Met Glu Leu Leu Arg Arg Leu Arg Ala Trp Leu Ala Ala Glu Lys Leu Asp Gly Val Leu Ile Ser Ser Arg Gln Asn Lys Gln Pro His Leu 20 25 Gly Ile Ser Thr Gly Ser Gly Tyr Val Leu Val Thr Gln Thr Ala Ala 35 4.0 His Ile Leu Val Asp Phe Arg Tyr Tyr Ser Asp Ile Ala Ser Arg Ala 55 60 Ala Gly Tyr Glu Met His Leu Leu Asn Thr Glu Asn Pro Phe Ala Gln 75 7.0 Ala Val Asn Gln Ile Ile Ala Lys Glu Ala Leu Thr Arg Leu Gly Phe 8.5 90 Glu Gly Glu Tyr Val Ser Trp Gln Thr Gly Val Leu Trp Arg Asp Thr 100 105 Leu Asn Thr Ala Leu Cys Ser Thr Ser Leu Asp Ala Leu Arg Gln Ile 115 120 125 Lys Thr Ala Asp Glu Ile Asp Arg Ile Arg Ala Ala Cys Gly Ile Ala 130 135 140 Asp Arg Ala Ala Gln His Ile Arg Arg Phe Ile Gln Pro Gly Met Arg 150 155 160 145 Glu Arg Glu Val Ala Ala Glu Leu Glu Trp Phe Met Lys Gln Glu Gly 165 170 175 Ala Asp Lys Pro Ser Phe Asp Thr Ile Val Ala Ser Gly Pro Arg Gly 185 180 Ala Leu Pro His Gly Lys Ala Ser Asp Lys Val Ile Met Pro Gly Glu 195 200 205 Met Ile Thr Leu Asp Phe Gly Ala Gln His Gln Gly Tyr Cys Ser Asp 210 215 220 Met Thr Arg Thr Phe Leu Val Ala Gly Gln Asn Thr Pro Pro Glu Glu 230 235 His Leu Ser Met Arg Cys Thr Arg Ser Phe Trp Arg His Asn Arg Gln 245 250 255

260 Pro Tyr Val Pro 275

<210> 9574 <211> 148 <212> PRT

<213> Enterobacter cloacae

<400> 9574 Gln Gly Glu Thr Val Met Tyr Gln Thr Ile Ile Met Pro Val Asp Val 1.0 Phe Glu Met Glu Leu Ser Asp Lys Ala Ile Arg His Ala Glu Phe Leu 20 25 Ala Gln Gln Asp Gly Ile Ile His Leu Leu His Val Leu Pro Gly Ser 35 40 Ala Ser Leu Ser Leu His Arg Phe Ala Ala Asp Val Arg Arg Phe Glu 50 55 Glu His Leu Gln His Glu Ala Glu Thr Arg Leu Gln Thr Met Val Gly 70 75 His Phe Ser Ile Asp Pro Ser Arg Ile Lys Thr His Val Arg Phe Gly 90 85 Ser Val Arg Asp Ala Val Asn Glu Leu Ala Gly Glu Leu Asn Ala Asp 100 105

Leu Leu Met Pro Ser Ala Pro Ala Phe Pro Val Ile Arg Ser Ile Ala 260 265 270

Val Val Val Ile Gly Ser Arg Asn Pro Ser Ile Thr Thr His Leu Leu 115 120 Gly Ser Asn Ala Ser Ser Val Ile Arg His Thr His Ile Pro Val Met 130 135 140 Val Val Arg 145 <210> 9575 <211> 87 <212> PRT <213> Enterobacter cloacae <400> 9575 Pro Pro Val His Ser Ser Ala Arg Thr Arg Asp Val Asn Ser Cys Pro 10 Ser Gly Glu Pro Ala Lys Arg Gly Pro Trp Ser Asp Pro Gly Leu Ala 30 20 25 Ile Arg Lys Glu Gly Leu Arg Thr Ala Ser Val Leu Ser Ser Leu Lys 35 40 Val Thr Phe Gly Asp Ser Ser Ala Ile Ser Val Ser Ser Ala Leu Ile 5.5 Ser Ala Asp Phe Ala Leu Ser Ser Ser Val Ala Ile Ser Ser Thr Gly 70 75 Leu Val Ser Phe Ser Arg 85 <210> 9576 <211> 427 <212> PRT <213> Enterobacter cloacae <400> 9576 Phe His Asn Ile Val Leu Phe Phe Ser Arg His Leu Thr Arg Arg Thr 10 Arg Leu Ile Met Ser Ile Tyr Lys Ile Pro Leu Gln Glu Asn Val Leu 2.0 25 30 Asp Ala Ser Ala Glu Arg Ile Asp Trp Thr Leu Asn Asn Phe Ser Arg 35 4.0 45 Val Cys Val Ser Phe Ser Gly Gly Lys Asp Ser Thr Val Met Leu His 50 55 60 Leu Val Ala Gln Lys Ala Arg Gln Leu Lys Arg Lys Ile Asp Val Ile 75 65 7.0 Phe Leu Asp Trp Glu Ala Gln Phe Ser Ser Thr Ile Gln His Val Asp 85 90 Thr Met Arg Thr Leu Tyr Arg Asp Val Ile His Leu Phe Trp Trp Val 100 105 Ala Leu Pro Leu Thr Thr Gln Asn Ala Leu Ser Gln Phe Gln Pro Glu 120 Trp Gln Cys Trp Glu Pro Gly Thr Asn Trp Val Arg Gln Pro Pro Glu 135 130 1.40 Asp Ala Ile Thr Asp Tyr His Tyr Phe Asp Phe Tyr Gln Gln Gly Met 145 150 155 160 Thr Phe Glu Ala Phe Val Arg Glu Phe Ala Glu Trp Tyr Ala Gln Arg 165 170 175 Arg Pro Ala Ala Val Met Val Gly Ile Pro Ala Asp Glu Ser Tyr Asn 185 180 190 Arg Phe Leu Ala Ile Ala Ser Ala Arg Lys Gln Arg Phe Ser Asp Asp 195 200 Lys Pro Trp Thr Thr Val Ala Pro Gly Gly His Ala Trp Tyr Ile Tyr 215 Pro Leu Tyr Asp Trp Lys Thr Ala Asp Ile Trp Thr Trp Phe Ala Lys

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230
                               235
Ser Lys Cys Cys Tyr Asn Pro Leu Tyr Asp Leu Met Tyr Lys Ala Gly
          245
                   250
Val Pro Pro Arg Tyr Met Arg Ile Cys Glu Pro Phe Gly Pro Glu Gln
        260
             265
                             270
Arg Gln Gly Leu Trp Leu Tyr His Val Ile Glu Pro Glu Arg Trp Ala
 275 280 285
Ala Met Cys Glu Arg Ala Cys Gly Val Arg Ser Gly Gly Ile Tyr Ala
 290 295 300
Gly His Asp Asn His Phe Tyr Gly His Arg Lys Ile Leu Lys Pro Asp
305 310 315 320
His Leu Gly Trp Arg Glu Tyr Ala Met Leu Leu Leu Asp Ser Met Pro
          325 330 335
Gln Asn Thr Ala Glu His Tyr Arg Asn Lys Ile Ala Val Tyr Leu His
        340 345 350
Trp Tyr Gln Lys Arg Gly Met Asn Asp Ile Pro Asp Thr Gln Glu Gly
         360 365
Asp Ile Gly Ala Lys Asp Ile Pro Ser Trp Arg Arg Ile Cys Lys Val
 370 375 380
Leu Leu Asn Asn Asp Tyr Tro Cys Arg Ala Leu Ser Phe Ser Pro Asn
385 390 395 400
Lys Pro Lys His Tyr Gln Arg Tyr Ser Asp Arg Val Lys Ala Lys Arg
       405 410
Lys Glu Trp Gly Ile Leu Cys Asn Asn Glu
         420
<210> 9577
<211> 241
<212> PRT
<213> Enterobacter cloacae
<400> 9577
Met Arg Asn Ala Phe Thr Thr Met Gly Glu Ser Met Ile Arg Ala Ile
                            10
Val Thr Asp Ile Glu Gly Thr Thr Ser Asp Ile Arg Phe Val His Asp
                         25
20
                                         3.0
Val Leu Phe Pro Tyr Ala Arg Glu Arg Leu Ala Ala Phe Val Thr Ala
                     4.0
                                     4.5
Gln Gln Tyr Ala Glu Pro Val Lys Ser Ile Leu Asp Asn Leu Arg Asp
                55
                                  60
Glu Ile Ser Ala Pro His Ala Ser Val Ser Asp Leu Ile Asn Val Leu
                             75
65 70
Phe Thr Phe Met Asp Glu Asp Arg Lys Ser Thr Ala Leu Lys Ala Leu
            85
                            90
Gln Gly Ile Ile Trp Gln Asp Gly Tyr Val Asn Gly Asp Phe Thr Gly
         100 105
His Leu Tyr Pro Asp Val Leu Pro Ala Leu Glu Lys Trp Lys Ala Gln
     115 120
Gly Ile Asp Leu Tyr Val Tyr Ser Ser Gly Ser Val Ala Ala Gln Lys
                   135
                                   140
Leu Leu Phe Gly Tyr Ser Asp Glu Gly Asp Ile Thr His Leu Phe Ser
145 150
                               155
Gly Tyr Phe Asp Thr His Ile Gly Ala Lys Arg Glu Val Gln Ser Tyr
           165
                            170 175
Gln Asn Ile Ala Ala Gln Thr Gly Ile Ala Pro Ser Gln Ile Leu Phe
        180
                         185
Leu Ser Asp Ile His Gln Glu Leu Asp Ala Ala Glu Gln Ala Gly Phe
   195 200
                                      205
Arg Thr Leu Gln Leu Ile Arg Gly Glu Asp Asp Gly Ala Ser His His
```

215

His Gln Ile His Gln Phe Asp Glu Ile Asn Pro Glu Gln Ile Pro Ser

220

<210> 9578 <211> 176 <212> PRT

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ru -

10

143

Cit

(2

10

10

```
<213> Enterobacter cloacae
<400> 9578
Asn Cys Pro Ser Ala Gly Asp Cys Cys Asp Arg Ala Val Pro Gly Ile
                      10
1 5
Arg Cys Arg Gln Pro Tyr His Leu Ala Gly Tyr Arg Gly Gly Arg Arg
     20
                       25
                                      3.0
Leu His Ala Gly Gly Val Met Ile Trp Lys Arg His Leu Thr Leu Glu
35
                    4.0
                                   4.5
Glu Leu Asn Ala Thr Ser Leu Asn Thr Met Val Gly His Leu Gly Ile
50 55
                                60
Val Tyr Thr Arg Leu Gly Asp Asp Thr Leu Glu Ala Glu Met Pro Val
           70 75
Asp Ala Arg Thr His Gln Pro Phe Gly Leu Leu His Gly Gly Ala Ser
         85 90
Ala Ala Leu Ala Glu Thr Leu Gly Ser Met Ala Gly Phe Leu Met Thr
        100
                      105 110
Arq Asp Gly Gln Asn Val Val Gly Thr Glu Leu Asn Ala Thr His His
115 120 125
Arg Ala Val Ser His Gly Lys Val Arg Gly Val Cys Gln Pro Leu His
130 135 140
Leu Gly Arg Ser Ser Gln Ser Trp Glu Ile Val Val Phe Asp Glu Gln
145 150 155 160
Gly Arg Arg Cys Cys Thr Cys Arg Leu Ser Thr Met Val Leu Gly
           165
                          170
<210> 9579
<211> 548
<212> PRT
<213> Enterobacter cloacae
```

<400> 9579 Gln Ala Leu Thr Arg Cys Tyr Val Trp Thr Ser Gly Trp Leu Ile Ile 10 Phe Arg Phe Ile Leu Cys Leu Phe Arg Arg Cys Gln Ser Thr Gly Ala 25 Val Lys Asn Ser Leu Asn Gln Lys Ser Asn Glu Gly Phe Thr Arg Met 35 40 45 Val Ser Ser Arg Leu Glu Met Arg Gly Ile Ser Leu Ala Phe Ser Gly 5.5 60 Phe Gln Ala Leu Ser Arg Val Asp Phe Thr Leu Asn Gly Gly Ser Val 7.0 75 His Ala Leu Thr Gly Ala Asn Gly Ala Gly Lys Ser Thr Leu Met Ala 85 90 Val Leu Cys Gly Thr His Asp His Tyr Glu Gly Glu Ile Cys Ile Asn 100 105 110 Asn Gln Pro Val Ser Ile Arg Glu Pro Leu Asp Ala Lys Arg Leu Gly 115 120 125 Ile His Leu Val Gln Gln Glu Val Asp Val Ala Leu Ile Pro Gly Leu 135 140 Ser Ile Ala Glu Asn Ile Met Leu Asp Gln Leu Ala Gln Pro Gly His 145 150 155 1.60 Arg Tyr Arg Trp Arg Asp Ile Arg Gln Gln Ala Arg Gln Ala Leu Ala 165 170

35

```
Gln Leu Asp Val Ser Leu Asp Val Arg Arg Ser Ile Asp Gly Cys Thr
                         185
         180
Leu Ala Glu Lys Gln Gln Ile Leu Leu Ala Arg Ala Leu Ser His His
      195
                      200
                                       205
Cys Arg Phe Leu Ile Leu Asp Glu Pro Thr Ala Pro Leu Asp Ala His
 210
                215
                        220
Glu Ser Glu Arg Leu Phe Ala Val Val Arg Arg Leu Gln Gln Gln Gly
       230 235
Ile Gly Val Val Phe Ile Ser His Arg Ile His Glu Leu Lys Ala Ile
            245
                            250 255
Cys Asp Thr Leu Thr Val Leu Arg Asp Gly Arg Leu Ile Glu Ser Gly
       260 265 270
Pro Met Ala Asp Leu Ser Gly Glu Ala Ile Val Glu Lys Met Leu Gly
     275 280
                           285
His Glu Leu Ser Asp Ile Tyr Pro Pro Pro Arg Pro Pro His Gly Asp
 290 295
                                   300
Glu Thr Leu Leu Arg Val Glu Gly Leu His Asp Asp Ala Leu Leu Lys
               310
                                315
Asp Ile Ser Leu His Leu Arg Lys Gly Glu Ile Leu Gly Ile Ala Gly
            325
                            330
Leu Ala Gly Ala Gly Lys Thr Glu Leu Cys Lys Ala Leu Phe Gly Ala
                          345
                                          350
Ser Lys Ser Arg Val Ala Asn Gly Glu Leu Asn His Gln Asp Trp Lys
     355
                      360
                                      365
Pro Arg Asp Pro Ala Asp Ser Val Leu Arg Gly Leu Ala Leu Val Pro
                   375
                                   380
Glu Glu Arg Arg Lys Glu Gly Ile Phe Ile Asp Glu Pro Val Ser Met
               390
                                395
Asn Leu Ala Val Cys Ala Asp Asn Ser Phe Ser Arg Trp Ser Leu Phe
            405
                             410
                                             415
Gly His Arg Gln Ala Trp Arg Trp Ala Glu Glu Val Ile Ala Arg Val
         420
                          425
                                          430
Gly Val Arg Ala Arg Gly Pro Gly Gln Val Leu Arg Arg Leu Ser Gly
    435
                      440
                                       445
Gly Asn Gln Gln Lys Val Ala Ile Gly Lys Trp Leu Arg Asn Asp Ala
 450 455
                                    460
Ser Val Leu Ile Phe Asp Glu Pro Thr Lys Gly Val Asp Val Lys Ala
465 470
                                475
Lys Thr Asp Leu Phe Gln Leu Ile Asp Gly Leu Ala Arg Glu Gly Lys
            485
                            490
                                             495
Gly Val Ile Tyr Ala Ser Gly Glu Phe Ala Glu Leu Val Gly Leu Cys
                         505
         500
                                          510
Asp Arg Ile Cys Val Leu Trp Asp Gly Arg Ile Val Ala Glu Ile Ala
      515
                      520
                             525
Gly Ala Glu Ala Arg Glu Glu Thr Leu Leu Tyr Tyr Ser Thr Gly Gly
  530
                535
                                    540
Thr Ala Ser
545
<210> 9580
<211> 356
<212> PRT
<213> Enterobacter cloacae
<400> 9580
Lys Met Lys Lys Ile Ala Leu Ser Leu Val Ala Leu Gly Leu Phe Thr
                             10
Ala Leu Pro Gly Phe Ala Ala Thr Pro Ala Pro Leu Pro Ala Ala Ile
       20
                         25
                                        30
Ala Asn His Asp Gly Pro Ile Arg Ile Ala Val Ile Arg Asn Leu Gly
```

40

```
Ser Asp Asp Asn Thr Thr Gln Phe Val Ala Gly Ala Ile Gln Glu Gly
Lys Lys Leu Gly Phe Lys Val Ser Thr Phe Leu Ser Asn Gly Asp Asp
               70
Ala Lys Phe Gln Asp Phe Val Asn Gln Ala Ile Ser Gln Lys Tyr Asp
          8.5
                            90
Gly Ile Ile Leu Ser Gln Gly Arg Asp Pro Tyr Ser Thr Ala Leu Val
                        105
         100
Lys Lys Ala Val Asp Ala Gly Ile Lys Val Ala Val Phe Asp Thr Ala
  115 120 125
Val Asn Gly Glu Ile Pro Gly Val Thr Val Thr Gln Gln Asp Asp Ala
 130 135 140
Ser Leu Thr Asn Leu Ser Phe Gly Gln Leu Ala Lys Asp Phe Asn Gly
145 150 155 160
Lys Ala Asn Ile Val Lys Leu Trp Val Ala Gly Phe Pro Pro Met Glu
     165 170 175
Arg Arg Gln Ala Ala Tyr Lys Glu Leu Gln Lys Gln Tyr Pro Glu Ile
180 185 190
Lys Glu Leu Glu Ser Ile Gly Ala Val Ser Ser Asp Val Gln Gly Asp
 195 200 205
Thr Ala Asn Lys Val Gly Ala Ile Leu Ala Lys Tyr Pro Lys Gly Lys
 210 215 220
Ile Asp Ala Ile Trp Gly Thr Trp Asp Ala Phe Ser Gln Gly Ala Tyr
225 230 235
Lys Ala Leu Lys Glu Asn Gly Arg Thr Glu Ile Lys Leu Tyr Ser Ile
                            250 255
            245
Asp Ile Ser Asn Gln Asp Leu Gln Leu Met Arg Glu Pro Gly Ser Pro
   260
             265 270
Trp Lys Val Ser Val Ala Val Asp Pro Lys Leu Ile Gly Ala Thr Asn
   275 280 285
Val Arg Leu Ile Ala Asn Lys Ile Ala Gly Glu Ala Thr Pro Ala Thr
  290 295
                                  300
Tyr Asp Phe Lys Ala Ala Ala Ile Pro Gln Ala Leu Leu Thr Ala Gln
305 310
                               315
Pro Gly Ala Val Asn Val Ala Ser Leu Gly Lys Ile Ile Pro Gly Trp
            325
                            330 335
Gly Gln Thr Glu Asp Phe Ile Ala Pro Trp Phe Ala Thr Leu Glu Ala
                         345
         340
Lys Asn Lys
     355
<210> 9581
<211> 361
<212> PRT
<213> Enterobacter cloacae
<400> 9581
Thr Ser Ile His Leu Asp Phe Ile Leu Thr Gln Cys Ala Thr Thr Thr
Gln Gln Gly Ile Asn Asp Met Gln Thr Leu Gln Thr Thr Ser Leu Arg
         20
                         25
Val Ala Asn Asn Gln Leu Phe Ile Leu Asp Gln Gln Ala Leu Pro Gln
                     4.0
Glu Lvs Arg Trp Val Asp Ala Ser Thr Val Glu Ala Leu Val Glv His
                  55
```

35 40 40 45
Glu Lys Arg Trp Val Asp Ala Ser Tnr Val Glu Ala Leu Val Gly His
50 55 60
Ile His Ala Leu Arg Val Arg Gly Ala Pro Leu Ile Gly Leu Ser Ala
65 75
Ser Leu Leu Leu Ala Leu Leu Ala Glu Asn Gly Lys Ser Arg Asp Glu
85 90 95
Leu Ala Val Ala Leu Glu Thr Leu Arg Ala Ser Arg Pro Thr Ala Val
100 105

```
Asn Leu Met Asn Asn Leu Asp Arg Met Lys Leu Ala Leu Trp Glu Glu
           120
   115
Asp Phe Val Pro Ala Leu Val Ala Glu Ala Leu Arg Leu Ile Asp Glu
                   135
                                     140
Asp Lys Arg Leu Cys Asp Ala Ile Ala Lys Ala Gly Ser Ala Leu Val
               150
                                 155
Lys Pro Gly Ser Arg Leu Leu Thr His Cys Asn Thr Gly Gly Leu Ala
                              170
            165
Thr Ala Gly Val Gly Thr Ala Leu Gly Val Ile Ala Arg Ala His Lys
         180
                          185
                                            190
Glu Gly Lys Val Ser Asn Val Trp Val Asp Glu Thr Arg Pro Leu Leu
      195 200
                                        205
Gln Gly Gly Arg Leu Thr Ala Trp Glu Leu Gly Glu Leu Gly Val Pro
 210 215 220
Tyr Gln Leu Ile Thr Asp Ser Met Ala Ala Ser Leu Met Ala Lys Gly
225 230 235 240
Gln Val Asp Ala Val Trp Val Gly Ala Asp Arg Ile Ala Ala Asn Gly
          245 250 255
Asp Val Ala Asn Lys Ile Gly Thr Tyr Ser Leu Ala Val Leu Ala Lys
         260 265 270
Phe His Gly Ile Pro Pne Tyr Val Ala Ala Pro Gln Thr Thr Leu Asp
275 280 285
Pro Asp Cys Pro Asn Gly Asp Ala Ile Pro Ile Glu Gln Arg Ala Ala 290 295 300
Ser Glu Val Thr Gly Val Ala Gly Ser Phe Gly Ala Val Gln Trp Ala
                310 315 320
Pro Gln Asn Ala Gln Val Tyr Asn Pro Ala Phe Asp Val Thr Pro Ala
             325 330 335
Ser Leu Ile Ser Gly Trp Val Leu Asp Thr Gly Val Val Thr Pro Asp
         340
              345
Glu Val Ala Glu Gly Lys Phe Ala
<210> 9582
<211> 207
<212> PRT
<213> Enterobacter cloacae
<400> 9582
Pro Arg Trp Ile Lys Leu Val Thr Leu His Leu Asp Glu Asn Thr Glu
                              10
Glu Val Gln Met Ser Leu Ile Asn Thr Lys Ile Lys Pro Phe Lys Asn
                          25
Gln Ala Phe Lys Asn Gly Glu Pne Ile Glu Val Thr Glu Lys Asp Ile
                     40
Glu Gly Arg Trp Ser Val Phe Phe Phe Tyr Pro Ala Asp Phe Thr Phe
 50
                                    60
Val Cys Pro Thr Glu Leu Gly Asp Val Ala Asp His Tyr Glu Glu Leu
              7.0
                                 75
Gln Lys Leu Gly Val Asp Val Tyr Ser Val Ser Thr Asp Thr His Phe
                              90
             85
Thr His Lys Ala Trp His Ser Ser Ser Glu Thr Ile Ala Lys Ile Lys
          100
                           105
Tyr Ala Met Ile Gly Asp Pro Thr Gly Ala Leu Thr Arg Asn Phe Asp
             120
                                         125
      115
Asn Met Arg Glu Asp Glu Gly Leu Ala Asp Arg Ala Thr Phe Val Val
                    135
                                     140
Asp Pro Gln Gly Ile Ile Gln Ala Ile Glu Val Thr Ala Glu Gly Ile
                150
                                 155
Gly Arg Asp Ala Ser Asp Leu Leu Arg Lys Val Lys Ala Ala Gln Tyr
```

170

165

```
Val Ala Ser His Pro Gly Glu Val Cys Pro Ala Lys Trp Lys Glu Gly
              185
       180
Glu Ala Thr Leu Ala Pro Ser Leu Asp Leu Val Gly Lys Ile
                        200
<210> 9583
<211> 244
<212> PRT
<213> Enterobacter cloacae
<400> 9583
Ile Phe Gly Asn Lys Pro Gly Val Pro Ile His Ala Glu Arg Lys Phe
                              10
Arg Tyr Ala Gly Lys Thr Glu Pro Gly Gln Cys Ala Leu Gln Pro Gln
                     25
                                            3.0
Arg Arg Glu Ser Asp Met Tyr Phe Tyr Gln Pro Ser Gln Gly His Gly
                      40
                               45
Leu Pro His Asp Pro Leu Asn Ala Ile Ile Gly Pro Arg Pro Ile Gly
                    55
Trp Ile Ser Ser Cys Asp Arg Ala Gly Gln Leu Asn Leu Ala Pro Tyr
                 7.0
                                  75
Ser Phe Phe Asn Cys Phe Asn Tyr Arg Pro Pro Ile Ile Gly Phe Ser
            85
                               90
Ser Asn Gly Trp Lys Asp Ser Val Arg Asn Ile Thr Glu Thr Gly Glu
          100
                         105
Phe Val Trp Asn Leu Ala Thr Arg Asp Leu Ala Glu Ala Met Asn Glu
115 120 125
Thr Ser Ala Thr Leu Pro His Gly Glu Asp Glu Phe Thr Phe Ala Gly
                    135
                                      140
Leu Thr Pro Val Ala Ser Gln Leu Val Ser Ser Pro Arg Val Ala Glu
                 150
                                   155
145
Ser Pro Val Asn Phe Glu Cys Arg Leu Ser Gln Cys Ile Gln Leu Thr
             165
                               170
Gly Ala Asp Gly Thr Pro Ile Asp Thr Trp Leu Val Leu Gly Glu Val
          180 185
                                             190
Val Gly Val His Ile Ala Glu Ser Leu Leu Glu Glu Gly Ile Tyr Gln
                        200 205
      195
Thr Ala Lys Ala Gln Pro Ile Leu Arg Ala Gly Gly Pro Thr Ala Tyr
                                      220
 210 215
Tyr Ala Ile Ser Asp Ser His Arg Phe Asp Leu Val Arg Pro Asp Ala
                 230
                                 235
225
Arg Arg Gly
<210> 9584
<211> 532
<212> PRT
<213> Enterobacter cloacae
<400> 9584
Arg Tyr Gly Trp Arg Asp Val Gln Arg Gly Ser Ala Thr Val Pro Val
Lys Thr Ser Gly Gln Gly Leu Arg Arg Arg Cys Phe Pro Leu Tyr Ala
          20
Gly Gly Gly Ser Thr Asp Ala Ala Gln Ala Arg Thr His Cys Pro Gly
       35
                        40
Ala Asn Ala Gly Gly Ala Val Ser Gly Cys Ala Asn Gly Val Ala Ala
                    55
```

Thr Ala Gly Arg Gly Thr Thr Val Ala Ala Ser Thr Ala Gly Gly Thr

Asp Gly Ala Ile Ser Leu Trp Thr Val Gly Ala Ser Gly Pro Ala Gly

70

```
Gly Ala Ser Trp Arg Thr Gly Tyr Gly Thr Gly Gly Glu Pro Gly Gly
     100
                     105
                                   110
Ala Arg Asn Gly Ala Asn Leu Gly Cys Arg Glu Leu Ala Asp Pro Ala
  115 120
Gly Ala Gly Ala Met Lys Lys Thr Thr Leu Met Ala Ile Ala Ile Ala
 130 135 140
Ile Ala Ala Ala Gly Gly Tyr Phe Val Gly Gln Lys Gln Thr His Gln
145 150 155
Pro Ala Ala Ala Gln Pro Ser Glu Arg Lys Val Leu Tyr Trp Tyr
     165 170 175
Asp Pro Met Val Pro Gly Gln Arg Phe Asp Lys Pro Gly Lys Ser Pro
   180 185 190
Phe Met Asp Met Asp Leu Val Pro Arg Tyr Ala Asp Glu Ala Gln Ala
195 200 205
Ala Ser Gly Val Ala Ile Ser Thr Gln Gln Gln Asn Leu Gly Met
210 215 220
Lys Thr Ala Asn Val Glu Met Arg Gln Leu Val Ser Pro Phe Ser Ala
225 230 235 240
Phe Ala Thr Val Ala Thr Asp Glu Arg Asn Val Ser Val Val Ser Ala
      245 250 255
Pro Ala Asn Gly Val Val Ser Lys Leu Phe Val Asn Ala Pro Gln Gln
           265 270
 260
Gln Val Lys Ala Gly Glu Ala Leu Ala Gln Leu Trp Ile Pro Gln Trp
275 280 285
Thr Thr Ala Gln Glu Tyr Leu Ala Val Arg Gln Leu Gly Asp Ala
290 295
                             300
Ala Leu Thr Arg Ala Ala Arg Glu Arg Leu Ala Leu Glm Phe Met Pro
305 310 315 320
Glu Glu Val Ile Arg Leu Leu Glu Arg Ser Gly Lys Pro Gln Thr Thr
          325 330 335
Leu Ile Leu Arg Ala Asp Gin Ala Gly Tyr Val Val Lys Leu Asp Val
     340 345 350
Arg Glu Gly Ala Gln Ile Thr Ala Thr Ala Pro Leu Phe Glu Ile Ala
355 360 365
Arg Leu Asp Pro Val Trp Leu Val Val Asp Tyr Pro Gln Thr Gln Ala
      375 380
370
Gin Ser Leu Ala Val Gly Ser Asn Val Val Ala Thr Ser Glu Ser Trp
385 390 395 400
Pro Gly Glu Gln Phe His Gly Thr Val Ser Glu Leu Leu Pro Gln Met
              410 415
          405
Glu Thr Thr Arg Thr Leu Lys Ala Arg Ile Val Leu Glu Asn Ser
           425 430
       420
Ala His Lys Leu Lys Pro Gly Met Tyr Leu Ser Val Arg Arg Ala Glu
435 440
                                 445
Glu Met Lys Gly Pro Pro Val Leu Ala Val Pro Glu Glu Ala Val Ile
 450
                455
                              460
Asn Ser Gly Glu Ser Ala Arg Leu Leu Leu Ala Thr Gly Asp Gly Tyr
465 470 475 480
Phe Arg Pro Val Thr Val Thr Thr Gly Leu Thr Ala Gln Gly Trp Thr
                        490
                                      495
           485
Ala Ile Leu Ser Gly Val Lys Gln Gly Asp Lys Val Val Thr Ser Gly
           505
                                    510
       500
Gln Phe Leu Ile Asp Ser Glu Ala Ser Leu Arg Ser Val Met Pro Glu
                   520
Val Thr Pro
```

<210> 9585 <211> 332 <212> PRT

<213> Enterobacter cloacae

```
<400> 9585
Ile Ser Gln Ala Gly Ala Arg Arg Gly Lys Tyr Gly Ala Asp Ala Gly
Asp Pro Arg Arg Cys Arg Ala Ala Arg Ala Ser Glu Gly Asp Asp Gly
        2.0
                        25
Arg His Tyr Tyr Gly Arg Thr Ala Ala His His Val Gly Glu Trp Glu
               4.0
     35
Trp Leu Gly Gly Asp Ala Thr Tyr Cys Arg Ala Asp Asp Trp Trp His
                               60
                55
Gly Asn Gly Thr Val Ile Val Asp Val Ser Tyr Ser Arg Thr Leu Gln
         70
                            7.5
Ile Val Thr Ser Thr Leu Asn Met Ser Thr Ala Cys Ala Tyr Ser Gly
               90
          85
Met Gln Phe Met Tyr Pro Gln Ile Ile Pro Arg Asn Gly Met Val Ile
      100 105 110
Arg Asn Asn Thr His Ala Val Lys Arg Ser Phe Lys Tyr Ser Val Leu
    115 120 125
Arg Ser Ala Pro Asn Thr Lys Tyr Gly Asn Gly Ile Val Ile Val Arg
 130 135
                      140
Ile Lys Phe Pro Leu Ile Leu Leu Phe Ile Ile Gly Gln Leu Ser Cys
   150 155
Ala Phe Ala Val Asn Ala Asp Ser Asn Thr Ala Asp Lys Gly Trp Phe
           165 170 175
Thr Thr Phe Thr Asp Asn Val Ala Gln Thr Trp Asn Glu Pro Glu His
                      185 190
Tyr Asp Leu Tyr Ile Pro Ala Ile Thr Trp His Ala Arg Phe Ala Tyr
     195
                     200 205
Asp Lys Glu Lys Thr Asp Arg Tyr Asn Glu Arg Pro Trp Gly Ala Gly
210
                 215
Phe Gly Gln Ser Arg Trp Asp Glu Lys Gly Asn Trp His Gly Leu Tyr
              230 235
Leu Met Ala Phe Lys Asp Ser Tyr Asn Lys Trp Glu Pro Ile Gly Gly
            245 250
                                           255
Tyr Gly Trp Glu Lys Thr Trp Arg Pro Leu Ser Asp Asp Asn Phe Arg
            265 270
Leu Gly Leu Gly Tyr Thr Ala Gly Phe Thr Ala Arg Asp Asn Trp Lys
                     280
Tyr Ile Pro Val Pro Val Leu Leu Pro Leu Ala Ser Ile Gly Tyr Gly
                  295 300
   290
Pro Ala Thr Phe Gln Met Thr Tyr Ile Pro Gly Thr Tyr Asn Asn Gly
               310
                              315
Asn Val Tyr Phe Ala Trp Met Arg Phe Gln Phe
            325
```

<210> 9586 <211> 436 <212> PRT

<213> Enterobacter cloacae

```
7.0
Phe Ala Arg Phe Ser Glu Pro Ala Val Gly Gly Asp Asp Pro Ala Gly
         8.5
                         90
Pro Phe Gln Gln Lys Leu Ala Gln Ala Phe Arg Asn Ala Lys Asn Ser
     100
                      105
Gly Ile Ala His Pro Val Met Val Gly Ala Ile Pro Phe Asp Thr Arg
    115 120
                                  125
Lys Pro Ser Ser Leu Phe Ile Pro Gln Arg Trp Gln Thr Phe Ser Arg
 130 135 140
Pro Ala Arg Gln Gln Ser Ala Arg Tyr Ala Ser Gly Ala Gln Thr Leu
145 150 155
Asn Val Gln Gln Arg Thr Glu Ile Pro Pro Gln Pro Ile Phe Glu Glu
        165 170 175
Met Val Ala Arg Ala Ala Ser Leu Thr Ala Thr Pro Gln Val Asn Lys
       180 185 190
Val Val Leu Ser Arg Leu Ile Asp Ile Ala Thr Asp Lys Gln Ile Asp
  195 200 205
Ser Ser Ala Leu Met Glu Arg Leu Ile Ala Gln Asn Pro Ala Ser Phe
 210 215 220
Asn Phe His Val Pro Leu Glu Asp Gly Gly Val Leu Leu Gly Ala Ser
     230 235 240
Pro Glu Leu Leu Arg Lys Glu Gly Ala His Phe Ser Ser Leu Pro
           245 250 255
Leu Ala Gly Ser Ala Arg Arg Gln Pro Asp Asp Val Leu Asp Arg Glu
   260 265 270
Ala Gly Thr Lys Leu Leu Ala Ser Glu Lys Asp Arg His Glu His Asp
                        285
    275 280
Leu Val Thr Gln Ala Met Lys Thr Ile Leu Glu Pro Arg Ser His His
                     300
              295
 290
Leu Ser Met Pro Ala Ser Pro Gln Leu Ile Thr Thr Pro Thr Leu Trp
305
              310
                  315 320
His Leu Ala Thr Pro Val Glu Gly Asp Ala Arg Glu Asn Glu Asn Ala
           325 330 335
Leu Thr Leu Ala Cys Leu Leu His Pro Thr Pro Ala Leu Ser Gly Phe
                       345
                           350
        340
Pro His Gln Ala Ala Lys Glu Leu Ile Ala Glu Leu Glu Pro Phe Asp
     355 360 365
Arq Glu Leu Phe Gly Gly Ile Val Gly Trp Cys Asp Ser Glu Gly Asn
                 375 380
Gly Glu Trp Val Val Thr Ile Arg Cys Ala Arg Leu His Gln Asn Thr
                  395 400
              390
Val Arg Leu Phe Ala Gly Ala Gly Ile Val Pro Ala Ser Ser Pro Val
         405 410
Gly Glu Trp Arg Glu Thr Gly Val Lys Leu Ser Thr Met Leu Asn Val
                       425
        420
Phe Glv Leu His
```

```
<210> 9587
```

435

<211> 540

<212> PRT

<213> Enterobacter cloacae

<400> 9587

Ala Ser Ala Leu Gln Ala Gln Gly Leu His Arg Gly Glu Thr Ala Leu 7.0 Val Gln Leu Gly Asn Val Ala Glu Phe Tyr Ile Thr Phe Phe Ala Leu 90 85 Leu Gln Ile Gly Val Ala Pro Val Asn Ala Leu Phe Ser His Gln Arg 110 100 105 Ser Glu Leu Asn Ala Tyr Ala Glu Gln Ile Lys Pro Ala Val Leu Ile 115 120 Ala Asp Arg Asp His Ala Leu Phe Ser Gly Asp Asp Phe Leu Asn Thr 130 135 140 Phe Val Asp Ala His Arg Ser Val Arg Val Val Leu Leu Arg Gly Asp 145 150 155 Lys Gly Glu His Ala Leu Glu Ala Ala Ile Ser Arg Pro Ala Asp Asn 165 170 Phe Ile Pro Asn Pro Thr Pro Ala Asp Glu Val Ala Phe Phe Gln Leu 180 185 190 Ser Gly Gly Ser Thr Gly Thr Pro Lys Leu Ile Pro Arg Thr His Asn 195 200 205 Asp Tyr Asp Tyr Ser Ile Arg Arg Ser Asn Glu Ile Cys Gly Ile Thr 210 215 220 Ala His Thr Arg Tyr Leu Asn Ala Leu Pro Ala Ala His Asn Tyr Ala 225 230 235 Met Ser Ser Pro Gly Ser Leu Gly Val Phe Thr Ala Gly Gly Cys Val 245 250 255 Val Leu Ala Asn Asp Pro Ser Ala Thr Leu Cys Phe Pro Leu Ile Glu 260 265 270 Gln His Gln Ile Asn Val Thr Ser Leu Val Pro Pro Ala Val Ser Leu 275 280 285 Trp Leu Gln Ala Ile Ala Asp Gly Ala Gly Asn Ala Gln Leu Lys Ser 290 295 300 Leu Glu Leu Gln Val Gly Gly Ala Arg Leu Ser Ala Thr Leu Ala 305 310 315 320 Ala Arg Ile Pro Ala Glu Ile Gly Cys Gln Leu Gln Gln Val Phe Gly 325 330 335 Met Ala Glu Gly Leu Val Asn Tyr Thr Ala Leu Asp Asp Ala Pro Glu 345 350 340 Arg Ile Ile Asn Thr Gln Gly Arg Pro Met Cys Pro Asp Asp Glu Val 355 360 365 Trp Val Ala Asp Glu Asp Gly Asn Pro Leu Pro Arg Gly Glu Val Gly 370 380 Arg Leu Met Thr Arg Gly Pro Tyr Thr Phe Arg Gly Tyr Phe Asn Ser 385 390 395 400Pro Glu His Asn Ala Ser Ala Phe Asp Ala Asn Gly Phe Tyr Cys Ser 405 410 415 Gly Asp Leu Ile Ala Ile Asp Glu Gln Gly Tyr Ile Thr Val Gln Gly 425 430 420 Arg Glu Lys Asp Gln Ile Asn Arg Gly Gly Glu Lys Ile Ala Ala Glu 440 445 435 Glu Ile Glu Asn Leu Leu Leu Arg His Asp Ala Val Ile His Ala Ala 450 455 460 Leu Val Ser Met Glu Asp Ser Leu Leu Gly Glu Lys Ser Cys Ala Tyr 470 475 Leu Val Val Lys Gln Pro Leu Arg Ala Val Glu Val Arg Arg Phe Leu 485 490 Arg Glu Gln Gly Val Ala Glu Phe Lys Leu Pro Asp Arg Val Glu Ser 500 505 510 Val Asp Ala Leu Pro Leu Thr Pro Val Gly Lys Val Asp Lys Lys Gln 515 Leu Arg Leu Trp Leu Ala Glu Arg Ala Arg Gly 535

<210> 9588 <211> 274 <212> PRT <213> Enterobacter cloacae

<400> 9588 Phe Arg Asp Ala Gly Lys Lys Ser Asp Pro Arg Cys Leu Val Gly Ala Ala Leu Pro Arg Gly Glu Val Met Ala Phe Asp Phe Thr Gly Lys Thr 25 Val Trp Val Thr Gly Ala Gly Lys Gly Ile Gly Tyr Ala Thr Ala Leu 40 Ala Phe Val Glu Ala Gly Ala Gln Val Thr Gly Phe Asp Leu Ala Phe 5.5 Pro His Gly Glu Tyr Pro Phe Ala Thr Glu Thr Leu Asp Val Ala Asp 7.0 75 Ala Ala Gln Ala Ser Asp Val Cys Gly Arg Leu Leu Ser Ser Leu Glu 8.5 90 95 Arg Leu Asp Val Leu Val Asn Ala Ala Gly Ile Leu Arg Met Gly Ala 100 105 110 Thr Asp Gln Leu Ser Pro Glu Asp Trp Gln Gln Thr Phe Ala Val Asn 115 120 Val Gly Gly Ala Phe Asn Leu Pne Gln Gln Thr Met Gly Gln Phe Arq 130 135 140 Arg Gln Gln Gly Gly Ala Ile Val Thr Val Ala Ser Asp Ala Ala His 150 155 Thr Pro Arg Ile Gly Met Ser Ala Tyr Gly Ala Ser Lys Ala Ala Leu 165 170 175 Lys Ser Leu Ala Leu Thr Val Gly Leu Glu Leu Ala Gly Ser Gly Val 180 185 190 Arg Cys Asn Leu Val Ser Pro Gly Ser Thr Asp Thr Asp Met Gln Arg 195 200 205 Thr Leu Trp Thr Ser Asp Asp Ala Glu Gln Arg Arg Ile Arg Gly Phe 210 215 220 Gly Glu Gln Phe Lys Leu Gly Ile Pro Leu Gly Lys Ile Ala Arg Pro 225 230 235 Gln Glu Ile Ala Ala Thr Val Leu Phe Leu Ala Ser Asp Ala Ala Ser 245 250

<210> 9589 <211> 366 <212> PRT <213> Enterobacter cloacae

Ala

His Ile Thr Leu Gln Asp Ile Val Val Asp Gly Gly Ser Thr Leu Gly

```
Leu Leu Ser Gly Leu Val Leu Asn Pro Gln Gln Leu Gly Arg Val Trp
         100
                       105
Phe Ala His Arg Gly Ala Ser Asp Ala Val Gly Ser Val Ser Arg Asp
     115
                    120
                                   125
Trp Pro Arg Leu Asp Val Val Leu Arg Gly Glu Tyr Gly Asn Arg Leu
              135
                                 140
Val Ala Gly Gln Gln Pro Leu His Gln Gly Glu Met Leu Phe Leu Pro
       150
                       155
Ala Gln Ala Ala Ser Val Pro Val Phe Glu Arg Pro Val Met Leu Leu
         165
               170
Ser Ile Leu Phe Ala Pro Ser Trp Leu Gly Leu Val Phe His Asp Thr
        180
            185 190
Arg His Gly Arg Ser Val Pro Ala Gln Arg His Val Glu Leu Pro His
     195 200
                         205
Pro Glu Arg Gly Glu Cys Ala Ala Met Leu Met Ala Leu Thr His Leu
 210
               215 220
Ser Ala Ser Pro Gln Asp Gln Ala Ile Ile Gln Pro Leu Val Leu Ser
225 230 235
Leu Leu His Trp Cys Arg Lys Val Val Ser Ser Leu Pro Glu Pro Gly
          245 250 255
Val Ser Arg Gly Asp Phe Leu Tyr Gln Ser Ile Cys Asn Trp Val Gln
       260 265 270
Glu Asn Tyr Ala Glu Pro Leu Ser Arg Asp Ser Val Ala Ser Leu Phe
275 280 285
Asn Ile Ser Ala Asn His Leu Ser Arg Leu Phe Ser Gln Gln Gly Thr
290 295 300
Met Ser Phe Val Asp Tyr Val Arg Trp Val Arg Met Ala Lys Ala Arg
           310 315
Thr Ile Leu Gln Lys Tyr His Leu Pro Val Gly Glu Val Ala Lys Arg
               330 335
           325
Cys Gly Tyr Ala Asp Ser Asp Tyr Phe Ser Arg Leu Phe Arg Arg Gln
      340 345 350
Phe Gly Leu Thr Pro Gly Glu Tyr Arg Ala Arg Phe Gln
```

<210> 9590 <211> 435 <212> PRT

<213> Enterobacter cloacae

<400> 9590

Arg Phe Gln Asp Tyr Leu Ala Asp Ala Ser Thr Leu Ser Glu Val Thr 1 1.0 Met Lys Gln His Thr Leu Ser Leu Trp Leu Gly Gly Val Leu Phe Gly 20 25 30 Leu Leu Thr Ser Ala Ala Gln Ala Glu Pro Trp Thr Leu Glu His Thr 40 4.5 Leu Thr Glu Ala Gln Arg Tyr Ser Ala Glu Leu Ser Ala Ser Arg Asn 5.0 60 Glu Ala Gln Ala Leu Asp Ala Met Ala Val Ser Ala Thr Gln Leu Pro 70 75 Asp Pro Lys Leu Lys Phe Gly Ile Glu Asn Val Pro Val Gln Gly Ser 90 85 Asn Asp Arg Arg Leu Thr Arg Glu Gly Met Thr Met Gln Lys Val Gly 100 105 110 Ile Met Gln Ser Tyr Val Ser Ser Glu Lys Arg Glu Arg Lys Ala Gln 120 125 Thr Leu Gln Ala Gln Ala Arg Ser Val Leu Ala Lys Ser Glu Ala Val 135 Arg Ala Ala Leu Gln Arg Asp Thr Ala Gln Ala Trp Leu Asp Leu Ala

```
150
Leu Ala Gln Gln Ala Leu Asn Thr Ala Arg Thr Leu Val Arg Glu Thr
                     170
         165
Glu Arg Gln Arg Gly Val Gln Lys Ala Ser Val Gly Ala Gly Ser Ala
        180
                     185
                                     190
Met Pro Asp Ser Val Leu Ala Leu Gln Met Ile Leu Ser Ala Met Arg
     195
            200
                                 205
Asp Lys Glu Thr Leu Ala Gln Arg Asp Val Gln Leu Ala Gln Ser Arg
                               220
Leu Leu Glu Leu Thr Gly His Ala Ile Thr Glu Val Arg Gly Pro Leu
225
            230 235
Pro Arg Tyr Gln Arg Leu Pro Ala Asn Glu Lys Thr Leu Gln Glu Gly
           245 250 255
Ile Val Arg His Pro Glu Val Glu Ala Ala Arg Arg Glu Ala Glu Thr
        260 265 270
Ala Lys Ala Arg Ser Ala Gln Ser Ala Val Ala Ala Ile Pro Asp Val
    275 280
                        285
Asp Val Glu Val Tyr Tyr Ala His Arg Ala Glu Gly Tyr Asp Asp Met
 290 295 300
Ala Gly Val Met Phe Ser Val Asp Leu Pro Leu Phe Gln Ser Lys Arg
305 310 315
Gln Asp Lys Asp Tyr Ala Ala Asp Val Ser Arg Ser Met Gln Ala Ala
        325 330 335
Asp Gln Leu Thr Leu Leu Lys Arg Glu His Ile Ala Gln Val Gln Thr
  340 345 350
Leu Val Ala Gln Tyr Gln Ala Ala Gln Thr Val Trp Gln Arg Gln Arg
355 360
Asp Glu Val Leu Pro Leu Gin Arg Gln Arg Leu Ala Val Leu Thr Ala
370 375
                      380
Gln Tyr Arg Ser Gly Gln Ser Ala Leu Pro Ala Leu Leu Glu Ala Arg
      390 395 400
Arg Gly Val Leu Asp Thr Glu Leu Ala Val Asn Gln Ala Glu Arg Glu
      405 410 415
Met Ala Arg Thr Trp Ala Ala Val Asn Trp Leu Ile Pro Gln Glu Leu
```

Ala Gln 435

<210> 9591 <211> 708

<212> PRT

<213> Enterobacter cloacae

<400> 9591

Gly Leu Gly Gln Asn Ala Asp Ala Gln Ala Ala Arg Arg Val Cys Arg 1.0 Gly Gly Thr Gly Val Cys Ala Val Pro Val Pro Pro Ala Leu Arg Ala Gly Gly Asp Gly Leu Ser Ala Ala Gly Asp Pro Arg Gly Phe Cys Gly 4.0 Asp Ala Leu Ser Gly His Asn Ala Asn Met Met Ser Leu Gly Gly Ile 50 55 60 Ala Ile Ala Ile Gly Ala Met Val Asp Ala Ala Ile Val Met Ile Glu 7.0 Asn Met His Lys Val Leu Glu Leu Trp Arg His Asp Asn Pro Gly Lys 90 8.5 95 Glu Pro Ala Pro Gly Glu Tyr Trp Arg Leu Ala Glu Lys Ala Ala Val 105 100 110 Glu Val Gly Pro Ala Leu Phe Cys Ser Leu Leu Ile Ile Thr Leu Ser 1.15 120 Phe Ile Pro Val Phe Ser Leu Glu Ala Gln Glu Gly Arg Met Phe Ser

```
135
Pro Leu Ala Phe Thr Lys Thr Trp Ser Met Ala Val Ala Ala Gly Leu
       150
                     155
Gly Ile Thr Leu Val Pro Val Leu Met Gly Phe Phe Ile Arg Gly Lys
          165
                    170
Ile Pro Asp Glu Lys Ala Asn Pro Ile Asn Arg Leu Leu Ile Arg Leu
       180
           185 190
Tyr Glu Pro Leu Leu Asp Lys Val Leu Thr Phe Pro Lys Thr Thr Leu
 195 200 205
Ala Leu Ala Cys Leu Leu Leu Ile Ala Thr Leu Trp Pro Leu Ser Arg
 210 215 220
Leu Gly Ser Glu Phe Met Pro Pro Leu Asp Glu Gly Asp Leu Leu Tyr
   230 235 240
Met Pro Ser Thr Leu Pro Gly Ile Ser Ala Arg Glu Ala Ser Arg Leu
         245 250 255
Leu Gln Gln Thr Asp Arg Leu Ile Lys Ser Val Pro Glu Val Ala Ser
   260
           265 270
Val Phe Gly Lys Ala Gly Arg Ala Glu Ser Ala Thr Asp Pro Ala Pro
275 280 285
Leu Thr Met Leu Glu Thr Thr Ile His Phe Lys Pro Arg Glu Gln Trp
290 295 300
Arg Pro Gly Met Thr Pro Gln Lys Leu Val Glu Glu Leu Asp Lys Thr
305 310 315
Val Ser Leu Pro Gly Ile Ala Asn Val Trp Val Pro Pro Val Arg Asn
     325 330 335
Arg Leu Asp Met Leu Ala Thr Gly Ile Lys Ser Pro Val Gly Ile Lys
 340 345 350
Val Asn Gly Asn Asn Ile Ala Asp Ile Glu Arg Val Ala Arg Gln Ile
355 360 365
Glu Gln Val Val Lys Asp Val Pro Gly Val Ser Ser Ala Leu Ala Glu
370 375 380
Arg Leu Glu Gly Gly Arg Tyr Val Asp Ile Arg Ile Asp Arg Gln Lys
385 390 395 400
Ala Ala Arg Tyr Gly Val Ser Val Asp Glu Leu Gln Ser Leu Val Ser
          405 410 415
Thr Leu Val Gly Gly Asp Asn Ile Gly Glu Val Ile Gln Gly Arg Glu
   420 425 430
Arg Tyr Pro Ile Asn Leu Arg Tyr Pro Arg Asp Leu Arg Asp Asn Val
   435 440 445
Asp Ala Leu Arg Val Leu Pro Val Val Thr Ala Ser Gly Ser Gln Val
 450 455 460
Ala Leu Gly Glu Leu Ala Asp Ile Val Val Thr Glu Gly Pro Pro Met
465 470 475
Leu Lys Ser Glu Asn Ala Arg Leu Ser Ser Trp Ile Tyr Val Asp Leu
          485 490
Arg Gly Arg Asp Leu Lys Ser Ala Val Asp Glu Met Gln Lys Arg Val
       500 505 510
Glu Glu Lys Val Val Leu Pro Gln Gly Val Ser Leu Ser Trp Ser Gly
   515 520 525
Gln Phe Glu Tyr Leu Glu Arg Ala Thr Ala Arg Leu Lys Ile Val Leu
530 535 540
Pro Val Thr Leu Met Ile Ile Phe Val Leu Leu Trp Leu Thr Phe Arg 545 550 555 560
Arg Ile Ser Asn Val Leu Ile Ile Met Gly Ala Leu Pro Phe Ala Leu
         565 570 575
Ile Gly Gly Val Trp Leu Leu Trp Leu Leu Glu Tyr Asn Leu Ser Val
       580 585 590
Ala Gly Ala Val Gly Phe Ile Ala Leu Ser Gly Val Ala Ala Glu Phe
    595 600
                       605
Gly Val Ile Met Val Leu Tyr Leu Asn His Ala Ile Asp Lys Tyr His
               615
```

```
Arg Leu Glu Pro Glu Gly Gly Asn Thr Val Leu Met Arg Ala Ile His
      630
                             635
Glu Gly Ala Val Leu Arg Val Arg Pro Lys Val Met Thr Val Ala Thr
                         650
           645
Ile Met Ala Gly Leu Leu Pro Ile Met Trp Gly Ser Gly Ser Gly Ser
      660 665
Glu Val Met Gln Arg Ile Ala Ala Pro Met Ile Gly Gly Met Val Thr
                                  685
    675 680
Ala Pro Leu Leu Ser Met Leu Val Ile Pro Ala Leu Tyr Lys Leu Leu
      695
His Gln Arg
705
<210> 9592
<211> 345
<212> PRT
<213> Enterobacter cloacae
<400> 9592
Asn Ser Pro Cys Ala Arg Trp Arg Cys Asp Ala Ser Cys Ala Ser Arg
                        10
1 5
Ala Leu Pro Asn Leu Ser Cys Arg Thr Ala Trp Arg Ala Trp Met Arg
 20
                      25
                                      3.0
Phe Arg Ser Arg Arg Ser Ala Lys Leu Ile Arg Asn Ser Cys Ala Cys
                                4.5
              40
Gly Leu Leu Asn Ala Pro Gly Ala Glu Glu Gln Arg Met Ala Ile Pro
50 55
                     60
Lys Leu Thr Ala Tyr Ala Leu Pro Thr Ala Ala Glu Leu Pro Thr Ser
65 70 75
Lvs Val Asn Tro Ala Phe Glu Pro Glu Arg Ala Ala Leu Leu Ile His
          85 90 95
Asp Met Gln Glu Tyr Phe Leu Asn Phe Trp Gly Glu Asn Ser Asp Met
 100 105 110
Met Gln Gln Val Val Ala Asn Ile Ala Lys Leu Arg Ala Tyr Cys Lys
   115 120 125
Glu His Asn Ile Pro Val Tyr Tyr Thr Ala Gln Pro Lys Asp Gln Ser
 130 135 140
Asp Glu Asp Arg Ala Leu Leu Asn Asp Met Trp Gly Pro Gly Leu Thr
145 150 155 160
Arg Ser Pro Glu Gln Gln Arg Ile Val Ala Glu Leu Thr Pro Asp Glu
       165 170 175
Ala Asp Thr Val Leu Val Lys Trp Arg Tyr Ser Ala Phe His Arg Ser
        180 185 190
Pro Leu Glu Gln Met Leu Lys Glu Thr Gly Arg Asn Gln Leu Leu Ile
                    200 205
Thr Gly Val Tyr Ala His Ile Gly Cys Met Thr Thr Ala Thr Asp Ala
 210 215 220
Phe Met Arg Asp Ile Lys Pro Phe Phe Ile Ala Asp Ala Leu Ala Asp
              230 235 240
Phe Thr Arg Asp Glu His Leu Met Ser Leu Lys Tyr Val Ala Gly Arg
           245 250
                                        255
Ser Gly Arg Val Val Met Thr Asp Glu Leu Leu Pro Ser Val Pro Ala
            265 270
Thr Lys Ala Ala Leu Arg Glu Leu Ile Leu Pro Leu Leu Asp Glu Ser
     275 280 285
Asp Glu Pro Met Asp Asp Glu Asn Leu Ile Asp Tyr Gly Leu Asp Ser
 290 295 300
Val Arg Met Met Ala Leu Ala Ala Arg Trp Arg Lys Val His Gly Asp
305 310 315
Ile Asp Phe Val Met Leu Ala Lys Asn Pro Thr Leu Asp Ala Trp Trp
```

Ala Leu Leu Ser Arg Glu Val Lys 340 <210> 9593 <211> 713 <212> PRT <213> Enterobacter cloacae <400> 9593 His Leu Thr Val Ser Gln Gln Arg Thr Thr Thr Met Asn Asn Ser Gly Lys Tyr Leu Thr Trp Ala Val Leu Ser Val Val Gly Ala Phe Ala Leu 20 25 Gly Tyr Ile Ala Leu Asn Arg Gly Glu Gln Ile Asn Ala Leu Trp Ile 35 40 Val Val Ala Ser Val Cys Ile Tyr Leu Ile Ala Tyr Arg Phe Tyr Gly 50 55 Arg Tyr Ile Ala Lys Thr Val Leu Gly Val Asp Gly Thr Arg Met Thr 75 70 Pro Ala Val Arg His Asn Asp Gly Leu Asp Tyr Val Pro Thr Asp Lys 85 90 Lys Val Leu Phe Gly His His Phe Ala Ala Ile Ala Gly Ala Gly Pro 100 105 110 Leu Val Gly Pro Val Leu Ala Ala Gln Met Gly Tyr Leu Pro Gly Met 115 120 125 Ile Trp Ile Leu Ala Gly Val Val Leu Ala Gly Ala Val Gln Asp Phe 130 135 140 Met Val Leu Phe Val Ser Thr Arg Arg Asp Gly Arg Ser Leu Gly Glu 150 155 160 Leu Val Lys Glu Glu Met Gly Ala Thr Ala Gly Val Ile Ala Leu Val 165 170 175 Ala Thr Phe Met Ile Met Val Ile Ile Leu Ala Val Leu Ala Met Ile 180 185 190 Val Val Lys Ala Leu Thr His Ser Pro Trp Gly Thr Tyr Thr Val Ala 195 200 205 Phe Thr Ile Pro Leu Ala Leu Phe Met Gly Ile Tyr Ile Arg Tyr Leu 210 215 220 Arg Pro Gly Arg Ile Gly Glu Val Ser Val Ile Gly Leu Val Phe Leu 230 235 240 Val Phe Ala Ile Ile Ser Gly Gly Trp Val Ala Glu Ser Pro Thr Trp 245 250 255 Ala Pro Phe Phe Asp Phe Thr Gly Val Gln Leu Thr Trp Met Leu Val 260 265 270 Gly Tyr Gly Phe Val Ala Ala Val Leu Pro Val Trp Leu Leu Ala 275 280 285 Pro Arg Asp Tyr Leu Ser Thr Phe Leu Lys Ile Gly Thr Ile Val Gly 295 300 Leu Ala Ile Gly Ile Leu Ile Met Arg Pro Thr Leu Thr Met Pro Ala 310 315 320 305 Leu Thr Lys Phe Ile Asp Gly Thr Gly Pro Val Trp Thr Gly Asn Leu 330 335 325 Phe Pro Phe Leu Phe Ile Thr Ile Ala Cys Gly Ala Val Ser Gly Phe 345 340 His Ala Leu Ile Ala Ser Gly Thr Thr Pro Lys Met Leu Ala Asn Glu 355 360 Asn Gln Ala Cys Leu Ile Gly Tyr Gly Gly Met Leu Met Glu Ser Phe 380 375 Val Ala Ile Met Ala Leu Val Ser Ala Cys Ile Ile Asp Pro Gly Val 385 390 395

Tyr Phe Ala Met Asn Ser Pro Met Ala Val Leu Ala Pro Ala Gly Thr

410

405

```
Val Asp Val Val Ala Ser Ala Ala Gln Val Val Ser Gly Trp Gly Phe
             425
                                    4.30
Ala Ile Thr Pro Glu Thr Leu Thr His Ile Ala Asn Glu Val Gly Glu
                                   445
     435
                    440
Gln Ser Ile Ile Ser Arg Ala Gly Gly Ala Pro Thr Leu Ala Val Gly
                 455
                                460
Met Ala Tyr Ile Leu His Gly Ala Leu Gly Gly Leu Met Asp Val Ser
465 470
                             475
Phe Trp Tyr His Phe Ala Ile Leu Phe Glu Ala Leu Phe Ile Leu Thr
         485 490
                                         495
Ala Val Asp Ala Gly Thr Arg Ala Ala Arg Phe Met Leu Gln Asp Leu
        500 505 510
Leu Gly Val Ile Ser Pro Asn Leu Lys Arg Thr Asp Ser Leu Pro Ala
     515 520 525
Asn Leu Leu Ala Thr Ala Leu Cys Val Leu Ala Trp Gly Tyr Phe Leu
 530 535
                                540
His Gln Gly Val Val Asp Pro Leu Gly Gly Ile Asn Thr Leu Trp Pro
545 550 555
Leu Phe Gly Ile Ala Asn Gln Met Leu Ala Gly Met Ala Leu Met Leu
           565 570 575
Cys Ala Val Val Leu Phe Lys Met Lys Arg Gln Arg Tyr Ala Trp Val
        580 585 590
Ala Leu Val Pro Thr Ala Trp Leu Leu Ile Cys Thr Leu Thr Ala Gly
     595 600 605
Trp Gln Lys Ala Phe Ser Pro Asp Asn Lys Val Gly Phe Leu Ala Ile
 610 615 620
Ala Asn Lys Phe Gln Ala Met Ile Asp Ser Gly Lys Ile Pro Ala Gln
625 630 635
Tyr Thr Glu Ser Gln Leu Ser Gln Leu Val Phe Asn Asn Arg Leu Asp
           645 650
Ala Gly Leu Thr Ile Phe Phe Met Val Val Val Val Leu Ala Leu
        660 665 670
Tyr Ser Leu Lys Thr Ala Leu Ala Ala Leu Lys Val Asp Lys Pro Thr
   675 680 685
Ala Lys Glu Thr Pro Tyr Glu Pro Met Pro Glu Asn Leu Asp Glu Ile
 690 695
Val Thr Gln Ala Lys Gly Ala His
              710
705
<210> 9594
<211> 104
<212> PRT
<213> Enterobacter cloacae
<400> 9594
                     10
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His Tyr Gln Thr Pro Ser Pro Gln Pro Ser Pro Gln Arg Gly Glu Gly Val Lys Val Pro Ser Pro Leu Trp Gly Glu Gly Gln Gly Glu Gly Asn 25 20 Thr Asn Glu Lys Leu Ile Met Phe Asp Thr Leu Ser Lys Ala Gly Lys 40 45 35 Tyr Leu Gly Gln Ala Ala Lys Met Met Ile Gly Val Pro Asp Tyr Asp 60 55 Asn Tyr Val Glu His Met Arg Val Asn His Pro Asp Gln Thr Pro Met 75 7.0 Thr Tyr Glu Glu Phe Phe Arg Asp Arg Gln Asp Ala Arg Tyr Gly Gly 90

Lys Gly Gly Ala Lys Cys Cys 100

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<211> 345
<212> PRT
<213> Enterobacter cloacae
<400> 9595
Arg Asp Thr Thr Leu Leu Phe Asn Arg Arg Asn Gly Val Val Ser Lys
Ala Leu Ser Val Ser Ala Ala Ala Ser Gly Arg Gln Gln Ile Phe Asp
      20
                        25
Phe Leu Tyr Lys Trp Gly Met Leu Leu Thr Val Val Ala Leu Val Ala
               40
 35
Val Phe Gly Leu Ala Ser Asp Ser Phe Leu Asp Pro Asn Asn Ile Ile
 50 55
                                 60
Asn Ile Leu Arg Ser Ile Ala Ile Val Thr Val Ile Ala Ile Gly Val
                              75
              70
Ser Ile Ser Leu Thr Val Gly Gly Phe Asp Leu Ser Val Gly Ser Thr
                90
          85
Ala Ser Leu Ala Asn Ala Leu Val Ile Ser Leu Phe Val Trp His Gly
        100 105 110
Phe Gly Thr Thr Glu Ser Ile Val Ile Thr Leu Ala Leu Cys Thr Leu
    115 120 125
Val Gly Leu Phe Asn Ala Phe Leu Ile Val Ile Leu Arg Ile Pro Asp
130 135 140
Met Leu Ala Thr Leu Ala Ser Leu Phe Val Ile Gln Gly Val Ala Met
145 150 155
Thr Tyr Ser Tyr Gly Gly Ser Ile Thr Glu Asn Met Val Leu Pro Ser
           165 170 175
Gly Asp Met Ala Glu Gly Thr Ile Pro Ala Ala Phe Ser Leu Leu Gly
                      185 190
Gln Val Pro Thr Ile Val Ile Val Met Leu Val Val Thr Ile Leu Ala
    195 200 205
Gln Leu Gly Leu Ser Leu Thr Thr His Gly Arg Arg Met Tyr Ala Ile
 210
                  215
                      220
Gly Gly Asn Pro Glu Ala Ala Arg Leu Ser Gly Ile Arg Thr Thr Arg
            230 235 240
225
Tyr Lys Val Ala Ala Tyr Val Ile Ala Ser Leu Leu Ala Gly Leu Gly
                250 255
            245
Gly Ile Leu Leu Ala Ser Arg Ile Gly Ser Ser Gln Val Asn Ala Gly
                      265 270
         260
Gly Gly Tyr Leu Met Asp Ala Val Ala Ala Ala Trp Ile Gly Phe Ser
      275 280
Leu Ala Gly Ser Gly Lys Pro Asn Ala Leu Gly Thr Leu Val Gly Ala
                  295 300
   290
Val Ile Leu Gly Val Leu Ser Asn Gly Leu Val Met Leu Ser Val Pro
               310 315
305
Tyr Tyr Ala Met Asp Ile Ile Lys Gly Leu Val Leu Ala Val Ala Leu
                            330
            325
Ala Ile Thr Tyr Ile Gln Lys Arg
         340
<210> 9596
<211> 414
<212> PRT
<213> Enterobacter cloacae
<400> 9596
Thr Ser Lys Arg Leu Asp Cys Gln Arg Leu Thr Ser Cys Tyr Ser Val
                           10
Ser Asn Ile Ser Ile Thr Gly Arg His Thr Thr Met Ser Asn Asn Pro
```

20 25 30 Leu Ile Pro Gln Ser Lys Leu Pro Asn Leu Gly Thr Thr Ile Phe Thr

```
Gln Met Ser Ala Leu Ala Gln Gln His Asn Ala Ile Asn Leu Ser Gln
                               60
Gly Phe Pro Asp Phe Asp Gly Pro Lys Tyr Leu Gln Glu Arg Leu Ala
              70
Tyr His Val Ala Gln Gly Ala Asn Gln Tyr Ala Pro Met Thr Gly Val
          85
                         90
Gln Thr Leu Arg Glu Ala Ile Ala Asp Lys Thr Ala Glu Leu Tyr Gly
      100 105
His Lys Pro Asp Ala Asn Ser Asp Ile Thr Val Thr Ala Gly Ala Thr
    115 120
                                  125
Glu Ala Leu Tyr Ala Ala Ile Thr Ala Leu Val Arg Thr Gly Asp Glu
 130 135 140
Val Ile Cys Phe Asp Pro Ser Tyr Asp Ser Tyr Ala Pro Ala Ile Glu
     150 155
Leu Ala Gly Gly Val Val Lys Arg Val Ala Leu Gln Pro Pro His Phe
          165 170 175
Arg Pro Asp Trp Gln Ala Phe Ala Ala Leu Leu Ser Asp Lys Thr Arg
       180 185 190
Leu Val Ile Leu Asn Thr Pro His Asn Pro Ser Ala Thr Val Trp Gln
 195 200 205
Lys Ala Asp Phe Ala Ala Leu Trp Gln Ala Ile Ala Glu Arg Glu Ile
210 215 220
Tyr Val Leu Ser Asp Glu Val Tyr Glu His Ile Cys Phe Ala Glu Glu
            230 235 240
Gly His Ala Ser Val Leu Ala His Pro Gln Leu Arg Glu Arg Ala Ile
           245 250 255
Ala Val Ser Ser Phe Gly Lys Thr Tyr His Met Thr Gly Trp Lys Val
        260 265 270
Gly Tyr Cys Val Ala Pro Ala Ala Ile Ser Ala Glu Leu Arg Lys Val
     275
         280 285
His Gln Tyr Leu Thr Phe Ala Val Asn Thr Pro Ala Gln Leu Ala Leu
      295 300
Ala Asp Met Leu Arg Ala Glu Pro Gly His Tyr Arg Glu Leu Pro His
     310 315 320
Phe Tyr Arg Glu Arg Arg Asp Leu Phe Val Ala Ala Leu Ser Lys Ser
           325 330 335
Arg Leu Glu Ile Leu Pro Ser Glu Gly Thr Tyr Phe Leu Leu Ala Asp
        340 345 350
Tyr Ser Ala Ile Ser Asp Leu Asp Asp Val Ser Phe Cys Gln Leu Leu
                    360 365
     355
Thr Lys Glu Val Gly Val Ala Ala Ile Pro Leu Ser Val Phe Cys Ala
 370
                 375
                      380
Asp Pro Phe Pro His Lys Leu Ile Arg Leu Cys Phe Ala Lys Gln Glu
            390 395
Ser Thr Leu Leu Ala Ala Ala Glu Arg Leu Ala Thr Leu
           405
```

```
<210> 9597
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<211> 535

<212> PRT <213> Enterobacter cloacae

<400> 9597

Gly Gly Leu His Asp Asp Val Leu Arg Glu Gly Arg Ile Met Leu Asp 1 5 10 15 Thr Asn Met Lys Thr Gln Leu Lys Ala Tyr Leu Glu Lys Leu Thr Lys 20 25 30 Pro Val Glu Leu Ile Ala Thr Leu Asp Asp Ser Ala Lys Ser Ala Glu $\frac{1}{45}$

Ile Lys Ala Leu Leu Thr Glu Ile Ala Glu Leu Ser Pro Lys Val Thr

```
Phe Lys Glu Asp Asn Thr Leu Ala Val Arg Lys Pro Ser Phe Leu Ile
              7.0
Ala Asn Pro Gly Ser Asp Gln Gly Pro Arg Phe Ala Gly Ser Pro Leu
                         90
Gly His Glu Phe Thr Ser Leu Val Leu Ala Leu Leu Trp Thr Gly Gly
       100
                 105
His Pro Ser Lys Glu Ala Gln Ala Leu Leu Glu Gln Ile Arg Asp Ile
 115 120
Asp Gly Asp Phe Glu Phe Glu Thr Tyr Tyr Ser Leu Ser Cys His Asn
 130 135 140
Cys Pro Asp Val Val Gln Ala Leu Asn Leu Met Ser Val Leu Asn Pro
145 150 155
Arg Ile Lys His Thr Ala Ile Asp Gly Gly Thr Phe Gln Asn Glu Ile
      165 170 175
Thr Glu Arg Asn Val Met Gly Val Pro Ala Val Tyr Leu Asn Gly Gln
   180 185 190
Glu Phe Gly Gln Gly Arg Met Thr Leu Thr Glu Ile Val Ala Lys Val
                       205
 195 200
Asp Thr Gly Ala Glu Lys Arg Ala Ala Glu Glu Leu Asn Gln Arg Asp
210 215 220
Ala Tyr Asp Val Leu Ile Val Gly Ser Gly Pro Ala Gly Ala Ala Ala
225 230 235 240
Ala Val Tyr Ser Ala Arg Lys Gly Ile Arg Thr Gly Leu Met Gly Glu
        245 250 255
Arg Phe Gly Gly Gln Val Leu Asp Thr Val Asp Ile Glu Asn Tyr Ile
 260 265 270
Ser Val Pro Lys Thr Glu Gly Gln Lys Leu Ala Gly Ala Leu Lys Ala
 275 280 285
His Val Ser Asp Tyr Asp Val Asp Val Ile Asp Ser Gln Ser Ala Ser
      295 300
Lys Leu Val Pro Ala Ala Val Glu Gly Gly Leu His Gln Ile Glu Thr
305 310 315 320
Ala Ser Gly Ala Val Leu Lys Ala Arg Ser Val Ile Ile Ala Thr Gly
          325 330 335
Ala Lys Trp Arg Asn Met Asn Val Pro Gly Glu Asp Gln Tyr Arg Thr
   340
                      345 350
Lys Gly Val Thr Tyr Cys Pro His Cys Asp Gly Pro Leu Phe Lys Gly
    355 360 365
Lys Arg Val Ala Val Ile Gly Gly Gly Asn Ser Gly Val Glu Ala Ala
              375 380
Ile Asp Leu Ala Gly Ile Val Glu His Val Thr Leu Leu Glu Phe Ala
      390 395 400
Pro Glu Met Lys Ala Asp Gln Val Leu Gln Asp Lys Val Arg Ser Leu
           405 410
Asn Asn Val Asp Ile Val Leu Asn Ala Gln Thr Thr Glu Val Lys Gly
            425 430
 420
Asp Gly Ser Lys Val Thr Gly Leu Glu Tyr Arg Asp Arg Val Ser Gly
         440
435
Asp Ile His Ser Val Ala Leu Ala Gly Ile Phe Val Gln Ile Gly Leu
                455 460
Leu Pro Asn Thr Thr Trp Leu Glu Gly Ala Ile Glu Arg Asn Arg Met
            470 475
Gly Glu Ile Ile Ile Asp Ala Lys Cys Glu Thr Ser Val Lys Gly Val
          485 490
Phe Ala Ala Gly Asp Cys Thr Thr Val Pro Tyr Lys Gln Ile Ile Ile
      500
                      505
Ala Thr Gly Glu Gly Ala Lys Ala Ser Leu Ser Ser Phe Asp Tyr Leu
                    520
   515
Ile Arg Thr Lys Thr Ala
   530
```

Pro Gly Gly Val Val 420

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<210> 9598
<211> 422
<212> PRT
<213> Enterobacter cloacae
<400> 9598
Ala Tyr Pro His Pro Phe Gly Gly Cys Met Lys Ala Leu Thr Tyr His
                           10
Gly Pro His His Val Arg Val Asp Asn Val Pro Asp Pro Gly Ile Glu
                       25
                                     30
    20
Gln Pro Asp Asp Ile Ile Leu Arg Val Thr Ala Thr Ala Ile Cys Gly
              40
Ser Asp Leu His Leu Tyr Arg Gly Lys Ile Pro Lys Val Gln His Gly
               55
Asp Ile Phe Gly His Glu Phe Met Gly Glu Val Val Glu Cys Gly Ser
      70 75
Glu Val Lys Asn Val Gln Lys Gly Asp Arg Val Val Ile Pro Phe Val
          85 90 95
Ile Ala Cys Gly Asp Cys Phe Phe Cys Gln Met Gln Gln Tyr Ala Ala
       100 105 110
Cys Glu Asn Thr Asn Arg Gly Gln Gly Ala Ala Leu Asn Lys Lys Gln
115 120 125
Ile Pro Ala Pro Ala Ala Leu Phe Gly Tyr Ser His Leu Tyr Gly Gly
 130 135 140
Val Pro Gly Gly Gln Ala Glu Tyr Val Arg Val Pro Lys Gly Asn Val
145 150 155 160
Gly Pro Phe Lys Val Pro Gln Leu Leu Ser Asp Asp Lys Ala Leu Phe
          165 170 175
Leu Ser Asp Ile Leu Pro Thr Ala Trp Gln Ala Ala Lys Asn Ala Gln
 180 185 190
Ile Gln Arg Gly Ser Ser Val Ala Val Phe Gly Ala Gly Pro Val Gly
 195 200 205
Leu Leu Thr Ile Ala Cys Ala Arg Leu Leu Gly Ala Glu Gln Ile Phe
       215 220
   210
Val Val Asp His His Pro Tyr Arg Leu Arg Phe Ala Gln Glu Arg Tyr
225 230 235 240
Gly Ala Ile Pro Ile Asn Phe Asp Asp Asp Asn Asp Ala Ala Glu Lys
            245 250 255
Ile Ile Glu Gln Thr Ala Gly Gln Arg Gly Val Asp Ala Val Ile Asp
         260 265 270
Ala Val Gly Phe Glu Ala Lys Gly Ser Thr Thr Glu Thr Ile Leu Ser
      275 280 285
Asn Leu Lys Ile Glu Gly Ser Ser Gly Lys Ala Leu Arg Gln Cys Ile
                295 300
 290
Ala Ala Val Arg Arg Gly Gly Val Val Ser Val Pro Gly Val Tyr Ala
              310 315 320
Gly Phe Ile His Gly Phe Leu Phe Gly Asp Ala Phe Asp Lys Gly Leu
            325 330 335
Ser Phe Lys Met Gly Gln Thr His Val His Ala Trp Leu Gly Glu Leu
             345 350
         340
 Leu Pro Leu Ile Glu Lys Gly Leu Leu Thr Pro Glu Asp Ile Val Thr
                     360 365
 His Tyr Leu Pro Leu Ser Asp Ala Glu Arg Ala Tyr Lys Ile Phe Glu
                  375 380
   370
 Lys Arg Glu Glu Glu Cys Arg Lys Val Ile Leu Val Pro Gly Ala Asp
                              395 400
       390
 Thr Pro Glu Ala Ala Gln Gln Lys Val Lys Gly Leu Val Asn Ala Phe
            405
                           410
```

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<210> 9599
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 9599
Gly Thr Ala Arg Glu Phe Pro Val Asp Ser Ile Ala Cys Ala Gln Ser
                                   1.0
Lys Gln Arg Arg Ala His Gly Cys Gln His Arg Gln Leu Arg Ala Ala
                               25
          20
Val Gly His Leu Arg Arg Ile Asp Gln Arg Thr Gly Glu Leu Leu Ala
       35
                          4.0
                                               4.5
Gly Gly Gln Val Ala Glu Leu His Leu Ala Val His Gly Asp His Ile
                    5.5
                                        60
Met Arg His Gly Leu Arg Arg Thr His Leu Arg Pro Val
                  7.0
<210> 9600
<211> 112
<212> PRT
<213> Enterobacter cloacae
<400> 9600
Phe Val Asp Phe Ile Tyr Leu Thr Phe Asn Arg Ser Phe Ile Met Arg
                                   10
Thr Val Phe Leu Ser Ala Leu Val Gly Ala Ser Val Ser Phe Ala Ser
                               25
                                                   3.0
Tyr Thr Ala Gln Ala Asn Gln Thr Trp Gln Gly Arg Gly Val Val Gln
       3.5
                           4.0
                                               4.5
Ser Ile Ser Asp Ser Ala Val Met Leu Arg His Glu Ala Ile Pro Glu
                       55
                                      60
Leu Lys Trp Pro Ala Met Thr Met Pro Phe Thr Leu Ser Ala Gly Ala
                   70
                                       75
Thr Leu Asn Gly Ala Lys Pro Gly Asp Glu Val Thr Phe Thr Leu Glu
                                  90 95
              8.5
Arg Ala Gly Asp Gly Phe Lys Ile Ile Ser Leu Thr Pro Ala Arg
            100
                               105
<210> 9601
<211> 396
<212> PRT
<213> Enterobacter cloacae
<400> 9601
Arg Asp Ala Gly Gly Asp Ala Met Ile Ala Ala Val Ile Arg Ala Ser
                                   10
Leu Arg Asn Arg Leu Leu Val Ile Leu Ala Ala Leu Met Met Ala Gly
                                25
Trp Gly Trp Trp Ala Val Gln Arg Ala Pro Leu Asp Ala Leu Pro Asp
                            40
        35
Leu Ser Asp Val Gln Val Ile Ile Lys Ala Ser Tyr Pro Gly Lys Ala
                       55
Pro Gln Val Ile Glu Asp Gln Val Thr Trp Pro Leu Thr Thr Ser Met
                    70
                                        7.5
Leu Ser Val Pro Gly Ala Lys Thr Val Arg Gly Phe Ser Met Phe Gly
                                    90
Asp Ala Tyr Val Tyr Val Leu Phe Glu Asp Gly Thr Asp Leu Tyr Trp
            100
                               105
Ala Arg Ser Arg Val Leu Glu Tyr Leu Ser Gln Val Gln Ala Gln Phe
                            120
```

```
Pro Pro Gly Val Lys Val Ser Leu Gly Pro Asp Ala Thr Gly Val Gly
130
        135 140
Trp Ile Tyr Glu Tyr Ala Leu Ile Asp Arg Ser Gly Lys His Ser Leu
      150 155
Ala Asp Leu Arg Ala Leu Gln Asp Trp Thr Leu Lys Phe Glu Leu Lys
     165 170 175
Thr Val Pro Asn Val Ser Glu Val Ala Ser Ile Gly Gly Met Val Arg
   180 185 190
Gln Tyr Gln Ile Val Ala Asp Pro Ala Lys Met Arg Ala Leu Asn Ile
    195 200 205
Thr His Ser Gln Leu Ser Gly Ala Val Gln Ala Ala Asn Lys Glu Ser
 210 215 220
Gly Gly Ala Leu Leu Glu Met Gly Glu Ala Glu Tyr Met Val Arg Thr
   230 235
Thr Gly Tyr Leu Arg Ser Leu Glu Asp Phe Arg Asn Val Val Ile Ala
       245 250 255
Thr Arg Asp Gly Val Pro Val Leu Leu Lys Asp Val Ala Thr Ile Gly
       260 265 270
Ile Gly Pro Glu Ile Arg Arg Ser Val Ala Glu Leu Asn Gly Glu Gly
    275 280 285
Glu Val Ala Gly Gly Val Ile Val Met Arg Tyr Gly Gln Asn Ala Leu
290 295 300
Glu Thr Leu His Ala Val Lys Ala Lys Leu Ser Glu Leu Gln Lys Thr
305 310 315 320
Leu Pro Gln Gly Val Glu Ile Val Pro Val Tyr Asp Arg Ser Thr Leu
          325 330 335
Ile Glu Asp Ser Val Lys Thr Leu Thr His Lys Leu Leu Glu Glu Phe
       340 345 350
Ala Val Val Leu Val Cys Ala Leu Phe Leu Phe His Leu Arg Ser
355 360 365
Ala Leu Val Ala Met Val Ser Leu Pro Leu Gly Ile Leu Gly Ala Phe
370 375 380
Val Val Met His Tyr Gln Gly Ile Thr Arg Ile
```

<210> 9602 <211> 334 <212> PRT

<213> Enterobacter cloacae

385 390

<400> 9602 Asn Ser Ser Arg Ile Thr Ser Pro Thr Pro Val Ser Ser Gly Ser Phe Cys Asn Ile Arg Val Arg Ile Pro Ser Val Thr Thr Ser Ser Arg Val 20 25 Asp Gly Pro Thr Gln Val Ser Ala Arg Ile Arg Tyr Pro Thr Val Ser 4 0 Pro Gly Phe Ser Phe Ser Ser Ser Ala Arg Arg Cys Ala Thr Leu Arg 5.5 Ala Ala Ser Leu Arg Gly Ser Ser Arg Ile Ile Phe Pro Leu Met Phe 7.0 Pro Ser Arg Arg Ile Cys Arg Gly Ser Gln Val Asp Leu Pro Ala Pro Val Gly Ala Leu Ser Lys Thr Cys Gly Ala Cys Ser Lys Ala Ala Ser 100 105 Ser Ser Gly Arg Thr Thr Ala Thr Gly Lys Glu Asp Thr Tyr Gly Ser 120 Arg Gly Leu Thr Leu Ile Gly Val His Cys Ser Ile Gly Ala Tyr His 135 140 Tyr Arg Val Leu Arg Met Ser Glu Ser Lys Arg Leu Phe Phe Ala Ile 155 160 145 150

20

```
Glu Leu Pro Thr Thr Leu Gln Arg Gln Ile Val Arg Trp Arg Ala Ser
             165
                                170
His Phe Pro Ala Glu Ala Gly Arg Pro Val Val Ala Ala Asn Met His
          180
                            185
Leu Thr Leu Ala Phe Leu Gly Glu Val Ser Ala Glu Lys Gln Arg Ala
       195
                        200
Leu Ser Ala Met Ala Gly Arg Ile Ser Gln Pro Gly Phe Thr Leu His
                     215
                                      220
Leu Asp Asp Ala Gly Gln Trp Leu Arg Ser Arg Val Val Trp Leu Gly
                 230
                                   235
Thr Arg Gln Pro Pro Arg Gly Leu Leu Gln Leu Ala Asn Met Leu Arg
             245
                             250 255
Ala Gln Ala Ala Arg Ser Gly Cys Tyr Gln Ser Pro Gln Pro Phe His
          260
                          265
                                270
Pro His Ile Thr Leu Leu Arg Asp Ala Gly Gln Ala Val Ala Ile Pro
      275
           280
                             285
Pro Pro Gly Phe His Trp Ser Phe Gln Val Asn Glu Phe Ala Leu Tyr
 290
                    295 300
Glu Ser Ala Phe Val Gln Gly Arg Thr Arg Tyr Thr Pro Leu Gln Arg
    310 315
Trp Thr Leu Gly Asp Thr Leu Arg Asn Pro Asp Glu Val
             325
<210> 9603
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 9603
Cys Val Leu Arg Arg Ser Asn Met Gln Glu Gly Gin Asn Arg Lys Thr
                            10
Ser Ser Leu Ser Ile Leu Ala Ile Ala Gly Val Glu Pro Tyr Gln Glu
       20
                 25
                                            3.0
Lys Pro Gly Glu Glu Tyr Met Asn Glu Ala Gln Leu Ser His Phe Lys
 35
                     40
Arg Ile Leu Glu Ala Trp Arg Asn Gln Leu Arg Asp Glu Val Asp Arg
                    5.5
Thr Val Thr His Met Gln Asp Glu Ala Ala Asn Phe Pro Asp Pro Val
               70
                       75
Asp Arg Ala Ala Gln Glu Glu Phe Ser Leu Glu Leu Arg Asn Arg
            85
                               90
Asp Arg Glu Arg Lys Leu Ile Lys Lys Ile Glu Lys Thr Leu Lys Lys
        100
                         105
Val Glu Asp Glu Asp Phe Gly Tyr Cys Glu Ser Cys Gly Val Glu Ile
     115
                                         125
Gly Ile Arg Arg Leu Glu Ala Arg Pro Thr Ala Asp Leu Cys Ile Asp
  130 135
                                      140
Cys Lys Thr Leu Ala Glu Ile Arg Glu Lys Gln Met Ala Gly
<210> 9604
<211> 301
<212> PRT
<213> Enterobacter cloacae
<400> 9604
Val Arg Arg Leu Ser Gly Arg Arg Thr Gln Phe Pro Leu Arg Ser Pro
                              10
Gly Val Leu Ile Ile Glu Thr Leu Pro Leu Leu Arg Gln His Ile Arg
```

25 Arg Ala Arg Gln Glu Gly Lys Arg Ile Ala Leu Val Pro Thr Met Gly

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THE RESIDENCE OF STREET AND THE PARTY OF STREET AND THE PARTY OF STREET, AND THE PARTY OF STREET
```

```
Asn Leu His Asp Gly His Met Lys Leu Val Asp Glu Ala Arg Ala Arg
                   5.5
Ala Asp Ile Val Val Val Ser Ile Phe Val Asn Pro Met Gln Phe Asp
                70
                                75
Arg Glu Asp Asp Leu Ala Arg Tyr Pro Arg Thr Leu Gln Glu Asp Cys
            8.5
                            90
Glu Lys Leu Lys Lys Arg His Ala Asp Ile Val Phe Ala Pro Ala Pro
         100
                105
                                110
Ala Asp Val Tyr Pro Gln Gly Thr Thr Glu Ser Thr Tyr Val Asp Val
     115
              120
                                   125
Pro Gly Ile Ser Thr Met Leu Glu Gly Ala Ser Arg Pro Gly His Phe
                   135
                        140
Arg Gly Val Ser Thr Ile Val Ser Lys Leu Phe Asn Leu Val Gln Pro
                    155
             150
Asp Ile Ala Cys Phe Gly Glu Lys Asp Phe Gln Gln Leu Ala Leu Ile
          165 170 175
Arg Lys Met Val Ala Asp Met Gly Tyr Asp Ile Glu Ile Ile Gly Val
       180 185 190
Pro Ile Val Arg Ala Lys Asp Gly Leu Ala Leu Ser Ser Arg Asn Gly
195 200 205
Tyr Leu Thr Ala Glu Gln Arg Lys Ile Ala Pro Gly Leu Ser Lys Val
 210 215 220
Met Asn Thr Met Ala Glu Gin Leu Leu Ala Lys Glu Leu Thr Ala Glu
225 230 235
Glu Ile Ile Ala Leu Ala Glu Gln Ala Leu Asn Glu Lys Gly Leu Arg
      245 250 255
Ala Asp Asp Val Gln Ile Arg Asp Ala Asp Thr Leu Leu Ala Leu Thr
 260 265 270
Glu Thr Ser Lys Arg Ala Val Ile Leu Val Ala Ala Trp Leu Gly Gln
275 280 285
Ala Arg Leu Ile Asp Asn Lys Val Val Glu Leu Ala
                  295
<210> 9605
<211> 205
<212> PRT
<213> Enterobacter cloacae
<400> 9605
Lys Met Ser Phe Asn Lys Leu Gly Leu Ala Thr Val Val Ala Met Val
                         10
Leu Ser Ala Gly Ser Ala Met Ala Ala Asp Ile Pro Ser Asp Thr Gly
 20 25
Thr Ile Thr Phe His Gly Met Val Ser Asn Asn Thr Cys Lys Val Ser
                     4.0
Leu Asp Gln Lys Ile Asp Gln Asp Gly Asn Asp Phe Asp Val Asn Leu
Asp Thr Val Phe Val Lys Asp Phe Ala Asn Ala Leu Gly Thr Thr Ser
               70
                             7.5
Thr Leu Gly Glu Lys Lys Phe Ser Leu Thr Leu Thr Gly Cys Asp Ser
           8.5
                            90
Ala Thr Val Lys Gln Ala Ser Ala Gln Phe Asp Ser Trp Ala Gly Ser
       100
                        105
Ser Ser Thr Ser Gly Gly Leu Leu Val Pro Pro Ser Asn Thr Gln Gly
                     120
Ala Ala Lys Asn Val Asn Leu Val Leu Ser Asn Asp Gly Asn Ser Ala
                  135
                                  140
Thr Asp Gln Ile Lys Leu Asp Gln Thr Asn Asn Thr Gln Lys Ala Thr
              150
                             155
Ile Asp Thr Thr Gly Ala Gly Ala Leu Tyr Tyr Arg Val Ala Tyr Thr
```

5186 170 165 Gln Gly Gln Asn Trp Asp Ala Ala Asn Asn Pro Val Ser Ala Gly Val 180 185 Val Gln Ala Gln Ala Ala Phe Thr Met Ile Tyr Glu 195 200 <210> 9606 <211> 209 <212> PRT <213> Enterobacter cloacae <400> 9606 Ser Thr Val Pro Asn Val Met Met Leu Lys Gln Gly Ile Thr Pro Met 5 10 Gly Asn Asn Met Lys Lys Asn His Cys Gly Tyr Ser Leu Ile Ala Leu 20 25 30 Ala Met Leu Ala Met Ser Gly Ser Ala Ala Ala Ala Asp Leu Asn Val 35 4.0 45 Asn Phe Thr Ala Asn Ile Arg Glu Thr Thr Cys Asp Met Lys Leu Val 50 55 Gly Asp Thr Gly Ser Asp Thr Gln Gln Thr Leu Thr Ile Gly Asn Asn 65 70 75 Gly Gln Val Arg Leu Asp Asp Val Lys Asp Gly Thr Ala Asn Ala Asn 85 90 Phe Lys Ile Val Leu Val Glu Cys Pro Ala Ser Leu Thr Ser Leu Lys 100 105 Thr Lys Val Ser Gly Thr Arg Ser Gly Tyr Leu Tyr Ser Gly Leu Ile 115 120 Asn Gln Ile Gln Lys Ile Asp Gly Gly Ala Asp Tyr Ser Ala Val Glu 130 135 140 Ile Ala Arg Ala Ser Ala Pro Asp Ala Pro Phe Ile Ile Asn Ser Glu 145 150 155 Asp Asp Asn Glu Arg Leu Val Trp Ser Pro Thr Glu Ile Gln Asn Lys 165 170 175 Glu Val Ala Leu Val Ala Thr Leu Arg Glu Thr Gln Glu Asn Arg Met 180 185 190 Thr Ile Gly Asp Phe Gln Ala Val Ala Thr Phe Glu Phe Ile Tyr Glu 195 200 <210> 9607 <211> 374

```
<212> PRT
<213> Enterobacter cloacae
<400> 9607
Arg His Leu Arg Ile Ile Ile Arg Thr Gly Lys Arg Met Arg Met Phe
                                10
Asn Phe Ile Arg Gln Gly Phe Thr Val Lys Gly Thr Met Ala Phe Ala
                               25
                                                  30
Met Ala Ser Val Leu Leu Thr Leu Ser His Ser Cys Trp Ala Ala Asp
                         40
                                               4.5
Cys Arg Met Asn Asn Gly Lys Gly Gly Thr Thr Thr Leu Ile Asn Ser
                       55
Glu Tyr Ser Gly Gly Thr Val Arg Leu Pro Pro Pro Gly Asn Tyr Ala
                  7.0
                                      75
Ser Thr Leu Phe Asn Val Asn Leu Thr Pro Gly Ile Gln Ala Glu Cys
            8.5
                                  90
Gly Pro Gly Asn Asp Gly Phe Asn Leu Val Ser Gln Thr Asn Pro Thr
                               105
```

```
Leu Leu Lys Gly Ser Ser Tyr Gly Arg Ala Met Phe Glu Thr Asn Ile
 115
                     120
                                 125
Pro Gly Ile Tyr Tyr Ser Val Arg Val His Thr Ala Glu Ser Asp Gly
 130
                  135
                                 140
Gly Met Gly Gly Tyr Phe Ala Met Asn Thr Thr Asp Trp Thr Thr Val
           150 155
145
Ala Ser Ser Gly Asn Ser Asp Pro Trp Asp Glu Lys Trp Ile Asn Thr
           165
                         170
Ser Val Gln Ile Tyr Ile Asp Ala Gly Tyr Arg Gly Asn Pro Asn Lys
             185
      180
                                      190
Glu Thr Ser Ile Arg Pro Lys Pro Gly Thr Leu Gly Lys Met Ala Ile
   195 200 205
Gly Asn Pro Asn Asp Ser Asn Asn Gln Pro Trp Thr Phe Val Val Asn
 210 215 220
Glu Asp Ser Phe Gln Ile Pro Ile Val Leu Pro Thr Cys Asp Met Ala
225 230 235
Met Leu Ser Asp Gly Thr Asn Asp Val Asn Leu Gly Glu Tyr Tyr Val
   245 250 255
Ser Asp Ile Lys Asn Asn Arg Val Lys Asp Ile Pro Phe Ser Ile Ser
 260 265 270
Leu Ser Asn Cys Thr Ser Val Ala Asn Ile Thr Thr Lys Leu Thr Thr
275 280 285
Ser Lys Leu Thr Gly Lys Asn Asn Asp Leu Leu Gly Asn Thr Leu Ser 290 295 300
Ser Gly Ala Glu Gly Ala Gly Val Lys Ile Met Tyr Asn Gly Thr Ser 305 310 315
Gln Leu Leu Pro Asn Asn Pro Asp Ser Ser Tyr Val Ile Thr Asp Tyr
 325 330 335
Gln Thr Pro Glu Ser Lys Gln Ile Asn Tyr Val Ala Gln Leu Val Ala
340 345 350
Asn Gly Ser Thr Val Lys Pro Gly Ser Phe Lys Ala Thr Gly Val Phe
355 360
```

<210> 9608 <211> 601 <212> PRT

Thr Leu Ser Tyr Asp

370

<213> Enterobacter cloacae

<400> 9608 Pro Arg Thr His Gln Val Pro Pro Arg Gln Ala Ala Ala Gly Arg Asn 10 His Ala Leu Pro Cys Pro Ala Leu Ser Ala Gly Glu Leu Gly Leu Pro 25 Ala Val His Gly Ser Cys Thr Gly His His Ala His His Pro Arg His 40 4.5 Gly Asp Phe Arg Leu Pro Asp Pro Gly Leu Asp Cys Asp Pro Arg Arg 55 60 Gly Leu Tyr Gly Glu Thr Glu Lys Cys Gln Asn Gly Glu Ser Ala Leu 70 75 Asn Val Phe Ser Leu Tyr Ser Arg Leu Arg Val Gln Arg Leu Val Thr 8.5 90 Phe Leu Thr Asn Ser Arg Gln Gln Gln Asn Pro Pro Tyr His Arg Leu 105 100 110 Tyr Ile Ala Thr His Ile Phe Val Cys Gln Arg Ile Ile Leu Ser Ile 115 120 125 Pro Lys Pro Gly Glu Leu Ser Met Asn Asn Asn Lys Leu Ser Val Lys 130 135 140 Glu Lys Ile Gly Tyr Gly Met Gly Asp Ala Gly Cys Asn Ile Ile Phe 150 155

```
Gly Ala Ile Met Leu Phe Val Asn Tyr Phe Tyr Thr Asp Ile Phe Gly
           165
                 170
Leu Ala Pro Ala Leu Val Gly Val Leu Leu Ser Val Arg Val Ile
        180
                       185
Asp Ala Val Thr Asp Pro Ile Met Gly Ala Ile Ala Asp Arg Thr Arg
     195
                   200
Ser Lys Tyr Gly Arg Phe Arg Pro Trp Leu Leu Trp Ile Ala Phe Pro
                215 220
Tyr Ala Leu Phe Ser Ile Leu Met Phe Thr Thr Pro Glu Trp Ser Tyr
      230 235
Asn Ser Lys Val Ile Tyr Ala Phe Val Thr Tyr Phe Leu Leu Ser Leu
      245 250 255
Thr Tyr Thr Ala Ile Asn Ile Pro Tyr Cys Ser Leu Gly Gly Val Ile
      260 265 270
Thr Asn Asp Pro Lys Glu Arg Val Ala Cys Gln Ser Tyr Arg Phe Val
 275 280 285
Met Val Gly Ile Ala Thr Leu Leu Leu Ser Leu Thr Leu Leu Pro Met
 290 295 300
Ala Asp Trp Phe Gly Gly Asp Asn Lys Ala Lys Gly Tyr Gln Met Ala
305 310 315 320
Met Thr Val Leu Ala Leu Ile Gly Thr Cys Met Phe Leu Phe Cys Phe
      325 330 335
Ala Thr Val Arg Glu Arg Val Arg Pro Ala Val Gln Thr His Asp Glu
       340 345
Leu Lys Asn Asp Leu Lys Asp Val Trp Lys Asn Asp Gln Trp Val Arg
355 360
Ile Leu Leu Thr Leu Cys Asn Val Cys Pro Gly Phe Ile Arg Met
370 375 380
Ala Ala Thr Met Tyr Tyr Val Thr Trp Val Met Gly Gln Ser Thr His
385 390 395 400
Phe Ala Thr Leu Phe Ile Ser Leu Gly Val Val Gly Met Met Phe Gly
   405 410
Ser Met Leu Ala Lys Val Leu Thr Asp Arg Trp Cys Lys Leu Lys Val
   420 425 430
Phe Phe Trp Thr Asn Ile Ala Leu Ala Ile Phe Ser Cys Ala Phe Tyr
435 440
Phe Phe Asp Pro Lys Ala Thr Thr Thr Ile Val Val Leu Tyr Val Leu
 450 455 460
Leu Asn Ile Leu His Gln Ile Pro Ser Pro Leu His Trp Ser Leu Met
465 470
                            475
Ala Asp Val Asp Asp Tyr Gly Glu Trp Lys Thr Gly Lys Arg Ile Thr
       485 490
Gly Ile Ser Phe Ser Gly Asn Ile Phe Phe Leu Lys Leu Gly Leu Ala
       500 505
                                     510
Ile Ala Gly Ala Met Val Gly Phe Leu Leu Ser Trp Tyr Gly Tyr Asp
     515 520 525
Ala Gly Ala Lys Ala Gln Ser Ala Asp Ala Ile Asn Gly Ile Val Leu
                 535
                               540
Leu Phe Thr Val Ile Pro Gly Ile Gly Tyr Leu Ile Thr Ala Gly Val
              550
                            555
Val Arg Leu Leu Lys Val Asp Arg Glu Thr Met Lys Gln Ile Gln Ser
           565
                         570
Asp Leu Glu Lys Arg Arg Thr Asn Tyr Arg Glu Leu Asn Asp Tyr Gln
       580 585
Glu Leu Lys Ala Ala Glu Thr Lys
     595
                    600
```

<210> 9609 <211> 329

<212> PRT

<213> Enterobacter cloacae

```
<400> 9609
Gln His Ala Gly Thr Pro Tyr Leu Trp Cys Cys Tyr Ser Val Gln Ser
Ser Met Phe Gln Tyr Tyr Asp Ser Leu Pro Ile Trp Ser Phe Ile Met
Pro Pro Arg Arg Tyr Asn Pro Asp His Arg Arg Asp Ala Leu Leu Glu
     35
                     40
Arg Ile Asn Ser Asp Ile Pro Ala Ser Val Ala His Ala Leu Arg Glu
                       60
Asp Leu Gly Gly Asp Val Ser Ala Asp Asn Asp Ile Thr Ala Gln Leu
               70 75
Leu Pro Lys Glu Thr Arg Ser His Ala Val Val Ile Thr Arg Glu Ala
           85 90
                                95
Gly Val Phe Cys Gly Lys Arg Trp Val Glu Glu Val Phe Thr Gln Leu
        100 105 110
Ala Gly Asp Glu Val Gln Val Tor Trp His Val Glu Asp Gly Asp Ala
     115 120 125
Val Thr Ala Asn Gln Pro Leu Phe Glu Leu Asp Gly Pro Ser Arg Val
130 135 140
Leu Leu Thr Gly Glu Arg Thr Ala Leu Asn Phe Val Gln Thr Leu Ser
145 150 155 160
Gly Val Ala Ser Glu Val Arg Arg Tyr Val Asp Leu Leu Ala Gly Thr
       165 170
Arg Thr Gln Leu Leu Asp Thr Arg Lys Thr Leu Pro Gly Leu Arg Thr
                       185 190
Ala Leu Lys Tyr Ala Val Leu Cys Gly Gly Gly Ala Asn His Arg Leu
195 200
Gly Leu Ser Asp Ala Phe Leu Ile Lys Glu Asn His Ile Ile Ala Ser
210 215
                                 220
Gly Ser Val Arg Gln Ala Val Glu Lys Ala Phe Trp Leu His Pro Asp
              230 235
Val Pro Val Glu Val Glu Thr Leu Glu Glu Leu Asp Glu Ala
           245 250 255
Ile Lys Ala Gly Ala Asp Ile Ile Met Leu Asp Asn Phe Asp Thr Glu
                        265 270
Gln Met Arg Glu Ala Val Lys Arg Thr Asn Gly Gln Ala Gln Leu Glu
     275
                     280 285
Val Ser Gly Asn Val Thr Phe Asp Thr Ile Arg Glu Phe Ala Glu Thr
                  295 300
Gly Val Asp Tyr Ile Ser Val Gly Ala Leu Thr Lys His Val Arg Ala
              310
                            315
Leu Asp Leu Ser Met Arg Phe Lys
            325
<210> 9610
<211> 408
<212> PRT
<213> Enterobacter cloacae
<400> 9610
Leu Arg Ser Lys Ser Cys Cys Ala Ser Trp Glu Cys Gln Met Ala Ala
```

<400> 9610
Leu Arg Ser Lys Ser Cys Cys Ala Ser Trp Glu Cys Gln Met Ala Ala 1
1 5 10 15
Asn Ser Leu Trp Arg Trp Arg Ala Leu Thr Thr Glu Gly Glu Val Gln 20
Thr Gly Thr Leu Trp Ala Ile Asp Arg Asn Ala Ala Tyr Thr Ala Leu 45
Val Leu Lys Gln Leu His Pro Leu Ala Leu Lys Arg Cys Gln Gln His 50
50 55 160
His Arg Trp Gln Val Gln His Cys Tyr Asp Ile Phe Arg Gln Leu Ala 65
70 70

```
Thr Leu Leu Gln Ala Gly Leu Met Leu Ser Gln Ser Leu His Met Leu
Ala Glu Gln His Pro Leu Gln His Trp Gln Ala Leu Leu His Ser Leu
      100
                      105
Ala Asp Asp Leu Ser Glu Gly Phe Ala Leu Ser Glu Ala Met Lys Lys
   115
         120
Trp Pro Glu Val Phe Ser Pro Leu Tyr Val Ser Met Val Lys Thr Gly
  130
      135 140
Glu Leu Thr Gly Lys Leu Glu Ala Cys Cys Arg Gln Leu Ala Gln Gln
145 150 155 160
Gln Lys Ser Gln Gln Gln Leu Ser Ala Lys Val Lys Lys Ala Leu Arg
      165 170 175
Tyr Pro Leu Ile Ile Leu Thr Leu Ala Val Phe Val Val Leu Ala Met
    180 185 190
Val Thr Leu Val Leu Pro Giu Phe Ala Ala Ile Tyr Lys Thr Phe Asn
 195 200 205
Thr Pro Leu Pro Leu Leu Thr Gln Ala Val Met Gly Leu Ala Ala Leu
 210 215 220
Val Gln Ala His Ile Leu Thr Leu Leu Ala Leu Leu Val Ala Met Val
225 230 235 240
Val Ile Ala Cys Lys Leu Arg Arg His Pro Arg Trp Gln Tyr Val Leu
   245 250 255
Leu His Val Pro Val Met Gly Thr Leu Met Arg Gly Gln Lys Leu Gly
 260 265 270
Gln Ile Phe Thr Val Leu Ser Leu Thr Gln Gln Ala Glv Ile Ala Phe
275 280
                                 285
Leu Gln Gly Leu Glu Ser Val Glu Glu Thr Val Glu Cys Gly Tyr Trp
 290 295
                              300
Gln Glu Lys Leu Arg Glu Ile Arg Ser Asp Ile Glu Gln Gly Met Pro
            310
                            315
Val Trp Ser Ser Phe Gln Lys Ala Ser Val Phe Thr Pro Leu Cys Ile
          325 330 335
Gln Leu Ile Arg Thr Gly Glu Val Ser Gly Ser Leu Asp Val Met Leu
       340 345 350
Met Asn Leu Ala Arg His His Thr Glu Gln Thr Phe Gln Gln Ala Asp
                   360 365
Asn Leu Ala Ala Leu Leu Glu Pro Leu Leu Leu Val Val Thr Gly Leu
 370 375 380
Ile Ile Gly Thr Leu Val Val Ala Met Tyr Leu Pro Ile Phe His Leu
385 390
                         395
Gly Asp Ala Met Ser Ala Gly
```

<210> 9611 <211> 213 <212> PRT <213> Enterobacter cloacae

<400> 9611 Phe Pro Gly Ser Asp Leu Met Gly Tyr Ile Val Ala Leu Thr Gly Gly 10 15 Ile Gly Ser Gly Lys Ser Thr Val Ala His Ala Phe Ala Arg Leu Gly 2.0 30 25 Ile Thr Ile Ile Asp Ala Asp Ile Ile Ala Arg His Val Val Glu Pro 35 40 45 Asn Thr Pro Ala Leu Asn Ala Ile Glu Ala His Phe Gly Arg Arg Val 55 Ile Gln Ala Asp Gly Thr Leu Asn Arg Arg Gln Leu Arg Glu Tyr Ile 75 7.0 Phe Ser Asp Pro Ala Glu Lys Ala Trp Leu Asn Ala Leu Leu His Pro

90

Ile Ile His Gln Glu Thr Gln Arg Gln Ile Ala Ala Arg Ser Pro 100 105 Tyr Val Leu Trp Val Val Pro Leu Leu Val Glu Asn Gln Leu Gln Asn Lys Ala Asp Arg Thr Leu Val Ile Asp Val Ser Arg Glu Thr Gin Ile 135 140 Gln Arg Thr Met Ala Arg Asp His Val Ser Arg Glu His Ala Glu Gln 150 155 160 Ile Leu Ala Ala Gln Ala Thr Arg Glu Ala Arg Leu Ala Val Ala Asp 165 170 175 Asp Val Ile Asp Asn Asn Gly Ala Pro Asp Ala Ile Ala Ser Asp Val 180 185 190 Ala Arg Leu His Ala Gln Tyr Leu Thr Phe Ala Ala Gln Ala Val Ala 195 200 205 Gln Glu Lys Pro 210

<210> 9612 <211> 195 <212> PRT <213> Enterobacter cloacae

<400> 9612 His Gln Ala Pro Ser Gly Arg Ala Gly Ser Val Arg Arg Ser Ser Ala 10 Ala Thr Ala Thr Val Gln Ala Ser Arg Ala Ala Ser His His Pro Pro 20 25 Leu Ala Thr Pro Val Pro Ala Ala Thr Ser Arg Arg Ser Ala Asp Val 40 Tyr Asp Ile Val Gln Pro Pro Ala Ser Ser Ser Val Arg Ser Ala Leu Phe Pro Glu Cys His Ser Ala Ser Pro Gly Val Thr Leu Pro Pro Thr 70 7.5 Ala Ser Pro Ala Val Ser Ser Arg Ala Ser Val Cys Gln Ser Gly Tyr Asp Gly Thr Pro Ser Ala Cys Pro Gly Tyr His Pro Ile Pro Arg Cys 100 105 Gln Ile Ala Glu Ala Ala Ala Gly Arg His Ala Ser Gly Gly Gln Tyr 120 125 Pro Arg Gln Pro Pro Val Lys Tyr Ala Arg Pro Gly Ser Gly Cys Pro 130 135 140 Gly Val Arg Ala Ala Arg Ser Ala Ile His Asp Ala Ser Gly Arg His 145 150 155 Arg Cys Pro Ala Ser Arg Pro Ser His Leu Pro Ala Asp Ser Asp His 165 170 Pro Ala Arg Asp Gly Ala Arg Phe Cys Pro Gly Arg Pro Gly Pro Ala

185

Glu Gly 195

<210> 9613 <211> 238 <212> PRT

<213> Enterobacter cloacae

<400> 9613
Gly Ile Leu Met Lys Phe Ser Pro Ala Leu Gln Pro Ala Thr Leu Ile
1 10 15
Gln Arg Tyr Lys Arg Phe Leu Ala Asp Val Ile Thr Pro Ala Gly Glu
20 25 30
Thr Leu Thr Leu His Cys Pro Asn Thr Gly Ala Met Thr Gly Cys Ala

Thr Pro Gly Asp Thr Val Trp Tyr Ser Thr Ser Glu Asn Thr Lys Arg 55 60 Lys Tyr Pro His Thr Trp Glu Met Thr Glu Thr Gln Ser Gly Ala Phe 70 75 Ile Cys Val Asn Thr Leu Arg Ala Asn Gln Leu Val Lys Glu Ala Leu 85 90 95 Thr Asn Gly Met Leu Pro Glu Leu Val Gly Tyr Gly Thr Gln Lys Ser 100 105 110 Glu Val Lys Tyr Gly Asp Glu Gly Ser Arg Ile Asp Phe Met Leu Gln 115 120 125 Ala Glu Asp Arg Pro Glu Cys Tyr Ile Glu Val Lys Ser Val Thr Leu 130 135 140 Ala Glu Gln Val Asn Gly Phe Phe Pro Asp Ala Val Thr Leu Arg Gly 145 150 155 Gln Lys His Leu Arg Glu Leu Met Ser Val Ala Ala Ala Gly Lys Arg 165 170 175 Ala Val Leu Leu Phe Ala Val Leu His Ser Ala Ile Glu Arg Phe Ser 180 185 190 Pro Ala Arg His Ile Asp Pro Lys Tyr Ala Gln Leu Leu Asn Glu Ala 195 200 205 Gln Lys Gln Gly Val Glu Ile Phe Ala Tyr Lys Ala Glu Leu Ser Ala 210 215 220 Asp Asn Met Thr Leu Arg Ser Ser Leu Pro Ile Val Leu 230

<210> 9614 <211> 163 <212> PRT

<213> Enterobacter cloacae

<400> 9614

Arg His Gly Met Thr Leu Ala Tyr Ile Ala Ile Gly Ser Asn Leu Ala Ser Pro Leu Glu Gln Val Asn Ala Ala Val Gln Ala Leu Gly Glu Ile 20 25 30 Pro Gln Ser Arg Ile Val Ala Leu Ser Ser Phe Tyr Arg Thr Pro Pro 35 4.0 Leu Gly Pro Gln Asp Gln Pro Asp Tyr Leu Asn Ala Ala Val Val Leu Glu Thr Thr Leu Asp Ala Glu Thr Leu Leu Asp Asn Thr Gln Arg Ile 65 70 75 Glu Leu Gln Gln Gly Arg Val Arg Lys Ala Glu Arg Trp Gly Pro Arg 85 90 Thr Leu Asp Leu Asp Ile Met Leu Phe Gly His Glu Val Ile Asn Thr 100 105 110 Glu Arg Leu Thr Val Pro His Tyr Asp Met Lys Asn Arg Gly Phe Met 115 120 125 Leu Trp Pro Leu Phe Glu Val Ala Pro Asp Leu Thr Phe Pro Asp Gly 130 135 140 Ala Ser Leu Gln Ala Val Leu Gln Asn Leu Asn Ala Asp Lys Pro Ala 145 150 155 Arg Trp

<210> 9615

<211> 277 <212> PRT

<213> Enterobacter cloacae

<400> 9615

```
Asn Ala Gln Arg Phe Ala Phe Gly Pro Ser Gly Asn Ser Met Lys Pro
Thr Thr Ile Ser Leu Leu Gln Lys Cys Lys Gln Glu Lys Lys Arg Phe
Ala Thr Ile Thr Ala Tyr Asp Tyr Ser Phe Ala Lys Leu Phe Ala Glu
                       4.0
                                        4.5
Glu Gly Ile Asn Val Met Leu Val Gly Asp Ser Leu Gly Met Thr Val
                   55
                                    60
Gln Gly His Asp Ser Thr Leu Pro Val Thr Val Glu Asp Ile Ala Tyr
                70
                                 7.5
His Thr Arg Ala Val Arg Arg Gly Ala Pro Ala Cys Leu Leu Ser
         8.5
                             90
Asp Leu Pro Phe Met Ala Tyr Ala Thr Pro Glu Gln Ala Phe Glu Asn
       100
                         105 110
Ala Ala Thr Val Met Arg Ala Gly Ala Asn Met Val Lys Ile Glu Gly
     115
                      120
                           125
Gly Ala Trp Leu Val Asp Thr Val Lys Met Leu Thr Glu Arg Ala Val
  130
                  135 140
Pro Val Cys Gly His Leu Gly Leu Thr Pro Gln Ser Val Asn Ile Phe
145 150 160
Gly Gly Tyr Lys Val Gln Gly Arg Gly Asp Ala Ala Gln Thr Leu Phe
       165 170 175
Asp Asp Ala Val Ala Leu Glu Ala Ala Gly Ala Gln Leu Leu Val Leu
        180
                          185
                                           190
Glu Cys Val Pro Val Glu Leu Ala Lys Arg Ile Thr Glu Ala Leu Ser
                       200
                                        205
Ile Pro Val Ile Gly Ile Gly Ala Gly Asn Val Thr Asp Gly Gln Ile
 210
                    215
                                    220
Leu Val Met His Asp Ala Phe Gly Ile Thr Gly Gly His Ile Pro Lys
                                235
225 230
Phe Ala Lys Asn Phe Leu Thr Glu Ala Gly Asp Met Arg Ala Ala Val
         245 250 255
Arg Gln Tyr Ile Ala Glu Val Glu Ser Gly Val Tyr Pro Gly Glu Glu
                         265
His Ser Phe His
```

275 <210> 9616 <211> 131

<212> PRT <213> Enterobacter cloacae

<400> 9616
Lys Val Asn Val Met Ile Arg Lys Met Leu Gln Gly Lys Leu His Arg
1 10 15
10 15
15
10 15

Val Lys Val Thr Gln Ala Asp Leu His Tyr Glu Gly Ser Cys Ala Ile 25 30 30
Asp Gln Asp Phe Leu Asp Ala Ala Gly Ile Leu Glu Asn Glu Ala Ile 35 40 45
Asp Ile Trp Asn Val Asn Asn Gly Lys Arg Phe Ser Thr Tyr Ala Ile 50 55 60
Ala Ala Glu Arg Gly Ser Lys Ile Ile Ser Val Asn Gly Ala Ala Ala 65 70 70 56
His Cys Ala Asp Val Gly Asp Ile Val Ile Ile Ala Ser Phe Val Met

85 90 95 Met Ser Asp Glu Glu Ala Arg Arg Trp Gln Pro Lys Val Ala Tyr Phe 100 105 110

Glu Gly Asp Asn Glu Met Lys Arg Thr Ala Lys Ala Ile Pro Val Gln 115 120

Val Ala 130

```
<210> 9617
<211> 280
<212> PRT
<213> Enterobacter cloacae
<400> 9617
Ser Thr Ser Asn Phe Lys Ser Ile Asp Lys Met Leu Ile Leu Ser Pro
                            1.0
Asp Val Arg Gln Gly Thr Ile Asp Ile Ile Pro Thr Gly Ser Gly Lys
        20
                         25
Met Leu Asn Thr Ser Phe Tyr Lys Gly Phe Lys Ala Ala Cys Phe Thr
    3.5
                    40
                          4.5
Val Ala Ala Val Ala Ser Phe Gln Ala Ser Ala Asp Ile Val Ile Ser
 50
              55 60
Gly Thr Arg Ile Val Tyr Gln Gln Ser Gln Lys Asp Val Ile Val Ser
             70 75
Leu Asp Asn Arg Gly Lys Lys Pro Leu Leu Val Gln Ser Trp Leu Asp
       85
                 90
Asp Gly Arg Asp Asp Thr Asn Pro Gln Glu Leu Lys Leu Pro Phe Ile
      100
             105 110
Ile Thr Pro Pro Val Ser Arg Ile Asp Pro Gln Lys Gly Gln Ser Val
                     120
                                    125
Arg Ile Ser Tyr Leu Gly Gly Ser Leu Pro Gln Asp Arg Glu Ser Leu
130 135 140
Phe Trp Phe Asn Val Leu Glu Ile Pro Pro Lys Ser Lys Val Lys Asp
145 150 155
Gly Glu Asn Pro Asn Gln Leu Gln Leu Ala Phe Arg Thr Arg Ile Lys
       165 170
                                             175
Leu Phe Phe Arg Pro Asp Gly Leu Lys Gly Thr Pro Gly Asn Ala Ala
   180
                         185
Ala Arg Val Thr Trp Ser Gln Gln Lys Gln Gly Asn Thr Leu Asn Leu
195 200 205
Ile Ala His Asn Asp Ser Pro Tyr Asn Val Ser Ile Ser Asn Val Lys
210 215 220
Leu Lys Ser Ala Asn Lys Glu Tyr Gln Val Glu His Lys Ser Ile Leu
            230 235
Pro Phe Ser Thr Gln Ile Met Gln Val Lys Gly Leu Gly Ser Thr Ala
                            250
Thr Gly Thr Val Ala Tyr Glu Thr Ile Asn Asp Asn Gly Gly Ser Asp
        260
                         265
Thr Phe Glu Ser Lys Val Asn
<210> 9618
<211> 866
<212> PRT
<213> Enterobacter cloacae
<400> 9618
Ser Met Leu Phe Gln Arg Ser Ile Leu Cys Leu Ala Ile Cys Ala Ala
Phe Pro Leu His Ala Ser Glu Thr Glu Lys Lys Ala Val Asp Thr Ser
      20
                         25
                                          30
Ser Glu Thr Glu Ser Ala Ile Glu Phe Asn Asp Gln Phe Leu Ile Asp
   35
                      40
                                     4.5
Asn Gly Gly Gly Ile Asn Val Asp Arg Tyr Ala Tyr Gly Asn Pro Val
                  55
Leu Pro Gly Thr Tyr Arg Val Lys Val Asn Leu Asn Gly Asn Ser Lys
                70
```

Ser Thr Val Glu Met Ala Phe Ile Asp Asn Lys Thr Pro Arg Ala Ser

Ala Cys Leu Thr Lys Leu Thr Leu Thr Gln Ala Gly Val Asp Thr Ser 100 105 110 Ile Leu Gly Asp Asp Val Lys Asp Asp Glu Thr Ser Cys Val Asp Ile 120 Lys Lys Tyr Tyr Pro Gly Ala Ser Glu Asn Phe Asp Ser Ser Lys Gln 135 140 Glu Met Asp Leu Asn Phe Pro Gln Ile Tyr Val Leu Lys Leu Pro Ala 150 155 160 Gly Tyr Val Asp Pro Ser Leu Trp Asp Asn Gly Val Pro Ala Gly Leu 165 170 175 Leu Ser Tyr Asp Leu Asn Thr Trp His Ser Glu Ser Asn Gly Thr Asn 180 185 190 Ser Asp Thr Ala Tyr Ala Gly Leu His Tyr Gly Leu Asn Val Gly Pro 195 200 205 Trp Arg Leu Arg Ser Arg Gly Ser Leu Asn Trp Asp Ser Asp Asn Gly 210 215 220 Thr His Tyr Ser Ser Gln Asp Ile Tyr Leu Gln Arg Asp Ile Thr Pro 225 230 235 Leu Asn Ala Gln Met Val Met Gly Asp Ser Tyr Thr Arg Gly Asp Val 245 250 255 Phe Asp Ser Val Ser Leu Arg Gly Ala Arg Met Tyr Asn Asp Asp Arg 260 265 270 Met Leu Pro Gln Gly Thr Ser Gly Tyr Ala Pro Val Ile Arg Gly Val 275 280 285 Ala Asn Ser Asn Ala Lys Val Ser Val Met Gln Ser Gly Asn Lys Ile 290 295 300 Tyr Glu Thr Thr Val Pro Pro Gly Ala Phe Glu Ile Asn Asp Leu Ser 305 310 315 320 Thr Thr Gly Tyr Gly Asn Asp Leu Ile Val Thr Val Glu Glu Ala Asp 325 330 Gly Ser Lys Arg Thr Phe Thr Val Pro Phe Ser Ser Val Thr Gln Met 340 345 350 Leu Arg Pro Gly Ser Ser Arg Trp Asp Val Gly Ile Gly Glu Leu Asn 355 360 365 Asp Asp Ser Leu His Asp Lys Pro Asn Val Gly Tyr Ala Thr Tyr Ala 370 375 380 Tyr Gly Leu Asn Asn Thr Phe Thr Gly Tyr Val Gly Ala Gln Tyr Thr 395 Asp Met Asp Phe Tyr Ala Gly Leu Leu Gly Leu Ala Met Asn Thr Arg 405 410 415 Ile Gly Ala Phe Ala Leu Asp Val Tnr Gly Ser Tyr Ala Asp Ile Asp 420 425 Gly Leu Asp Thr Leu Lys Gly Gln Ser Tyr Arg Leu Thr Tyr Ser Lys 435 440 Met Leu Glu Ala Thr Asn Thr Ser Leu Asn Val Ala Ala Tyr Arg Phe 455 460 Ser Thr Glu Asp Tyr Leu Ser Leu Asn Asp Ala Ala Ser Leu Gln Asp 470 475 Ser Ile His His Glu Glu Tyr Gly Asn Arg Ser Tyr Asp Ser Asn Ala 485 490 Glu Leu Tyr Ala Asp Tyr Gln Arg Thr Lys Asn Gln Ile Gln Val Ser 500 505 Leu Asn Gln Pro Leu Asn Val Asn Gly Asp Glu Tyr Gly Ser Leu Tyr 515 520 Ile Ser Gly Thr Trp Gln Asp Tyr Trp Asn Asp Ser Ser Ser Thr Ser 535 540 Asp Tyr Ser Val Gly Tyr Asn Asn Ser Phe Ala Tyr Gly Ser Tyr Ser 545 550 555 Val Ser Val Gln Arg Thr Tyr Asn Glu Thr Gly Glu Lys Asp Asp Ser 565 570

```
Val Tyr Leu Asn Val Ser Ile Pro Phe Ser Ile Phe Asn Lys Asp Asn
       580 585
Ala Gln Ser Gly Gly Phe Asn Asn Val Asn Met Ser Leu Arg Thr Asp
      595
                 600
Leu Lys Gly Gly Thr Ser Phe Asn Ser Thr Ala Ser Gly Asn Ser Lys
          615 620
Asn Ser Glu Val Ser Tyr Ser Val Ser Ala Ser Ser Ser Gly Gly Asn
      630
                               635
Tyr Gly Asn Leu Asn Gln Val Ser Gly Tyr Ser Ser Trp Asn Ser Pro
         645 650 655
Tyr Gly Pro Leu Gly Val Ser Ala Ser Phe Gly Asp Asp Asn Ser Lys
    660 665 670
Gln Tyr Ser Ala Ser Tyr Asn Gly Gly Met Val Val His Ser Gly Gly
    675 680 685
Val Val Phe Thr Ser Gly Ser Ile Gly Glu Thr Asp Ser Leu Ala Leu
 690 695 700
Val Lys Ala Ser Gly Ala Thr Gly Ala Arg Leu Gly Tyr Gly Gln Ser 705 \phantom{000}710\phantom{000}715\phantom{000} 720
Arg Ile Asn Ser Ser Gly Tyr Gly Ile Met Pro Tyr Met Ser Ala Tyr
     725 730 735
Arg Glu Asn Arg Val Ser Leu Asp Ile Ser Thr Leu Glu Ala Asp Val
 740 745 750
Glu Ile Lys Asn Thr Ser Ala Val Ala Val Pro Arg Asn Gly Ser Val
755 760 765
Val Phe Val Asn Phe Glu Thr Asp Glu Gly Arg Ser Leu Val Leu Glu
770 775
                                  780
Leu Gln Arg Ser Asp Asn Gly Phe Ile Pro Leu Gly Ala Asp Val Leu 785 790 795 800
Asn Glu Lys Asn Glu Ser Ile Gly Thr Val Gly Gln Ala Gly Gln Ala
 805 810
Tyr Val Arg Gly Val Glu Asn Lys Gly Ala Leu Arg Val Val Trp Gly
        820 825 830
Ser Asp Gly Ser Ser Ser Cys Thr Val His Tyr Gln Ile Pro Glu Asn
835 840 845
Ala Lys Lys Ala Gly Leu Thr Thr Ile Leu Ser Asn Gln Gln Cys Gln
         855
Met
865
<210> 9619
<211> 217
<212> PRT
<213> Enterobacter cloacae
<400> 9619
Cys Ala Ser His Val Tyr Tyr His Leu Ser Ile Ile Pro Gly Thr Ser
                          10
Met Gln Gln Ser Pro Phe Tar Leu Tyr Gln Pro Gly Leu Val Leu Leu
                         25
                                         3.0
Met Gly Leu Ala Gly Gly Ile Leu Pro Gly Val Gly Gln Ala Ser Ser
                     40
                                      45
Gly Leu Asp Val Asn Ile Thr Ala Asn Ile Val Asn Ser Thr Cys Lys
                                  60
Met Thr Val Glu Asn Asp Gly Glu Ile Tyr Leu Pro Asn Val Met Arg
              70
                                75
Ser Trp Phe Tyr Asn Pro Asp Gly Ser Asp Arg Phe Thr Ala Thr Asp
            85
                            90
Asp Ala Gly Gly Thr Pro Phe Lys Ile His Val Asp Asp Cys Tyr Gly
                       105
        100
```

Asp Ser Ser Thr Ala Lys Lys Leu Ser Phe Ser Phe Ser Pro Gln Ser 120

125

```
Gly Phe Trp Pro Gly Gln Asn Gln Val Phe Lys Ser Asp Asp Thr Ala
  130
           135
Ala Gly Ala Ala Lys Asn Val Gly Val Val Val Phe Ser Glu Arg Tyr
145
              150
                           155
Lys Lys Asn Val Leu Asn Asn Asp Gly Thr Ser Lys Ile Thr Tyr Asp
            165
                170
                                          175
Val Ser Gly Gln Asp Thr Ala Phe Leu Thr Asp Tyr Gln Phe Tyr Ala
            185
       180
Arg Tyr Gln Asn Ile Gly Val Val Ala Gly Gly Val Val Thr Ser Lys
    195 200 205
Val Leu Val Asp Val Thr Tyr Glu
   210 215
<210> 9620
<211> 299
<212> PRT
<213> Enterobacter cloacae
<400> 9620
Trp Met Leu Thr Lys Glu Val Leu Pro Met Thr Glu Lys Thr Val Trp
                     1.0
Gln Glu Thr Leu His Asp Gln Phe Gly Gln Tyr Phe Ala Val Asp Asn
20 25
Val Leu Tyr His Glu Lys Thr Asp His Gln Asp Leu Ile Ile Phe Glu
35 40 45
Asn Ala Ala Phe Gly Arg Val Met Ala Leu Asp Gly Val Val Gln Thr
               55 60
Thr Glu Arg Asp Glu Phe Ile Tyr His Glu Met Met Thr His Val Pro
65 70 75
Leu Leu Ala His Gly His Ala Lys Asp Val Leu Ile Ile Gly Gly Gly
          85 90
Asp Gly Ala Met Leu Arg Glu Val Ser Arg His Gln Asn Val Glu Thr
      100 105 110
Ile Ser Met Val Glu Ile Asp Ala Gly Val Val Ser Phe Cys Arg Gln
   115 120 125
Tyr Leu Pro Asn His Asn Ala Gly Ser Tyr Asp Asp Pro Arg Phe Asn
 130 135 140
Leu Val Ile Asp Asp Gly Val Asn Phe Val Asn Gln Thr Thr Gln Thr
145 150 155 160
Phe Asp Val Ile Ile Ser Asp Cys Thr Asp Pro Ile Gly Pro Gly Ala
         165 170 175
Ser Leu Phe Thr Ser Ser Phe Tyr Glu Gly Cys Lys Arg Cys Leu Lys
      180 185 190
Pro Gly Gly Ile Phe Val Ala Gln Asn Gly Val Cys Phe Leu Gln Gln
195 200 205
Asp Glu Ala Leu Asp Ser His Arg Lys Leu Ser Thr Tyr Phe Ala Asp
210 215
                                220
Val Ser Phe Tyr Gln Ala Ala Ile Pro Thr Tyr Tyr Gly Gly Ile Met
225 230 235
Thr Phe Ala Trp Ala Thr Asp Asn Asp Val Leu Arg His Leu Ser Thr
           245 250
Glu Ile Ile Gln Ala Arg Phe His Gln Ala Gly Leu Gln Cys Arg Tyr
        260
                       265 270
Tyr Asn Pro Ala Ile His Thr Ala Ala Phe Ala Leu Pro Gln Tyr Leu
                    280 285
Gln Asp Ala Leu Ser Ser Lys Glu Val Asn
   290
                  295
<210> 9621
```

<211> 265

<212> PRT

<213> Enterobacter cloacae

```
<400> 9621
Leu Lys Lys Leu Lys Leu His Gly Phe Asn Asn Leu Thr Lys Ser Leu
Ser Phe Cys Ile Tyr Asp Ile Cys Tyr Ala Lys Thr Ala Glu Glu Arg
       20
                         25
                                          30
Asp Gly Tyr Ile Ala Tyr Ile Asp Glu Leu Tyr Asn Ala Asn Arg Leu
                    4.0
      3.5
                                    4.5
Thr Glu Ile Leu Thr Glu Thr Cys Ser Ile Ile Gly Ala Asn Ile Leu
                 55
                                  60
Asn Ile Ala Arg Gln Asp Tyr Glu Pro Gln Gly Ala Ser Val Thr Ile
             7.0
                         75
Leu Val Ser Glu Glu Pro Val Asp Pro Gln Leu Ile Asp Lys Thr Glu
            85
                           90
His Pro Gly Pro Leu Pro Glu Val Val Val Ala His Leu Asp Lys Ser
        100 105
His Ile Cys Val His Thr Tyr Pro Glu Ser His Pro Glu Gly Gly Leu
     115 120
                            125
Cys Thr Phe Arg Ala Asp Ile Glu Val Ser Thr Cys Gly Val Ile Ser
      135
                             140
Pro Leu Asn Ala Leu Asn Tyr Leu Ile His Gln Leu Glu Ser Asp Ile
          150
                                155
Val Thr Ile Asp Tyr Arg Val Arg Gly Phe Thr Arg Asp Ile Asn Gly
            165 170
                                           175
Met Lys His Phe Ile Asp His Glu Ile Asn Ser Ile Gln Asn Phe Met
         180
                         185 190
Ser Glu Asp Met Lys Ser Leu Tyr Asp Met Met Asp Val Asn Val Tyr
      195 200
                                       205
Gln Glu Asn Ile Phe His Thr Lys Met Leu Leu Lys Glu Phe Asp Leu
  210
                215
                       220
Lys His Tyr Met Phe His Thr Lys Pro Glu Asp Leu Ser Glu Glu Glu
             230 235
Arg Lys Val Ile Thr Asp Leu Leu Trp Lys Glu Met Arg Glu Ile Tyr
            245
                             250
Tyr Gly Arg Asn Ile Pro Thr Val
```

<210> 9622

<211> 464 <212> PRT

<213> Enterobacter cloacae

<400> 9622

Gln Pro His Thr Arg Phe Gln Met Glu Ala Gln Gln His Gly Asp Gln 1.0 1.5 Leu Lys Arg Gly Leu Lys Asn Arg His Ile Gln Leu Ile Ala Leu Gly 20 25 3.0 Gly Ala Ile Gly Thr Gly Leu Phe Leu Gly Ser Ala Ser Val Ile Gln 35 40 Ser Ala Gly Pro Gly Ile Ile Leu Gly Tyr Ala Ile Ala Gly Phe Ile 55 60 Ala Phe Leu Ile Met Arg Gln Leu Gly Glu Met Val Val Glu Glu Pro 75 70 Val Ala Gly Ser Phe Ser His Phe Ala Tyr Lys Tyr Trp Gly Ser Phe 90 85 Ala Gly Phe Ala Ser Gly Trp Asn Tyr Trp Val Leu Tyr Val Leu Val 100 105 110 Ala Met Ala Glu Leu Thr Ala Val Gly Lys Tyr Ile Gln Phe Trp Tyr 120 Pro Glu Ile Pro Thr Trp Ala Ser Ala Ala Ala Phe Phe Val Leu Ile

```
135
Asn Ala Ile Asn Leu Thr Asn Val Lys Val Phe Gly Glu Met Glu Phe
            150
                           155
Trp Phe Ala Ile Ile Lys Val Ile Ala Val Val Ala Met Ile Ile Phe
         165
                    170
Gly Gly Trp Leu Leu Phe Ser Gly Asn Gly Gly Pro Gln Ala Thr Val
        180
            185 190
Arg Asn Leu Trp Glu Gln Gly Gly Phe Leu Pro His Gly Met Thr Gly
  195 200 205
Leu Val Met Met Ala Ile Ile Met Phe Ser Phe Gly Gly Leu Glu
      215
                    220
 210
Leu Val Gly Ile Thr Ala Ala Glu Ala Asp Asn Pro Glu Gln Ser Ile
225 230 235
Pro Lys Ala Thr Asn Gln Val Ile Tyr Arg Ile Leu Ile Phe Tyr Val
        245 250 255
Gly Ser Leu Ala Val Leu Leu Ser Leu Leu Pro Trp Thr Arg Val Thr
     260 265 270
Ala Asp Thr Ser Pro Phe Val Leu Ile Phe His Glu Leu Gly Asp Thr
275 280 285
Phe Val Ala Asn Ala Leu Asn Val Val Leu Thr Ala Ala Leu Ser
290 295 300
Val Tyr Asn Ser Cys Val Tyr Cys Asn Ser Arg Met Leu Phe Gly Leu
305 310 315
Ala Gln Gln Gly Asn Ala Pro Lys Ala Leu Leu Thr Val Asp Lys Arg
          325 330 335
Gly Val Pro Val Asn Thr Ile Ile Val Ser Ala Val Val Thr Ala Leu
      340
                      345
Cys Val Leu Ile Asn Tyr Leu Ala Pro Glu Ser Ala Phe Gly Leu Leu
     355 360 365
Met Ala Leu Val Val Ser Ala Leu Val Ile Asn Trp Ala Met Ile Ser
370 375 380
Leu Ala His Ile Lys Phe Arg Arg Ala Lys Gln Gln Gln Gly Val Thr
385 390
                            395
Thr Arg Phe Pro Ala Leu Leu Tyr Pro Leu Gly Asn Trp Val Cys Leu
          405 410
                                    415
Leu Phe Met Ala Ala Val Leu Val Ile Met Leu Ile Thr Pro Gly Met
       420 425 430
Ala Ile Ser Val Tyr Leu Ile Pro Val Trp Ile Ala Ile Leu Gly Val
    435 440
Gly Tyr Met Val Lys Gln Lys Asn Ala Lys Thr Val Lys Ala His
                455
```

<210> 9623 <211> 333

<212> PRT <213> Enterobacter cloacae

<400> 9623

Thr Ile Ile Arg Asn Ser Lys Pro Leu Arg Leu Asn Lys Glu Ser Arg 10 Met Gln Thr Trp Pro Asn Pro Phe Ile Glu Gln Arg Ala Asp Pro Tyr 20 25 30 Ile Leu Arg His Asp Gly Gln Tyr Tyr Phe Ile Ala Ser Val Pro Glu 40 Tyr Asp Arg Leu Ala Ile Arg Arg Ala Asp Ser Leu Glu Gly Leu Arg Asp Ala Glu Glu Val Val Val Trp Arg Lys Pro Asp Thr Gly Pro Met 70 75 Ser Gln Leu Ile Trp Ala Pro Glu Leu His His Ile Asp Gly Ser Trp 8.5 90 Tyr Ile Tyr Phe Ala Ala Thr His Thr Gln Ala Leu Asp His Leu Gly

105 100 Met Phe Gln His Arg Met Phe Ala Ile Glu Cys Ala Asp Arg Asp Pro 120 115 Leu Thr Gly Thr Trp Val Glu Lys Gly Gln Ile Lys Thr Pro Phe Asp 140 130 135 Thr Phe Ala Leu Asp Ala Thr Thr Phe Val His Gln Gly Lys Arg Trp 150 155 Tyr Leu Trp Ala Gln Lys Ala Pro Asp Ile Ser Gly Asn Ser Asn Leu 165 170 Tyr Leu Cys Glu Met Glu Asn Pro Trp Thr Leu Lys Gly Glu Pro Val 180 185 190 Met Leu Ser Lys Pro Glu Tyr Asp Trp Glu Cys Arg Gly Phe Trp Val 200 205 195 Asn Glu Gly Pro Ala Val Leu Phe His Gly Asp Lys Leu Phe Ile Ser 210 215 220 Tyr Ser Ala Ser Ala Thr Asp Glu Asn Tyr Cys Met Gly Leu Met Trp 225 230 235 240 Ala Asp Leu Asn Ala Asp Pro Gln Asn Pro Ala Asn Trp His Lys Ser 245 250 255 Pro Arg Pro Val Phe Val Thr Ser Tyr Glu Asn Arg Gln Tyr Gly Pro 260 265 270 Gly His Asn Ser Phe Thr Gln Thr Pro Glu Gly Glu Asp Val Leu Val 275 280 285 Tyr His Ala Arg Asn Tyr Thr Glu Ile Glu Gly Asp Pro Leu Tyr Asp 290 295 300 Pro Asn Arg His Thr Arg Leu Lys Leu Ile Arg Trp Asn Glu Asn Gly 305 310 315 Met Pro Glu Phe Gly Ile Pro Pro Ala Asp Thr Pro

<210> 9624 <211> 71 <212> PRT

<213> Enterobacter cloacae

<400> 9624

Asn Ser Met Asn Phe Ser Pro Phe Ser Ser Thr Thr Val Pro Pro Leu 10 Ser Ser Trp Pro Ala Ser Met Pro Pro Ser Ile Thr Lys Ser Ala Pro 2.5 Pro Pro Lys Ala Phe Ala Thr Ser Pro Gly Met Val Gln Pro Pro Ser 40

Leu Met Ile Trp Pro Pro Arg Pro Cys Ala Ala Ser Ala His Ser Ile 5.5

Thr Ala Asp Ser Cys Gly

<210> 9625 <211> 308

<212> PRT

<213> Enterobacter cloacae

<400> 9625

50

Gly Gly Ser Leu Ser Arg Leu Val Thr Val Asp Met Ser Glu Ser His 10 Tyr Ile Gly Arg Phe Ala Pro Ser Pro Ser Gly Glu Leu His Phe Gly 25 20 Ser Leu Ile Ala Ala Leu Gly Ser Tyr Leu Gln Ala Arg Ala Arg Gln 40 Gly Gln Trp Leu Val Arg Ile Glu Asp Ile Asp Pro Pro Arg Glu Val

5.5

```
Pro Gly Ala Ala Glu Thr Ile Leu Arg Gln Leu Glu His Tyr Gly Leu
His Trp Asp Gly Asp Val Leu Trp Gln Ser Gln Arg His Asp Ala Tyr
           85
Arg Glu Arg Leu Ala Trp Leu Ala Glu Gln Gly Leu Ser Tyr Asn Cys
        100
                      105
Thr Cys Thr Arg Ala Arg Ile Gln Ser Val Gly Gly Val Tyr Asp Gly
   115
His Cys Arg Thr Arg His Asn Gly Pro Glu Asn Ala Ala Val Arg Leu
 130 135 140
Ile Gln Arg Ser Pro Val Thr Gln Phe Thr Asp Val Val Ser Gly Thr
145 150 155
Ile Gln Ala Asp Glu Arg Leu Ala Arg Glu Asp Phe Ile Ile His Arg
   165 170 175
Arg Asp Gly Leu Phe Ala Tyr Asn Leu Ala Val Val Asp Asp His
       180 185 190
Phe Gln Gly Val Thr Glu Ile Val Arg Gly Ala Asp Leu Val Glu Pro
 195 200 205
Thr Val Arg Gln Ile Ser Leu Tyr Gln Gln Phe Gly Trp Thr Val Pro
 210 215 220
Asp Tyr Ile His Leu Pro Leu Ala Val Asn Asp Gln Gly Asn Lys Leu
225 230 235 240
Ser Lys Gln Asn His Ala Pro Ala Leu Pro Asp Gly Asp Pro Arg Pro
          245 250 255
Val Leu Ile Asp Ala Leu Arg Phe Leu Asn Gln Asn Val Thr Gln Glu
       260 265 270
Trp Gln Asp Leu Ser Leu Asp Glu Leu Leu Lys Thr Ala Ile Ala Asp
275 280 285
Trp Ala Leu Ile Ala Val Pro Lys Ile Gln His Ser Gln Met Arg Cys
290
          295
Ala Glu Leu
305
```

<212> PRT <213> Enterobacter cloacae

<400> 9626

<210> 9626 <211> 480

Leu Ala Ala Phe Leu Ile Thr Lys His Thr Thr Arg Cys Thr Ile Phe 1 5 10 Thr Arg Val Ala Asn Phe Cys Arg Lys Val Leu Ser Arg Glu Glu Ser 20 25 30 Met Ala Asn Asp Ala Ile Ala Gln Pro His Met Ser Val Ile Pro Arg 40 4.5 Glu Gln His Asn Ile Ser Arg Lys Asp Ile Ser Glu Asn Ala Leu Lys 50 55 Val Leu Tyr Arg Leu Asn Lys Ala Gly Tyr Glu Ala Tyr Leu Val Gly 7.0 75 Gly Gly Val Arg Asp Leu Leu Leu Gly Lys Lys Pro Lys Asp Phe Asp 90 8.5 Val Thr Thr Ser Ala Thr Pro Glu Gln Val Arg Lys Leu Phe Arg Asn 100 105 Cys Arg Leu Val Gly Arg Arg Phe Arg Leu Ala His Val Met Phe Gly 120 125 Pro Glu Ile Ile Glu Val Ala Thr Phe Arg Gly His His Glu Ala Gly 135 140 Val Asn Asp Arg Thr Thr Ser Gln Arg Gly Gln Asn Gly Met Leu Leu 150 160 Arg Asp Asn Ile Phe Gly Ser Ile Glu Glu Asp Ala Gln Arg Arg Asp 165 170

```
Phe Thr Ile Asn Ser Leu Tyr Tyr Ser Val Ala Asp Phe Thr Val Arg
                       185
Asp Tyr Val Gly Gly Met Gln Asp Leu Lys Asp Gly Leu Ile Arg Leu
     195
                 200
Ile Gly Thr Pro Glu Thr Arg Tyr Arg Glu Asp Pro Val Arg Met Leu
       215
Arg Ala Val Arg Phe Ala Ala Lys Leu Asn Met Arg Ile Ser Pro Glu
      230 235
Thr Ala Glu Pro Ile Pro Arg Leu Ala Thr Leu Ile Asn Asp Val Pro
      245 250
Pro Ala Arg Leu Phe Glu Glu Ser Leu Lys Leu Leu Gln Ala Gly Tyr
        260 265 270
Gly Phe Glu Thr Tyr Asn Leu Leu Arg Glu Tyr Asn Leu Phe Gln Pro
  275 280 285
Leu Phe Pro Thr Ile Thr Arg Tyr Phe Thr Glu Asn Gly Asp Ser Ala
 290 295
                     300
Met Glu Arg Met Ile Ala Gln Val Leu Lys Asn Thr Asp Thr Arg Ile
305 310 315 320
His Asn Asp Met Arg Val Asn Pro Ala Phe Leu Phe Ala Ala Met Phe
   325 330 335
Trp Tyr Pro Leu Leu Glu Thr Ala Gln Arg Ile Thr Gln Glu Ser Gly
        340 345 350
Leu Ala Tyr Tyr Asp Ala Phe Ala Leu Ala Ala Asn Asp Val Leu Asp
     355 360 365
Glu Gly Cys Arg Thr Leu Ala Ile Pro Lys Arg Ile Thr Thr Leu Val
370 375
Arg Asp Ile Trp Gln Leu Gln Leu Arg Met Ser Arg Arg Gln Gly Lys
385 390 395
Arg Ala Trp Lys Leu Met Glu His Pro Lys Phe Arg Ala Ala Phe Asp
                          410 415
         405
Leu Leu Ser Leu Arg Ala Glu Val Glu Arg Asn Gln Glu Leu Gln Arg
        420 425 430
Leu Ala Gln Trp Trp Gly Glu Phe Gln Val Ser Ala Pro Pro Glu Gln
 435
                    440 445
Lys Asp Met Leu Thr Asp Leu Asp Asp Glu Pro Ala Pro Arg Arg Arg
450 455 460
His Arg Arg Pro Arg Lys Arg Ala Pro Arg Arg Glu Gly Thr Ala
              470
<210> 9627
<211> 202
<212> PRT
<213> Enterobacter cloacae
<400> 9627
```

Ile Tyr Leu Arg Val Ile Ser Ala Gly Lys Arg Ser Asn Ile Met Lys 10 Phe Asn Ser Thr Phe Ile Ala Leu Ser Val Ser Ala Leu Leu Phe Ser 25 20 3.0 Gly Met Ala Ser Ala Ala Ile Thr Gly Thr Pro Ser Val Glu Leu Thr 40 4.5 35 Ile Lys Ser Lys Ile Val Ser Gly Thr Cys Thr Ala Lys Val Leu Asn 50 Asp Ala Gly Thr Ala Ser Thr Glu Ile Ala Phe Gly Asp Val Tyr Lys 65 70 75 8.0 Ser Asp Leu Val Asn Lys Thr Arg Val Glu Pro Leu Lys Ile Ser Phe 85 90 Thr Asn Cys Ser Gly Val Thr Arg Ala Thr Val Ser Ala Ala Lys Gly 100 105 Ala Gly Gly Glu Cys Ser Gly Val Asn Lys Thr Gly Asp Ser Tyr Ser 115 120

```
Gly Gly Leu Ala Thr Gly Phe Glu Ile Trp Ser Gly Val Val Asp Thr
  130
             135
                          140
Gly Glu Leu Met Ser Cys Asn Thr Pro Pro Ala Ala Lys Asp Val Thr
145
              150 155
Ile Thr Asp Gly Thr Gly Glu Phe Pro Met Asn Ser Arg Ile Val Ile
          165 170 175
Gly Gln Gly Gln Thr Ile Ala Glu Val Gly Ala Gly Ala Val Asn Ala
       180 185 190
Pro Val Thr Phe Thr Ile Thr Tyr Pro
<210> 9628
<211> 256
<212> PRT
<213> Enterobacter cloacae
<400> 9628
Ile Gln Leu Thr Leu Ser Ser Asp Thr Arg Cys Val Val Ser Leu Lys
                          10
Val Gly Leu Pro Tyr Ser Ser Ala Thr Gln Ser Leu Gly Tyr Arg Ser
         20
               25
Leu Thr Ser Met Asn Asp Ile Asp Thr Leu Ile Ser Asn Asn Ala Leu
                  40
Trp Ser Lys Met Leu Val Glu Glu Asp Pro Gly Phe Phe Gly Lys Leu
5.0
             55
                                 60
Ala Gln Ala Gln Asn Pro Arg Phe Leu Trp Ile Gly Cys Ser Asp Ser
              70
                               75
Arg Val Pro Ala Glu Arg Leu Thr Gly Leu Glu Pro Gly Glu Leu Phe
            85
                       90
Val His Arg Asn Val Ala Asn Leu Val Ile His Thr Asp Leu Asn Cys
        100
                        105 110
Leu Ser Val Val Gln Tyr Ala Val Asp Val Leu Glu Val Glu His Ile
                      120 125
     115
Ile Ile Cys Gly His Tyr Gly Cys Gly Gly Val Gln Ala Ala Val Glu
130
                  135
                                  140
Asn Thr Glu Leu Gly Leu Ile Asp Asn Trp Leu Leu His Ile Arg Asp
             150
                               155
Ile Trp Phe Lys His Ser Ser Leu Leu Gly Glu Met Pro Gln Glu Arg
            165 170
                                            175
Arg Leu Asp Thr Leu Cys Glu Leu Asn Val Met Glu Gln Val Tyr Asn
         180 185 190
Leu Gly His Ser Thr Ile Met Gln Ser Ala Trp Lys Arg Gly Gln Lys
      195
                     200
                                    205
Val Ser Ile His Gly Trp Ala Tyr Gly Ile His Asp Gly Leu Leu Arg
                  215
                                  220
 210
Asn Leu Glu Val Thr Ala Thr Asn Arg Glu Thr Leu Glu Gln Arg Tyr
               230 235 240
Arg Ser Gly Ile Ala Asn Leu Lys Leu Lys His Val Asn His Lys
                            250
            245
<210> 9629
<211> 808
<212> PRT
<213> Enterobacter cloacae
<220>
<400> 9629
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Gln Ile Ile Asn Lys Thr Asp Glu Tyr Phe Ser Met Ala Glu Thr Lys

10 Thr Lys Gln Pro Arg Leu Leu Val Thr Leu Thr Ala Ala Phe Ala Ala 30 25 Phe Cys Ala Leu Tyr Leu Leu Ile Gly Gly Val Trp Leu Val Ala Ile 40 Gly Gly Ser Trp Tyr Tyr Pro Ile Ala Gly Leu Val Met Val Gly Val Thr Val Leu Leu Arg Arg Lys Gln Ser Ala Leu Trp Leu Tyr Ala 70 7.5 Ala Leu Leu Leu Ala Thr Met Ile Trp Gly Val Trp Glu Val Gly Phe 85 90 Asp Phe Trp Ala Leu Thr Pro Arg Ser Asp Ile Leu Val Phe Phe Gly 100 105 110 Ile Trp Leu Ile Leu Pro Phe Val Trp Arg Arg Leu Ile Val Pro Ser 115 120 125 Ser Gly Ala Val Ala Gly Leu Val Val Ala Leu Leu Ile Ser Gly Gly 135 140 Ile Leu Thr Trp Ala Gly Phe Asn Asp Pro Gln Glu Ile Asn Gly Thr 145 150 155 Leu Asn Ala Glu Ser Thr Pro Ala Ala Ala Ile Ser Gln Val Ala Asp 165 170 175 Gly Asp Trp Pro Ala Tyr Gly Arg Asn Gln Glu Gly Gln Arg Tyr Ser 185 190 Pro Leu Lys Gln Ile Asn Ala Asp Asn Val Lys Asn Leu Lys Glu Ala 195 200 205 Trp Val Phe Arg Thr Gly Asp Leu Lys Met Pro Asn Asp Pro Gly Glu 210 215 220 Leu Thr Asn Glu Val Thr Pro Ile Lys Val Gly Asn Met Leu Tyr Leu 225 230 235 Cys Thr Ala His Gln Arg Leu Phe Ala Leu Asp Ala Ala Thr Gly Lys 245 250 255 Glu Lys Trp His Phe Asp Pro Gln Leu Asn Ser Asn Pro Ser Phe Gln 260 265 270 His Ile Thr Cys Arg Gly Val Ser Tyr His Glu Ala Arg Ala Asp Asn 275 280 285 Ala Ser Pro Glu Val Ile Ala Asp Cys Pro Arg Arg Ile Met Leu Pro 295 300 Val Asn Asp Gly Arg Leu Phe Ala Ile Asn Ala Glu Thr Gly Lys Leu 315 310 305 Cys Glu Thr Phe Ala Asn Lys Gly Ile Leu Asn Leu Gln Thr Asn Met 325 330 335 Pro Asp Thr Thr Pro Gly Leu Tyr Glu Pro Thr Ser Pro Pro Ile Ile 345 350 340 Thr Asp Lys Thr Ile Val Ile Ala Gly Ser Val Thr Asp Asn Phe Ser 365 360 355 Thr Arg Glu Thr Ser Gly Val Ile Arg Gly Phe Asp Val Asn Thr Gly 375 380 Lys Leu Leu Trp Ala Phe Asp Pro Gly Ala Lys Asp Pro Asn Ala Ile 395 400 390 Pro Ser Asp Glu His Thr Phe Thr Phe Asn Ser Pro Asn Ser Trp Ala 415 405 410 Pro Ala Ala Tyr Asp Ala Lys Leu Asp Leu Val Tyr Leu Pro Met Gly 420 425 Val Thr Thr Pro Asp Ile Tro Gly Gly Asn Arg Thr Pro Glu Gln Glu 440 445 Arg Tyr Ala Ser Ser Ile Val Ala Leu Asn Ala Thr Thr Gly Lys Leu 455 460 Ala Trp Ser Tyr Gln Thr Val His His Asp Leu Trp Asp Met Asp Met 470 475 Pro Ser Gln Pro Thr Leu Ala Asp Ile Thr Val Asn Gly Lys Thr Val 485 490

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Pro Val Ile Tyr Ala Pro Ala Lys Thr Gly Asn Ile Phe Val Leu Asp
                                     510
                      505
      500
Arg Ser Asn Gly Lys Leu Val Val Pro Ala Pro Glu Lys Pro Val Pro
   515
Gln Gly Ala Ala Lys Gly Xaa Tyr Val Thr Lys Thr Gln Pro Phe Ser
 530 535
                               540
Asp Leu Ser Phe Arg Pro Lys Lys Asp Leu Ser Gly Ala Asp Met Trp
545 550
                            555
Gly Ala Thr Met Phe Asp Gln Leu Val Cys Arg Val Met Phe His Gln
      565 570
Leu Arg Tyr Glu Gly Ile Phe Thr Pro Pro Ser Glu Gln Gly Thr Leu
       580 585
                                      590
Val Phe Pro Gly Asn Leu Gly Met Phe Glu Trp Gly Gly Ile Ser Val
 595 600 605
Asp Pro Asn Arg Gln Val Ala Ile Ala Asn Pro Met Ala Leu Pro Phe
 610 615 620
Val Ser Arg Leu Ile Pro Arg Gly Pro Gly Asn Pro Met Glu Gln Pro
              630 635
Lys Asp Ala Lys Gly Ser Gly Thr Glu Ala Gly Ile Gln Pro Gln Tyr
           645 650 655
Gly Val Pro Tyr Gly Val Thr Leu Asn Pro Phe Leu Ser Pro Phe Gly
             665 670
        660
Leu Pro Cys Lys Gln Pro Ala Trp Gly Tyr Ile Ser Gly Leu Asp Leu
                    680 685
675
Lys Thr Asn Lys Ile Val Trp Lys Lys Arg Ile Gly Thr Pro Gln Asp
690 695
                     700
Ser Met Pro Phe Pro Met Pro Val Pro Val Pro Phe Asn Met Gly Met
              710
                  715 720
Pro Met Leu Gly Gly Pro Ile Ser Thr Ala Gly Asn Val Leu Phe Ile
           725 730 735
Ala Ala Thr Ala Asp Asn Tyr Leu Arg Ala Tyr Asn Met Thr Asn Gly
        740
                       745 750
Glu Lys Leu Trp Gln Gly Arg Leu Pro Ala Gly Gly Gln Ala Thr Pro
                    760 765
     755
Met Thr Tyr Glu Val Asn Gly Lys Gln Tyr Val Val Ile Ser Ala Gly
                 775 780
770
Gly His Gly Ser Phe Gly Thr Lys Met Gly Asp Tyr Ile Val Ala Tyr
           790
                       795
785
Ala Leu Pro Asp Asp Ala Lys
           805
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<210> 9630 <211> 212

<212> PRT <213> Enterobacter cloacae

100

<400> 9630 Met Arg Leu Arg Ala Ser Gly Ala Ser Asn Ser Gly Met Gly Lys Ala 10 Gly Leu Ser Ala Ala Lys Thr Ala Arg Leu Gln Arg Gly Ile Ala Leu 25 20 Ala Thr Pro Ser Ala Ala Glu Asn Phe Lys Lys Ser Arg Arg Cys Met 4.0 Cys Ile Ser Leu Phe Pro Ala Gly Asp Leu Leu Ser Ile Asn Pro Pro 55 Leu Thr Gly Arg Ser Ser Thr Ala Ala Ile Ile Lys Ile Val Gly Leu 75 70 Ala Ser Ser Met Leu Thr Leu Ile Phe Arg Asp Ala Val Val Lys Ala 90 95 85 Met Lys Thr Phe Phe Arg Thr Ile Leu Phe Ala Ser Leu Met Ala Met

Cys Ala Asn Ser Tyr Ala Leu Ser Glu Asn Glu Ala Glu Asp Met Ala 115 Asp Leu Thr Ala Val Phe Val Phe Leu Lys Asn Asp Cys Gly Tyr Gln 130 135 Asn Leu Pro Asn Gly Gln Ile Arg Arg Ala Leu Val Phe Phe Ala Gln 145 150 155 Gln Asn Gln Trp Asp Leu Ser Asn Tyr Asp Ser Phe Asp Met Lys Ala 165 Leu Gly Glu Asp Ser Tyr Arg Asp Leu Ser Gly Ile Gly Ile Pro Thr 180 185 190 Ala Lys Lys Cys Lys Ala Leu Ala Arg Asp Ser Leu Ser Leu Leu Ala 200 Tyr Val Lys

210

<210> 9631 <211> 518 <212> PRT

<213> Enterobacter cloacae

<400> 9631 Tyr Ser Arg Gln Gln Gln Arg Leu Thr Ala Leu His Ser Ser Arg Trp 10 Ser Gln Ser Met Lys Leu Pro Phe Lys Pro His Leu Leu Val Leu Leu 20 2.5 Cys Ser Ala Gly Leu Phe Ala Ala Ser Gly Val Met Phe Val Lys Ser 35 4.0 Arg Ala Thr Glu Pro Ala Pro Ala Pro Ala Pro Val Ala Pro Gln Leu 55 Pro Asp Pro Ala Ala Gln Pro Ala Pro Val Ala Thr Pro Ala Tyr Thr 7.0 7.5 Ala Ala Gln Ile Asp Gln Trp Thr Ala Pro Ile Ala Leu Tyr Pro Asp 8.5 90 Ala Leu Leu Ser Gln Ile Leu Met Ala Ser Thr Tyr Pro Ala Ser Val 105 110 100 Ile Gln Ala Ala Gln Trp Ser Lys Asp Asn Pro Lys Met Gln Gly Asp 115 Ala Ala Ile Gln Ala Val Ser Gly Gln Pro Trp Asn Ala Ser Val Lys 135 140 130 Ser Leu Val Ala Phe Pro Gln Leu Met Ser Leu Met Gly Glu Asn Pro 150 155 Ser Trp Val Gln Ser Leu Gly Asp Ala Phe Leu Ala Gln Pro Lys Asp 165 170 175 Val Met Asp Ser Val Gln Arg Leu Arg Leu Leu Ala Gln Gln Thr Gly 185 190 180 Thr Leu Gln Ser Thr Pro Gln Gln Thr Val Thr Thr Val Lys Lys Ser 200 205 195 Ala Pro Ala Ser Ala Ser Thr Ala Ala Thr Ser Thr Ser Ala Ser Pro 220 210 215 Thr Val Ile Lys Ile Glu Pro Ala Asp Pro Gln Val Val Tyr Val Pro 235 230 Thr Tyr Asn Pro Ser Thr Val Tyr Gly Thr Trp Pro Asn Ala Ser Tyr 245 250 Pro Pro Val Tyr Leu Pro Pro Ser Pro Gly Gln Gln Phe Thr Asn Ser 270 260 265 Phe Val Arg Gly Phe Gly Tyr Ser Leu Gly Val Ala Thr Thr Tyr Ala 275 280 285 Leu Phe Ser Asn Ile Asp Trp Asp Asp Asp Asp His His His Asp 295 300 His Asp Asp Asp His His Gly Gly Tyr Ser His Asn Gly Asp Asn Ile 310 315

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Asn Ile Asn Val Asn Asn Phe Asn Lys Ile Thr Gly Glu His Arg Thr
             325
                             330
Asp Asn His Gln Val Trp Gln His Asn Pro Ala Tyr Arg Asn Gly Val
         340
                          345
Pro Tyr Ala Asn Ser Gln Leu Ala Ser Arg Tyr His Gln Thr Ser Val
     355
                       360
Pro Gly Gly Leu Ser Ala Thr Arg Gln Gln Pro Val Asn Arg Asp Ser
 370 375
                                     380
Gln Arg Gln Ala Ala Met Ala Gln Val Gln Gln Ser Thr Gly Lys Thr
      390
                                 395
Leu Thr Gln Leu Gln His Gly Asp Ala His Phe Pro Gln His Ser Ala
            405 410
Ser Ala Gln Gln Leu Lys Gln Leu Ser Gln Arg Ser Asn Tyr Arg Gly
         420 425 430
Tyr Asp Ser Ala Arg Pro His Ala Gln Gln Met Asn Asn Thr Leu Ala
     435 440 445
Gln Thr Arg Arg Pro Thr Gln Val Gln His Gln Pro Leu Arg Ala Asn
 450 455
                        460
Ala Leu Ser Gly Asn Asp Ser Arg Ser Ala Ser Trp Gln Ala Gln His
             470 475
Gln Arg Gly Leu Gln Ser Arg Gln His Ala Ser Leu Asn Ser Glu Gln
           485 490 495
Arg Ala Ser Phe Arg Gln Gln Leu Ser Glu His His Thr Glu His His
         500
                        505
Glu Phe His Arg Arg
   515
<210> 9632
<211> 149
<212> PRT
<213> Enterobacter cloacae
<400> 9632
Gly Ala Asp Met Asn Arg Gln Gln Gly Phe Thr Leu Ile Glu Leu Met
                            10
Val Val Ile Gly Ile Ile Ala Ile Leu Ser Ala Ile Gly Val Pro Ala
                           25
                                            30
          20
Tyr Gln Asn Tyr Leu Arg Lys Ala Ala Leu Thr Asp Met Leu Gln Thr
                       40
                                        45
    35
Phe Ile Pro Tyr Arg Thr Ala Ile Glu Leu Cys Ala Leu Asp Arg Gly
 50
                    5.5
Gly Val Asp Arg Cys Asp Ala Gly Thr Asn Gly Ile Pro Ser Pro Thr
                70
                                 75
Thr Thr Arg Tyr Val Ser Ala Met Ser Val Ala Lys Gly Ile Val Ser
                              90
             85
Leu Thr Gly Gln Glu Ser Leu Asn Gly Leu Glu Val Leu Met Thr Pro
                           105
Ile Trp Ser Asp Gly Asn Gly Met Thr Gly Trp Thr Arg Asp Cys Lys
                        120
                                   125
       115
Ile Ala Ser Asp Thr Ala Leu Arg Gln Ala Cys Glu Asp Val Phe Arg
                    135
   130
Phe Asp Asn Asn
145
<210> 9633
<211> 464
<212> PRT
<213> Enterobacter cloacae
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 $\!<\!400\!>9633$ Glu Trp Thr Met Asn Thr Glu Gln Leu Met Thr Leu Cys Gln Arg

1.0 His His Ala Leu Leu Leu Ala Ser Asp Thr Glu Met Ile Ser Ile Ala Val Val Gly Asn Pro Ala Ser Glu Leu Met Glu Ala Leu Arg Phe Ala 40 Thr Gln Lys Arg Ile Asp Ile Glu Cys Trp Thr Ala Glu Arg Met Glu 55 Lys Arg Leu Gln Ser Leu Ser Ser His Leu Pro Gly Ile Val Pro 75 7.0 Asn Ser Ala Ala Asp Val Leu Ser Thr Thr Leu Gln Gln Ala Val Asn 8.5 Gln Arg Ala Ser Asp Ile His Ile Glu Pro Thr Glu His Gly Tyr Gln 100 105 Ile Arg Leu Arg Ile Asp Gly Val Leu Tyr Pro Gln Pro Pro Ile Ser 115 120 125 Ala Ala Leu Gly Thr Thr Leu Ala Ala Arg Leu Lys Val Leu Gly Gln 130 135 140 Leu Asp Ile Ala Glu Arg Arg Leu Pro Gln Asp Gly Gln Phe Thr Val 150 155 Glu Leu Ala Ser Val Pro Val Ser Phe Arg Ile Ala Thr Leu Pro Cys 165 170 Ser Gly Gly Glu Lys Ile Val Leu Arg Leu Leu His Gln Val Gln Gln 180 185 190 Ala Leu Glu Leu Glu Gln Leu Gly Met Ser Ala Asp Gln Gln Ala Arg 195 200 205 Phe Ala Glu Ala Leu Asn Ser Pro Gln Gly Leu Ile Leu Val Thr Gly 210 215 220 Pro Thr Gly Ser Gly Lys Thr Val Thr Leu Tyr Ser Ala Leu Gln Ala 225 230 235 Arg Asn Thr Pro Asp Val Asn Ile Cys Ser Val Glu Asp Pro Val Glu 245 250 255 Ile Pro Leu Ala Gly Leu Asn Gln Thr Gln Ile Asn Pro Arg Ala Gly 260 265 270 Leu Thr Phe Gln Ser Val Leu Arg Ala Leu Leu Arg Gln Asp Pro Asp 280 285 Ile Ile Met Val Gly Glu Ile Arg Asp Gly Glu Thr Ala Glu Ile Ala 290 295 300 Ile Lys Ala Ala Gln Thr Gly His Leu Val Leu Ser Thr Leu His Thr 305 \$310\$ \$310 \$315Asn Ser Thr Thr Glu Thr Leu Val Arg Leu Gln Gln Met Gly Val Ala 325 330 335 Arg Trp Met Ile Ser Ser Ala Leu Ser Met Val Ile Ala Gln Arg Leu 340 345 Val Arg Arg Leu Cys Pro Tyr Cys Arg Gln Glu Ala Ser Arg His Thr 355 360 365 Glu Leu Pro Arg Thr Leu Trp Pro Arg Pro Leu Pro Arg Trp Gln Pro 375 380 Thr Gly Cys Asp Arg Cys Tyr His Gly Phe Tyr Gly Arg Val Ala Ile 395 400 390 Phe Glu Val Leu Val Ile Asp Asp Thr Leu Arg Gln Ala Ile Ala Ser 410 405 Gly Ala Ser Thr Glu Val Ile Gly Ser Ser Ala Arg Gln Ala Gly Met 425 420 Thr Ser Leu Phe Glu His Gly Cys Met Ala Val Glu Gln Gly Leu Thr 435 440 445Thr Leu Glu Glu Leu Leu Arg Val Leu Gly Met Pro Asp Gly Cys 455

<210> 9634 <211> 279

<212> PRT

<213> Enterobacter cloacae

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Arg Arg Thr Arg Cys His Cys Ile Gly Cys Cys Ser Ser Ala Arg Ala
Val Ser Asp Leu Arg Arg Ala Gly Arg Cys Thr Gly Lys Thr Ile Met
          2.0
                           25
Ser Thr His Ile Leu Phe Glu His Pro Leu Asn Glu Lys Met Arg Thr
                    4.0
Trp Leu Arg Ile Glu Phe Leu Ile Gln Gln Leu Ser Gln His Leu Pro
                                      60
              55
Val Asn Asp His Ala Thr Ala Leu His Phe Phe Arg Asn Val Gly Asp
                         75
                 7.0
Leu Leu Asp Val Ile Glu Arg Gly Asp Val Arg Thr Glu Leu Leu Lys
             85
                              90
Glu Leu Glu Arg Gln Gln Arg Lys Leu Gln Ala Trp Ala Glu Val Pro
                         105 110
          100
Gly Val Asp Gln Ser Arg Ile Asp Ala Leu Arg Gln Gln Leu Lys Asn
      115
                        120
                              125
Ser Ser Thr Thr Leu Met Ala Ala Pro Arg Val Gly Gln Phe Leu Arg
                 135
                          140
Glu Asp Arg Leu Ile Ala Leu Val Arg Gln Arg Leu Ser Ile Pro Gly
                      155
145
                 150
Gly Cys Cys Ser Phe Asp Leu Pro Thr Leu His Met Trp Leu His Met
              165
                               170 175
Pro Gln Glu Gln Arg Asp Arg Gln Val Asn Ser Trp Leu Gly Ser Leu
                         185
          180
Glu Pro Met Asn Gln Thr Leu Ser Leu Ile Leu Asp Leu Val Arg Asn
                         200
 195
Ser Ala Pro Phe Arg Lys Gln Thr Ser Leu Asn Gly Phe Tyr Gln Asp
                     215
                                     220
   210
Asn Gly Asp Asp Ala Asp Leu Leu Arg Leu Asn Leu Ser Leu Ser Glu
                  230
                                  235
Gln Leu Tyr Pro Gln Ile Ser Gly His Lys Ser Arg Phe Ala Ile Arg
                               250
              245
Phe Met Pro Leu Asp Ser Glu His Gly Thr Val Pro Glu Arg Leu Asp
                            265
           260
Phe Glu Leu Ala Cys Cys
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<210> 9635 <211> 68 <212> PRT <213> Enterobacter cloacae

275

<210> 9636 <211> 913 <212> PRT <213> Enterobacter cloacae <400> 9636 Met Arg Gly Ser Phe Gln Pro Arg Val Arg Leu Leu Leu Ile Lys Leu 10 Leu Thr Arg Val Phe Gly Ser Arg Asn Asp Arg Thr Leu Arg Arg Met 20 25 Arg Lys Ala Val Asn Val Ile Asn Gly Met Glu Pro Ala Met Glu Lys 35 4.0 Leu Ser Asp Asp Glu Leu Lys Ala Lys Thr Ala Glu Phe Arg Ala Arg 50 55 60 Leu Glu Lys Gly Glu Thr Leu Glu Ser Leu Ile Pro Glu Ala Phe Ala 70 75 Val Val Arg Glu Ala Ser Lys Arg Val Phe Gly Met Arg His Phe Asp 85 90 Val Gln Leu Leu Gly Gly Met Val Leu Asn Glu Arg Cys Ile Ala Glu 100 105 110 Met Arg Thr Gly Glu Gly Lys Thr Leu Thr Ala Thr Leu Pro Ala Tyr 115 120 125 Leu Asn Ala Leu Thr Gly Lys Gly Val His Val Val Thr Val Asn Asp 130 135 Tyr Leu Ala Gln Arg Asp Ala Glu Asn Asn Arg Pro Leu Phe Glu Phe 145 150 155 160 Leu Gly Met Thr Val Gly Ile Asn Met Ser Gly Leu Pro Ala Pro Ala 165 170 175 Lys Arg Glu Ala Tyr Asn Ala Asp Ile Thr Tyr Gly Thr Asn Asn Glu 185 190 180 Tyr Gly Phe Asp Tyr Leu Arg Asp Asn Met Ala Phe Ser Pro Glu Glu 195 200 205 Arg Val Gln Arg Lys Leu His Tyr Ala Leu Val Asp Glu Val Asp Ser 210 215 220 Ile Leu Ile Asp Glu Ala Arg Thr Pro Leu Ile Ile Ser Gly Pro Ala 225 230 235 240 225 Glu Asp Ser Ser Glu Met Tyr Arg Lys Val Asp Lys Ile Ile Pro His 250 255 245 Leu Leu Arg Gln Glu Lys Glu Asp Ser Asp Thr Phe Gln Gly Glu Gly 260 265 270 His Phe Ser Val Asp Glu Lys Ala Arg Gln Val Asn Leu Thr Glu Arg Gly Leu Val Lys Ile Glu Glu Leu Leu Val Ala Glu Gly Ile Met Glu 290 295 300 Glu Gly Glu Ser Leu Tyr Ser Pro Ser Asn Ile Met Leu Met His His 310 315 Val Thr Ala Ala Leu Arg Ala His Ala Leu Phe Thr Arg Asp Val Asp 330 325 Tyr Ile Val Lys Asp Gly Glu Val Ile Ile Val Asp Glu His Thr Gly 345 350 340 Arg Thr Met Gln Gly Arg Arg Trp Ser Asp Gly Leu His Gln Ala Val 360 365 355 Glu Ala Lys Glu Gly Val Asp Ile Gln Asn Glu Asn Gln Thr Leu Ala 370 375 380 Ser Ile Thr Phe Gln Asn Tyr Phe Arg Leu Tyr Glu Lys Leu Ala Gly 395 390 Met Thr Gly Thr Ala Asp Thr Glu Ala Phe Glu Phe Ser Ser Ile Tyr 405 410 415 Lys Leu Asp Thr Val Val Val Pro Thr Asn Arg Pro Met Ile Arg Lys 425 430 420 Asp Met Pro Asp Leu Val Tyr Met Thr Glu Ala Glu Lys Ile Gln Ala 440 445 435 Ile Ile Glu Asp Ile Arg Glu Arg Thr Ala Lys Gly Gln Pro Val Leu 460 455 Val Gly Thr Ile Ser Ile Glu Lys Ser Glu Val Val Ser Asn Glu Leu

470 475 Thr Lys Ala Gly Ile Lys His Asn Val Leu Asn Ala Lys Phe His Ala 485 490 495 Lys Glu Ala Asp Ile Val Ala Gln Ala Gly Tyr Pro Ala Ala Val Thr 500 505 510 Ile Ala Thr Asn Met Ala Gly Arg Gly Thr Asp Ile Met Leu Gly Gly 515 520 Ser Trp Gln Ala Glu Val Ala Glu Leu Glu Asn Pro Thr Pro Glu Gln 530 535 540 Ile Ala Gln Ile Lys Ala Asp Trp Gln Val Arg His Asp Ala Val Leu 545 550 555 Pro Ser Gly Gly Leu His Ile Ile Gly Thr Glu Arg His Glu Ser Arg 565 570 Arg Ile Asp Asn Gln Leu Arg Gly Arg Ala Gly Arg Gln Gly Asp Ala 580 585 590 Gly Ser Ser Arg Phe Tyr Leu Ser Met Glu Asp Ala Leu Met Arg Ile 595 600 605 Phe Ala Ser Asp Arg Val Ser Gly Met Met Arg Lys Leu Gly Met Lys 610 615 620 Pro Gly Glu Ala Ile Glu His Pro Trp Val Thr Lys Ala Ile Ala Asn 625 630 635 640 Ala Gln Arg Lys Val Glu Ser Arg Asn Phe Asp Ile Arg Lys Gln Leu 645 650 655 Leu Glu Tyr Asp Asp Val Ala Asn Asp Gln Arg Arg Ala Ile Tyr Thr 660 665 670 Gln Arg Asn Glu Leu Leu Asp Val Ser Asp Val Ser Glu Thr Ile Asn 675 680 685 Ser Ile Arg Glu Asp Val Phe Lys Ala Thr Ile Asp Ala His Ile Pro 690 695 700 Pro Gln Ser Leu Glu Glu Met Trp Asp Ile Glu Gly Leu Gln Glu Arg 705 710 715 Leu Lys Asn Asp Phe Asp Leu Glu Leu Pro Ile Lys Glu Trp Leu Asp 725 730 Lys Glu Pro Glu Leu His Glu Glu Thr Leu Arg Glu Arg Ile Tyr Glu 740 745 750 Thr Ala Leu Asp Val Tyr Lys Arg Lys Glu Glu Val Val Gly Ala Glu 760 765 Met Met Arg His Phe Glu Lys Gly Val Met Leu Gln Thr Leu Asp Ser 775 780 Leu Trp Lys Glu His Leu Ala Ala Met Asp Tyr Leu Arg Gln Gly Ile 785 790 795 800 His Leu Arg Gly Tyr Ala Gln Lys Asp Pro Lys Gln Glu Tyr Lys Arg 805 810 Glu Ser Phe Ser Met Phe Ala Ala Met Leu Glu Ser Leu Lys Tyr Glu 820 825 830 Val Ile Ser Thr Leu Ser Lys Val Gln Val Arg Met Pro Glu Glu Val 835 840 845 Glu Ala Met Glu Gln Gln Arg Arg Glu Glu Ala Glu Arg Leu Ala Gln 855 860 Met Gln Gln Leu Ser His Gln Thr Asp Glu Ser Glu Ala Ala Ala Ala 875 880 870 Ile Ala Ala Gln Thr Gly Asp Arg Lys Val Gly Arg Asn Asp Pro Cys 885 890 Pro Cys Gly Ser Gly Lys Lys Tyr Lys Ala Cys His Gly Arg Leu Ser 905

<210> 9637 <211> 150

<212> PRT

<213> Enterobacter cloacae

<400> 9637 Glu His Asn Lys Leu Lys Arg Arg Tyr Leu Arg Leu Phe Tyr Gly Ser Asp Met Met Lys Thr Leu Gln Ile Ala Val Gly Ile Ile Arg Asn 20 25 Pro Gln Asn Gln Ile Phe Ile Thr Gln Arg Ala Ala Asp Ala His Met 4.0 Ala Asn Lys Trp Glu Phe Pro Gly Gly Lys Ile Glu Ser Gly Glu Thr 55 Pro Glu Gln Ala Leu Val Arg Glu Leu Gln Glu Glu Val Gly Ile Thr 70 7.5 Pro Leu Gly Ala Thr Leu Phe Asp Lys Leu Glu Tyr Gln Phe Pro Asp 90 95 85 Arg His Ile Thr Leu Trp Phe Trp Leu Val Glu Ser Trp Glu Gly Glu 100 105 Pro Trp Gly Lys Glu Gly Gln Pro Gly Gly Trp Val Thr Leu His Ala 115 120 125 Ser Asp Ala Glu Lys Phe Pro Pro Ala Asn Ala Pro Val Ile Ser Arg 130 Leu Thr Gly Asn Leu

145 150

<210> 9638 <211> 366 <212> PRT <213> Enterobacter cloacae

<400> 9638

Arg His Trp Ser Cys Ala Phe Asn Ile Phe Ala Ser Asn Pro Arg Asn 10 Pro His Met Arg Ile Glu Glu Asp Leu Lys Leu Gly Phe Lys Asp Val Leu Ile Arg Pro Lys Arg Ser Thr Leu Lys Ser Arg Ser Asp Val Glu 40 35 Leu Glu Arg Gln Phe Thr Phe Lys His Ser Gly Gln Thr Trp Ser Gly 5.5 Val Pro Ile Ile Ala Ala Asn Met Asp Thr Val Gly Thr Phe Glu Met 70 7.5 Ala Thr Ala Leu Ala Gln Phe Asp Ile Leu Thr Ala Val His Lys His 90 8.5 Tyr Ser Ala Glu Glu Trp Asp Ala Phe Val Ala Ser Ala Ser Ala Glu 105 110 100 Val Val Lys His Val Met Val Ser Thr Gly Thr Ser Asp Ala Asp Phe 115 120 Glu Lys Thr Lys Gln Ile Leu Asn Ala Asn Pro Ala Leu Asn Phe Val 130 135 140 Cys Ile Asp Val Ala Asn Gly Tyr Ser Glu His Phe Val Gln Phe Val 150 155 Ser Lys Ala Arg Glu Ala Trp Pro Thr Lys Thr Ile Ile Ala Gly Asn 170 165 Val Val Thr Gly Glu Met Cys Glu Glu Leu Ile Leu Ser Gly Ala Asp 185 190 180 Ile Val Lys Val Gly Ile Gly Pro Gly Ser Val Cys Thr Thr Arg Val 195 200 205 Lys Thr Gly Val Gly Tyr Pro Gln Leu Ser Ala Val Ile Glu Cys Ala 215 220 Asp Ala Ala His Gly Leu Gly Gly Gln Ile Ile Ser Asp Gly Gly Cys 225 230 235 240

Thr Met Pro Gly Asp Val Ala Lys Ala Phe Gly Gly Gly Ala Asp Phe

250 245 Val Met Leu Gly Gly Met Leu Ala Gly His Glu Glu Ser Gly Gly Thr 265 260 Val Val Glu Glu Asn Gly Glu Lys Phe Met Leu Phe Tyr Gly Met Ser 285 280 275 Ser Glu Ser Ala Met Thr Arg His Val Gly Gly Val Ala Lys Tyr Arg 295 300 Ala Ala Glu Gly Lys Thr Val Lys Leu Pro Leu Arg Gly Pro Val Glu 310 315 Asn Thr Ala Arg Asp Ile Leu Gly Gly Leu Arg Ser Ala Cys Thr Tyr 325 330 Val Gly Ala Ser Arg Leu Lys Glu Leu Thr Lys Arg Thr Thr Phe Ile 340 345 Arg Val Gln Glu Gln Glu Asn Arg Val Phe Asn Ser Leu 360 <210> 9639 <211> 193 <212> PRT <213> Enterobacter cloacae 1.0

<400> 9639 Ile Arg Ser Ser Ser Met Leu Leu Glu Asn Gly Trp Leu Val Asp Ala Arg His Val Pro Ser Pro His His Asp Cys Arg Pro Glu Asp Glu Lys 2.5 3.0 Pro Thr Leu Leu Val Val His Asn Ile Ser Leu Pro Pro Gly Glu Phe 40 4.5 Gly Gly Pro Trp Ile Asp Ala Leu Phe Thr Gly Thr Ile Asp Pro Asp 5.0 5.5 60 Ala His Pro Phe Phe Ala Glu Ile Ala His Leu Arg Val Ser Ala His 7.0 75 Cys Leu Ile Arg Arg Asp Gly Glu Val Val Gln Tyr Val Pro Phe Asp 85 90 95 Lys Arg Ala Trp His Ala Gly Val Ser Lys Tyr Gln Gly Arg Glu Arg 100 105 110 Cys Asn Asp Phe Ser Ile Gly Ile Glu Leu Glu Gly Thr Asp Thr Thr 115 120 125 Pro Tyr Thr Asp Ala Gln Tyr Glu Lys Leu Val Ala Val Thr Gln Thr 135 140 130 Leu Ile Gly Arg Tyr Pro Ala Ile Ala Asp Asn Ile Thr Gly His Ser 150 155 Asp Ile Ala Pro Glu Arg Lys Thr Asp Pro Gly Pro Ala Phe Asp Trp 165 170 175 Ser Arg Phe His Ala Met Leu Thr Thr Ser Ser Asp Lys Glu Ile Thr 180 185

<210> 9640 <211> 881 <212> PRT <213> Enterobacter cloacae

<400> 9640 Arg Glu Arg Pro Pro His Met Thr Met Arg Ala Arg Arg Thr Val Val 10 Leu Glu Glu Tyr Arg Lys His Val Ala Glu Arg Ala Ala Glu Gly Ile 20 Val Pro Lys Pro Leu Asp Ala Thr Gln Met Ala Ala Leu Val Glu Leu 35 4.0

Leu Lys Asn Pro Pro Glu Gly Glu Glu Glu Phe Leu Leu Asp Leu Leu Ile Asn Arg Val Pro Pro Gly Val Asp Glu Ala Ala Tyr Val Lys Ala 70 Gly Phe Leu Ala Ala Val Ala Lys Gly Glu Ala Thr Ser Pro Leu Val 90 85 Thr Pro Glu Lys Ala Ile Glu Leu Leu Gly Thr Met Gln Gly Gly Tyr 100 105 Asn Ile His Pro Leu Ile Asp Ala Leu Asp Asn Asp Lys Leu Ala Pro 115 120 Ile Ala Ala Lys Ala Leu Ser Ser Thr Leu Leu Met Phe Asp Asn Phe 130 135 140 Tyr Asp Val Glu Glu Lys Ala Lys Ala Gly Asn Val Tyr Ala Lys Gln 150 155 Val Met Gln Ser Trp Ala Asp Ala Glu Trp Phe Leu Asn Arg Pro Gln \$165\$Leu Ala Glu Lys Ile Thr Val Thr Val Phe Lys Val Thr Gly Glu Thr 180 185 190 Asn Thr Asp Asp Leu Ser Pro Ala Pro Asp Ala Trp Ser Arg Pro Asp 200 205 195 Ile Pro Leu His Ala Leu Ala Met Leu Lys Asn Ala Arg Glu Gly Ile 210 215 220 Glu Pro Asp Gln Pro Gly Ser Val Gly Pro Ile Lys Gln Ile Glu Ala 230 235 Leu Gln Gln Lys Gly Phe Pro Leu Ala Tyr Val Gly Asp Val Val Gly 245 250 255 Thr Gly Ser Ser Arg Lys Ser Ala Thr Asn Ser Val Leu Trp Phe Met 260 265 270 Gly Asp Asp Ile Pro His Val Pro Asn Lys Arg Gly Gly Leu Cys 275 280 285 Leu Gly Gly Lys Ile Ala Pro Ile Phe Phe Asn Thr Met Glu Asp Ala 295 300 290 Gly Ala Leu Pro Ile Glu Val Asp Val Ser Asn Leu Asn Met Gly Asp 310 315 305 Val Ile Asp Val Tyr Pro Tyr Lys Gly Glu Val Arg Asn His Glu Thr 330 335 325 Asn Glu Leu Leu Ala Ser Phe Glu Leu Lys Thr Asp Val Leu Ile Asp 345 350 340 Glu Val Arg Ala Gly Gly Arg Ile Pro Leu Ile Ile Gly Arg Gly Leu 355 360 365 Thr Thr Lys Ala Arg Glu Ala Leu Gly Leu Pro His Ser Asp Val Phe 370 375 380 370 Arg Gln Ala Lys Asp Val Ala Glu Ser Asn Arg Gly Phe Ser Leu Ala 390 395 400 Gln Lys Met Val Gly Arg Ala Cys Gly Val Ala Gly Ile Arg Pro Gly 410 415 405 Ala Tyr Cys Glu Pro Lys Met Thr Ser Val Gly Ser Gln Asp Thr Thr 425 420 Gly Pro Met Thr Arg Asp Glu Leu Lys Asp Leu Ala Cys Leu Gly Phe 440 445 435 Ser Ser Asp Leu Val Met Gln Ser Phe Cys His Thr Ala Ala Tyr Pro 455 460 Lys Pro Val Asp Val Thr Thr His His Thr Leu Pro Asp Phe Ile Met 475 470 Asn Arg Gly Gly Val Ser Leu Arg Pro Gly Asp Gly Val Ile His Ser 490 485 Trp Leu Asn Arg Met Leu Leu Pro Asp Thr Val Gly Thr Gly Gly Asp 500 505 510 Ser His Thr Arg Phe Pro Ile Gly Ile Ser Phe Pro Ala Gly Ser Gly 525 520 Leu Val Ala Phe Ala Ala Ala Thr Gly Val Met Pro Leu Asp Met Pro

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Glu Ser Val Leu Val Arg Phe Lys Gly Lys Met Gln Pro Gly Ile Thr
                            555
             550
Leu Arg Asp Leu Val His Ala Ile Pro Leu Tyr Ala Ile Lys Gln Gly
         565
                         570
Leu Leu Thr Val Glu Lys Lys Gly Lys Lys Asn Ile Phe Ser Gly Arg
      580
                      585
                                     590
Ile Leu Glu Ile Glu Gly Leu Pro Asp Leu Lys Val Glu Gln Ala Phe
    595 600
                          605
Glu Leu Thr Asp Ala Ser Ala Glu Arg Ser Ala Ala Gly Cys Thr Ile
 610 615
                       620
Lys Leu Asn Lys Glu Pro Ile Ile Glu Tyr Leu Asn Ser Asn Ile Val
625 630
                           635
Leu Leu Lys Trp Met Ile Ala Glu Gly Tyr Gly Asp Arg Arg Thr Leu
          645 650 655
Glu Arg Arg Ile Gln Gly Met Glu Lys Trp Leu Ala Asp Pro Gln Leu
        660 665
Leu Glu Ala Asp Ala Asp Ala Glu Tyr Ala Ala Val Ile Asp Ile Asp
          680
                        685
Leu Ala Asp Ile Lys Glu Pro Ile Leu Cys Ala Pro Asn Asp Pro Asp
690 695 700
Asp Ala Arg Pro Leu Ser Glu Val Gln Gly Glu Lys Ile Asp Glu Val
705 710 715 720
Phe Ile Gly Ser Cys Met Thr Asn Ile Gly His Phe Arg Ala Ala Gly
           725 730 735
Lys Leu Leu Asp Thr His Lys Gly Gln Leu Pro Thr Arg Leu Trp Val
            745 750
Ala Pro Pro Thr Arg Met Asp Ala Ala Gln Leu Thr Glu Glu Gly Tyr
   755 760 765
Tyr Ser Val Phe Gly Lys Ser Gly Ala Arg Ile Glu Ile Pro Gly Cys
               775 780
Ser Leu Cys Met Gly Asn Gln Ala Arg Val Ala Asp Gly Ala Thr Val
785 790 795 800
Val Ser Thr Ser Thr Arg Asn Phe Pro Asn Arg Leu Gly Thr Gly Ala
          805 810 815
Asn Val Phe Leu Ala Ser Ala Glu Leu Ala Ala Val Ala Ala Leu Ile
       820 825 830
Gly Lys Leu Pro Thr Pro Glu Glu Tyr Gln Thr Phe Val Ala Gln Val
     835 840 845
Asp Lys Thr Ala Val Asp Thr Tyr Arg Tyr Leu Asn Phe Asp Gln Leu
 850 855 860
Ser Gln Tyr Thr Glu Lys Ala Asp Gly Val Ile Phe Gln Thr Ala Val
                             875
              870
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<210> 9641
<211> 185
<212> PRT
<213> Enterobacter cloacae
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Pro His Glu Val Asp Phe Met Thr Ala Ser Ser Tyr Gly Ser Gly Met

Ser Thr Thr Arg Asp Val Lys Ile Leu Lys Asp Leu Asp Glu Asp Ile 90 Arg Gly Lys Asp Val Leu Ile Val Glu Asp Ile Ile Asp Ser Gly Asn 110 100 105 Thr Leu Ser Lys Val Arg Glu Ile Leu Ser Leu Arg Glu Pro Lys Ser 115 120 Leu Ala Ile Cys Thr Leu Leu Asp Lys Pro Glu Arg Arg Glu Val Gln 135 140 Val Pro Val Glu Phe Val Gly Phe Ser Ile Pro Asp Glu Phe Val Val 145 150 155 Gly Tyr Gly Ile Asp Tyr Ala Gln Arg Tyr Arg His Leu Pro Tyr Val 165 170 Gly Lys Val Val Ile Leu Asp Glu

<210> 9642 <211> 312 <212> PRT

Asp Lys Gln Gly Asp Lys Ala

<213> Enterobacter cloacae <400> 9642 Val Glu Phe Met Ala Ile Ala Leu Glu Leu Glu Gln Leu Lys Lys Thr 10 Tyr Pro Gly Gly Val Gln Ala Leu Arg Gly Ile Asp Leu Lys Val Glu 25 Ala Gly Asp Phe Tyr Ala Leu Leu Gly Pro Asn Gly Ala Gly Lys Ser 4.0 4.5 3.5 Thr Thr Ile Gly Ile Ile Ser Ser Leu Val Asn Lys Thr Ser Gly Arg 60 55 Val Ser Val Phe Gly Tyr Asp Leu Gln Lys Asp Val Val Asn Ala Lys 65 70 75 80 Arg Gln Leu Gly Leu Val Pro Gln Glu Phe Asn Phe Asn Pro Phe Glu 95 85 90 Thr Val Gln Gln Ile Val Val Asn Gln Ala Gly Tyr Tyr Gly Val Glu 100 105 110 Arg Lys Glu Ala Leu Glu Arg Ser Glu Lys Tyr Leu Lys Gln Leu Asp 120 125 115 Leu Trp Glu Lys Arg Asn Glu Arg Ala Arg Met Leu Ser Gly Gly Met 135 140 130 Lys Arg Arg Leu Met Ile Ala Arg Ala Leu Met His Glu Pro Lys Leu 150 155 145 Leu Ile Leu Asp Glu Pro Thr Ala Gly Val Asp Ile Glu Leu Arg Arg 170 175 165 Ser Met Trp Gly Phe Leu Lys Asp Leu Asn Asp Lys Gly Thr Thr Ile 180 185 190 Ile Leu Thr Thr His Tyr Leu Glu Glu Ala Glu Met Leu Cys Arg Asn 195 200 205 Ile Gly Ile Ile Gln His Gly Glu Leu Val Glu Asn Thr Ser Met Lys 210 215 220 Asn Leu Leu Ser Lys Leu Lys Ser Glu Thr Phe Ile Leu Asp Leu Ala 230 235 240 Ala Lys Ser Ala Leu Pro Lys Leu Glu Gly Tyr Asn Tyr Arg Leu Val 245 250 255 Asp Thr Ser Thr Leu Glu Val Glu Val Leu Arg Glu Gln Gly Ile Asn 265 260 Ser Val Phe Ser Gln Leu Ser Ala Gln Gly Ile Gln Val Leu Ser Met 280 285 Arg Asn Lys Ala Asn Arg Leu Glu Glu Leu Phe Val Ser Leu Val His 295 300

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<210> 9643
<211> 156
<212> PRT
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<213> Enterobacter cloacae

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Pro Phe Val Leu Leu His Asp Leu Tyr Lys His 150

<210> 9644

<211> 437 <212> PRT

<213> Enterobacter cloacae

<400> 9644 Thr Leu Val Leu Met Ser Leu Leu Leu Gln Trp Arg Leu Ile Phe Arg 1.0 Ile Asp Leu Tyr Pro Met Leu Met Arg Val Ile Phe Ile Leu Leu Val 25 30 20 Leu Val Ser Gly Gly Ala Ser Ala Ser Leu Thr Ser Gln Gln Gly Leu 3.5 40 4.5 Pro Ala Gln Tyr Met Gln Thr Thr Glu Asp Ala Ala Ile Trp Ala Gln 55 Val Gly Asn Ala Val Val Asn Val Gly Asn Val Arg Ala Gly Gln Ile 7.0 7.5 Leu Ala Val Phe Pro Ala Ala Ala Asp Tyr Tyr Glu Phe Arg Phe Gly 90 Phe Gly Thr Gly Phe Ile Asp Lys Asp His Leu Glu Lys Val Gln Gly 105 100 Lys Gln Arg Val Glu Asp Ser Leu Gly Asp Leu Asn Lys Pro Leu Ser 120 125 115 Asn Gln Asn Leu Ile Thr Trp Lys Asp Thr Pro Val Tyr Asn Ala Pro 140 135 130 Ser Ser Gly Ser Ala Pro Phe Gly Thr Leu Ser Ala Asn Leu Arg Tyr 155 Pro Ile Leu Asn Lys Leu Lys Asp Arg Leu Asn Gln Thr Trp Phe Gln 170 165 Ile Arg Ile Gly Asn Arg Leu Ala Trp Ile Ser Ser Leu Asp Ala Gln 185 180 Glu Asp Asn Gly Leu Pro Val Leu Thr Tyr His His Ile Leu Arg Asp 195 200

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Glu Glu Asn Thr Arg Phe Arg His Thr Ser Thr Thr Thr Ser Val Arg
      215
210
Ala Phe Asn Asn Gln Met Ala Trp Leu Arg Asp Gln Gly Tyr Thr Thr
225 230
                           235
Leu Thr Met Tyr Gln Leu Glu Gly Tyr Val Arg Asn Lys Met Asn Leu
     245 250
                                       255
Pro Ala Lys Ala Val Val Ile Thr Phe Asp Asp Gly Leu Lys Ser Val
     260 265 270
Ser Arg Tyr Ala Tyr Pro Val Leu Lys Glu Tyr Gly Phe Asn Ala Thr
    275 280 285
Ala Phe Ile Ile Ser Ser Arg Ile Lys Gly His Pro Gln Lys Trp Asp
290 295 300
Pro Lys Ser Leu Gln Phe Met Ser Val Gln Glu Ile Lys Gly Ile Gln
   310 315
Asp Val Phe Asp Ile Gln Ser His Thr His Phe Leu His Arg Val Asp
      325 330 335
Gly Tyr Lys His Pro Ile Leu Leu Ser Arg Ser Tyr His Val Ile Leu
       340 345 350
Phe Asp Phe Glu Arg Ser Arg Arg Ala Leu Ala Gln Phe Asn Pro Arg
355 360 365
Val Leu Tyr Val Ser Tyr Pro Phe Gly Gly Tyr Asp Asn Lys Ala Ile
370 375 380
 370
Lys Ala Ala Asn Asp Ala Gly Phe His Leu Ala Val Thr Thr Met Lys
385 390 395 400
Gly Lys Val Lys Pro Gly Asp Asn Pro Phe Leu Leu Lys Arg Leu Tyr
      405 410 415
Ile Leu Arg Thr Asp Ser Leu Glu Thr Met Ser Arg Leu Ile Ser Asn
       420
                     425
Gln Pro Gln Gly
435
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<210> 9645 <211> 173 <212> PRT

<213> Enterobacter cloacae

<400> 9645 Gln Gly Gly Arg Asp Ser Arg Leu Ser Arg Val Val Arg Gly Gln Ala 10 Leu Ala Ser His Leu Phe Phe Ala Asp Phe Cys Gln Arg Phe Thr Val 2.0 2.5 Asp Ala Gln Ile Gly Cys Trp Thr Arg Phe Gln Ala Thr Asn Thr Asp 35 40 Phe Asn Thr Ala Gly Phe Ala Val Ala Lys Ile Phe Val Leu Asp Leu 55 Leu Gln Arg Phe Phe Asp Leu Phe Asp Gln Phe Ala Leu Ala Val Thr 7.5 7.0 Val Thr Gln Phe Glu Ala Glu Leu Phe Phe Leu Ser Gly Thr Val Asp 8.5 90 Arg Val Arg Glu Val Ser Ser Phe Val Leu His Met Cys Asn Gly Ala 105 110 100 Ile Asp Phe Ile Pro Glu Leu Ile Thr Pro Cys Phe Lys Asn Thr Leu 115 125 120 Glu Val Arg Gln Leu Gly Phe Val His Ile Leu Phe Ala Arg Leu Leu 140 135 130 Leu Ile Arg Leu His Pro Ser Asp Gly Glu Asn Thr Gln Gly Arg Cys 150 155 Phe Thr Val Leu Pro Phe Leu His Val Ala Ser Pro 165 170

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<211> 643
<212> PRT
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<213> Enterobacter cloacae

435

<400> 9646 Pro Ala Ser Gly Val Arg Gly Lys Arg Ile Met Ala Ile Glu Ile Asn Val Pro Asp Ile Gly Ala Asp Glu Val Glu Ile Thr Glu Ile Leu Val 20 2.5 Lys Val Gly Asp Lys Val Glu Ala Glu Gln Ser Leu Ile Thr Val Glu 40 Gly Asp Lys Ala Ser Met Glu Val Pro Ser Pro Gln Ala Gly Ile Val 5.5 60 Lys Glu Ile Lys Val Ser Val Gly Asp Lys Thr Glu Thr Gly Lys Leu 70 75 Ile Met Ile Phe Asp Ser Ala Asp Gly Ala Ala Ala Ala Ala Pro Ala 85 90 Gln Glu Glu Lys Lys Glu Ala Ala Pro Ala Ala Ala Pro Ala Ala Ala 100 105 110 Ala Ala Ala Lys Glu Val Asn Val Pro Asp Ile Gly Gly Asp Glu Val 120 125 Glu Val Thr Glu Ile Leu Val Lys Val Gly Asp Thr Val Ala Ala Glu 130 135 140 Gln Ser Leu Ile Thr Val Glu Gly Asp Lys Ala Ser Met Glu Val Pro 145 150 155 160 Ala Pro Phe Ala Gly Thr Val Lys Glu Ile Lys Ile Asn Thr Gly Asp 165 170 175 Lys Val Ser Thr Gly Ser Leu Ile Met Ile Phe Glu Val Ala Gly Ser 180 185 190 Glu Gly Ala Ala Ala Pro Ala Lys Ala Glu Ala Ala Pro Ala Pro Ala 195 200 205 Ala Ala Pro Ala Ala Ala Gly Gly Val Lys Asp Val Asn Val Pro Asp 210 215 220 Ile Gly Gly Asp Glu Val Glu Val Thr Glu Val Met Val Lys Val Gly 225 230 235 Asp Lys Val Ala Ala Glu Gln Ser Leu Ile Thr Val Glu Gly Asp Lys 245 250 255 Ala Ser Met Glu Val Pro Ala Pro Phe Ala Gly Thr Val Lys Glu Ile 260 265 270 Lys Ile Ser Thr Gly Asp Lys Val Ser Thr Gly Ser Leu Ile Met Val 275 280 285 Phe Glu Val Glu Gly Ala Ala Pro Ala Ala Ala Pro Ala Ala Ala Ala 295 300 Ala Pro Ala Pro Ala Ala Ala Pro Ala Gln Ala Ala Lys Pro Ala Ala 310 315 Ala Pro Ala Ala Lys Ala Glu Lys Ser Glu Phe Ala Glu Asn Asp Ala 325 330 Tyr Val His Ala Thr Pro Leu Ile Arg Arg Leu Ala Arg Glu Phe Gly 345 340 350 Val Asn Leu Ala Lys Val Lys Gly Thr Gly Arg Lys Gly Arg Ile Leu 360 365 355 Arg Glu Asp Val Gln Ala Tyr Val Lys Asp Ala Val Lys Arg Ala Glu 375 380 Ala Ala Pro Ala Ala Ala Gly Gly Gly Ile Pro Gly Met Leu Pro 390 395 Trp Pro Lys Val Asp Phe Ser Lys Phe Gly Glu Ile Glu Glu Val Glu 410 405 415 Leu Gly Arg Ile Gln Lys Ile Ser Gly Ala Asn Leu Ser Arg Asn Trp 420 425 Val Met Ile Pro His Val Thr His Phe Asp Lys Thr Asp Ile Thr Asp

440

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Leu Glu Ala Phe Arg Lys Gln Gln Asn Ala Glu Ala Glu Lys Arg Lys
      455
Leu Asp Val Lys Phe Thr Pro Val Val Phe Ile Met Lys Ala Val Ala
465
     470 475
Ala Ala Leu Glu Gln Met Pro Arg Phe Asn Ser Ser Leu Ser Glu Asp
     485 490
Gly Gln Lys Leu Thr Leu Lys Lys Tyr Ile Asn Ile Gly Val Ala Val
       500 505 510
Asp Thr Pro Asn Gly Leu Val Val Pro Val Phe Lys Asp Val Asn Lys
    515 520 525
Lys Ser Val Thr Glu Leu Ser Arg Glu Leu Thr Thr Ile Ser Lys Lys
530 535 540
Ala Arg Asp Gly Lys Leu Thr Ala Gly Glu Met Gln Gly Gly Cys Phe
545 550 555 560
Thr Ile Ser Ser Ile Gly Gly Leu Gly Thr Thr His Phe Ala Pro Ile
          565 570 575
Val Asn Ala Pro Glu Val Ala Ile Leu Gly Val Ser Lys Ser Ala Met
        580 585 590
Glu Pro Val Trp Asn Gly Lys Glu Phe Val Pro Arg Leu Met Met Pro
595 600 605
Ile Ser Leu Ser Phe Asp His Arg Val Ile Asp Gly Ala Asp Gly Ala
610 615 620
Arg Phe Ile Thr Ile Ile Asn Asn Met Leu Ser Asp Ile Arg Arg Leu
           630
                         635
Val Met
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<210> 9647 <211> 161 <212> PRT <213> Enterobacter cloacae

<400> 9647 Gly His Gln Ala Ala Gly Ser Cys Ser His Leu Phe Ile Phe Ile Pro 10 15 Pro Thr Ser Pro Ala Phe Phe Leu Pro Arg Cys Cys Asp Asn Tyr Leu 20 2.5 Asn Gly Phe Ala Glu Glu Asn Ala Met Asp Tyr Glu Phe Leu Arg Asp 40 45 35 Ile Thr Gly Val Val Lys Val Arg Met Ser Met Gly His Glu Ala Val 55 60 Gly His Trp Phe Asn Glu Glu Val Lys Glu Asn Leu Ala Leu Leu Asp 70 75 65 Glu Val Glu Gln Ala Ala Glu Thr Val Lys Gly Ser Glu Arg Ser Trp 85 90 Gln Arg Ala Gly His Glu Tyr Thr Leu Trp Met Asp Gly Glu Glu Val 105 110 100 Met Val Arg Ala Asn Gln Leu Glu Leu Ser Gly Asp Glu Met Glu Glu 115 120 125 Gly Met Ser Tyr Tyr Asp Glu Glu Ser Leu Ser Leu Cys Gly Val Glu 140 135 130 Asp Phe Leu Ser Val Val Asn Ala Tyr Arg Asp Phe Met Lys Gln Lys 155 150

<210> 9648 <211> 810

<212> PRT <213> Enterobacter cloacae

<400> 9648 Val Ser Ser Leu Pro Val Ala Val Val Leu Pro Glu Leu Leu Ala Ala 10 Leu Glu His Ala Pro Gln Val Leu Leu Ser Ala Pro Thr Gly Ala Gly 20 3.0 Lys Ser Thr Trp Leu Pro Leu Gln Ile Leu Arg Asp Gly Asn Ile Ser 35 4.0 Gly Lys Ile Ile Leu Leu Glu Pro Arg Arg Leu Ala Ala Arg Asn Val 55 Ala Gln Arg Leu Ala Glu Leu Leu Asn Glu Lys Pro Gly Glu Thr Val 65 70 75 Gly Tyr Arg Met Arg Ala Glu Thr Cys Val Gly Pro Ser Thr Arg Leu ^{*} 90 8.5 Glu Val Val Thr Glu Gly Ile Leu Thr Arg Met Leu Gln Asn Asp Pro 105 110 100 Glu Leu Thr Gly Val Gly Leu Val Ile Leu Asp Glu Phe His Glu Arg 125 115 120 Ser Leu Gln Ala Asp Leu Ala Leu Ala Leu Leu Leu Asp Val Gln Gln 135 140 Gly Leu Arg Asp Asp Leu Arg Leu Leu Ile Met Ser Ala Thr Leu Asp 145 150 155 Asn Glu Arg Leu Arg Gln Thr Leu Pro Asp Ala Pro Met Ile Ser Ser 165 170 175 Glu Gly Arg Ala Phe Pro Val Glu Arg Arg Tyr Gln Pro Leu Pro Ala 180 185 190 His Gln Arg Phe Asp Glu Ala Val Ala Ile Ala Thr Ala Glu Leu Leu 200 205 195 Arg Gln Glu Pro Gly Ser Leu Leu Leu Phe Leu Pro Gly Val Gly Glu 210 215 220 Ile Gln Arg Val Gln Glu Gln Leu Ala Ser Arg Val Asp Ser Asp Val 225 230 235 Met Leu Cys Pro Leu Tyr Gly Ala Leu Pro Leu Ala Asp Gln Arg Lys 245 250 255 Ala Ile Leu Pro Ala Pro Ala Gly Gln Arg Lys Val Val Leu Ala Thr 265 270 260 Asn Ile Ala Glu Thr Ser Leu Thr Ile Glu Gly Ile Arg Leu Val Val 280 285 Asp Ser Thr Leu Glu Arg Val Ala Ser Phe Asp Pro Arg Ser Gly Leu 295 300 290 Thr Arg Leu Leu Thr Gln Arg Ile Ser Gln Ala Ser Met Val Gln Arg 310 315 320 Ala Gly Arg Ala Gly Arg Leu Glu Pro Gly Ile Cys Leu His Leu Thr 325 330 Ser Ala Glu Gln Ala Glu Arg Ala Ala Phe Gln Ser Thr Pro Glu Ile 345 340 Leu Gln Ser Asp Leu Ser Gly Leu Val Met Asp Met Met Gln Trp Gly 360 355 Cys Pro Asp Pro Asp Gln Leu Thr Trp Leu Asn Pro Pro Pro Val Val 380 375 370 Asn Leu Ser Ala Ala Arg Ser Leu Leu Thr Gln Leu Gly Ala Leu Glu 395 390 Gly Glu Arg Leu Thr Ala Arg Gly Gln Lys Met Ala Ala Leu Gly Asn 415 405 410 Asp Pro Arg Leu Ala Ala Met Leu Val Ala Ala Gln Gly Asp Asp Glu 420 425 Ile Ala Thr Ala Ala Lys Leu Ala Ala Ile Leu Glu Glu Pro Pro Arg 435 440 445 Gly Gly Gly Ser Asp Leu Gly Gln Ala Phe Ser Arg His Gln Gly Asn 450 455 460 Trp Gln Gln Arg Ala Gln Gln Leu Cys Lys Arg Leu Asn Cys Arg Gly 470 475

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Gly Ser Pro Asp Ser Asp Lys Val Ile Pro Leu Leu Ala Gln Ala Phe
           485
                          490
Pro Asp Arg Ile Ala Arg Arg Gly Leu Asp Gly Arg Tyr Gln Leu
        500
                      505
Ala Asn Gly Met Gly Ala Met Leu Asp Ser Asp Asp Ala Leu Thr Arg
  515
                    520
                                  525
His Glu Trp Leu Ile Ala Pro Leu Leu Leu Gln Gly Ser His Ser Pro
 530 535
                               540
Asp Ala Arg Ile Leu Gln Ala Val Ala Val Asp Ile Asp Leu Leu Thr
545 550 555
Arg Ala Cys Pro Gln Leu Leu Gln Gln Ser Asp Ile Val Glu Trp Asp
      565 570 575
Asp Thr Gln Gly Thr Leu Lys Ala Phe Arg Arg Ser Gln Ile Gly Lys
        580 585 590
Leu Thr Leu Gly Thr Lys Pro Leu Ala Lys Pro Ser Glu Glu Glu Leu
     595 600 605
His Gln Ala Met Leu Asn Gly Ile Arg Glu Lys Gly Leu Ser Val Leu
 610 615 620
Asn Trp Thr Pro Glu Ala Glu Gln Tyr Arg Ile Arg Leu His Cys Ala
   630 635
Ala Lys Trp Leu Pro Glu Gln Gly Trp Pro Ala Val Asp Asp Glu Thr
        645 650 655
Leu Leu Ala Thr Leu Glu Gln Trp Leu Leu Pro Gln Met Ser Gly Val
        660 665 670
His Ser Leu Arg Ala Leu Lys Ala Leu Asp Val Lys Ala Ala Leu Gln
                   680 685
Asn Leu Leu Asp Trp Ser Leu Arg Gln Arg Leu Asp Ser Glu Leu Pro
                695
                               700
Gly His Tyr Thr Val Pro Thr Gly Ser Arg Ile Ala Ile Arg Tyr His
705 710
                            715
Glu Asp Asn Pro Pro Ala Leu Ala Val Arg Met Gln Glu Met Phe Gly
      725
                          730
                                        735
Glu Ala Thr Thr Pro Ser Ile Ala Glu Gly Arg Val Pro Leu Val Leu
        740 745 750
Glu Leu Leu Ser Pro Ala His Arg Pro Leu Gln Ile Thr Arg Asp Leu
    755
                   760 765
Gly Ala Phe Trp Ala Gly Ser Tyr Arg Glu Val Gln Lys Glu Met Lys
                 775
                               780
Gly Arg Tyr Pro Lys His Val Trp Pro Asp Asp Pro Ala Asn Thr Ala
            790
                            795
Pro Thr Arg Arg Thr Lys Lys Tyr Ser
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<210> 9649
<211> 652
<212> PRT
<213> Enterobacter cloacae
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805

85

Arg Ser Arg Ile Asp Gly Lys Val Trp Gln Leu Pro Ala Ala Val Tyr 105 Gly Arg Met Val Asn Leu Glu Pro Asp Met Ser Ile Ser Lys Asn Glu 120 Met Val Lys Leu Leu Glm Ala Thr Glm Tyr Arg Glm Val Thr Lys Met 130 135 140 Thr Arg Pro Gly Glu Phe Thr Val Gln Ala Lys Ser Ile Glu Met Ile 145 150 155 Arg Arg Pro Phe Asp Phe Pro Asp Ser Lys Glu Gly Gln Val Arg Ala 165 170 175 Arg Leu Thr Phe Asp Gly Asp Arg Leu Glu Thr Ile Glu Asn Met Asp 180 185 190 Asn Asp Arg Gln Phe Gly Phe Phe Arg Leu Asp Pro Arg Leu Ile Thr 195 200 205 Met Leu Ser Ser Ala Asn Gly Glu Gln Arg Leu Phe Val Ala Arg Asn 210 215 220 Gly Phe Pro Asp Leu Leu Val Asp Thr Leu Leu Ala Thr Glu Asp Arg 225 230 235 240 His Phe Tyr Glu His Asp Gly Ile Ser Leu Tyr Ser Ile Gly Arg Ala 245 250 255 Val Leu Ala Asn Leu Thr Ala Gly Arg Thr Val Gln Gly Ala Ser Thr 260 265 270 Leu Thr Gln Gln Leu Val Lys Asn Leu Phe Leu Ser Ser Glu Arg Ser 275 280 285 Tyr Trp Arg Lys Ala Asn Glu Ala Tyr Met Ala Val Leu Met Asp Ala 290 295 300 Arg Tyr Ser Lys Asp Arg Ile Leu Glu Leu Tyr Met Asn Glu Val Tyr 310 315 320 Leu Gly Gln Ser Gly Asp Asn Glu Ile Arg Gly Phe Pro Leu Ala Ser 325 330 335 Leu Tyr Tyr Phe Gly Arg Pro Val Glu Glu Leu Ser Leu Asp Gln Gln 340 345 350 Ala Leu Leu Val Gly Met Val Lys Gly Ala Ser Ile Tyr Asn Pro Trp 355 360 365 Arg Asn Pro Lys Leu Ala Leu Glu Arg Arg Asn Leu Val Leu Arg Leu 370 375 380 Leu Gln Gln Gln Gln Val Ile Asp Gln Glu Leu Tyr Asp Met Leu Ser 390 395 Ala Arg Pro Leu Gly Val Gln Pro Arg Gly Gly Val Ile Ser Pro Gln 405 410 Pro Ala Phe Met Gln Met Val Arg Gln Glu Leu Gln Ser Lys Leu Gly 420 425 430 Asp Lys Val Lys Asp Leu Ser Gly Val Lys Ile Phe Thr Thr Phe Asp 435 440 445 Ser Val Ala Gln Asp Ala Ala Glu Lys Ala Ala Val Glu Gly Ile Pro 450 455 460 Ala Leu Lys Lys Gln Arg Lys Leu Ser Asp Leu Glu Thr Ala Met Val 470 475 Val Val Asp Arg Asn Thr Gly Glu Val Arg Ala Met Val Gly Gly Ala 485 490 495 Glu Pro Gln Tyr Ala Gly Tyr Asn Arg Ala Met Gln Ala Arg Arg Ser 500 505 510 Ile Gly Ser Leu Ala Lys Pro Ala Thr Tyr Leu Thr Ala Leu Ser Gln 520 525 515 Pro Asn Leu Tyr Arg Leu Asn Thr Trp Ile Ala Asp Ala Pro Ile Ser 530 535 540 Leu Arg Gln Pro Asn Gly Gln Val Trp Ser Pro Gln Asn Asp Asp Arg 550 555 Gln Phe Ser Gly Gln Val Met Leu Val Asp Ala Leu Thr Arg Ser Met 570 565 Asn Val Pro Thr Val Asn Leu Gly Met Ala Leu Gly Leu Pro Ala Ile

115

585 580 Thr Asp Thr Trp Gln Lys Leu Gly Val Pro Lys Asp Gln Leu His Pro 600 605 595 Val Pro Ala Met Ile Leu Gly Ala Leu Asn Leu Thr Pro Ile Glu Val 615 620 Ala Gln Ala Phe Gln Thr Ile Ala Ser Gly Gly Asn Arg Ala Arg Val 625 630 635 Gln Pro Arg Val Leu Ala Arg Ser Pro Arg Ser Ser 645 <210> 9650 <211> 174 <212> PRT <213> Enterobacter cloacae <400> 9650 Gln Arg Ser Gln Pro Val Gly Cys Gln Arg Gly Ser Gly Arg Gly His 10 Ser Val Arg Gly Asn Ser Val Trp Arg Leu Ala Ser Cys Arg Gln Tyr 20 25 30 Gly His Lys Arg Arg Thr Ser Arg Trp Ala Ile Thr Ile Glu Ser Ala 35 40 45 Glu Glu Ile Ile Gln Arg Ala Thr Pro Ile Cys Cys Ser Arg Thr Ser 55 60 Val Ser Val Val Glu Leu Val Trp Arg Val Asp Ser Thr Arg Cys Pro 7.0 7.5 Val Cys Ala Ala Leu Met Ala Ile Ser Ala Val Ser Pro Ser Arg Ile 8.5 90 95 Ser Pro Thr Ile Met Met Ser Gly Ser Cys Leu Ser Arg Ala Arg Ser 100 105 110 Thr Leu Trp Lys Val Ser Pro Ala Arg Gly Leu Ile Cys Val Trp Phe 115 120 125 Lys Pro Ala Ser Gly Ile Ser Thr Gly Ser Ser Thr Leu Gln Ile Leu 135 Thr Ser Gly Val Phe Arg Ala Cys Asn Ala Leu Tyr Ser Val Thr Val 145 150 155 Phe Pro Leu Pro Val Gly Pro Val Thr Arg Ile Asn Pro 165 <210> 9651 <211> 288 <212> PRT <213> Enterobacter cloacae <400> 9651 Gly Asp Asn Met Thr Leu Phe Thr Met Leu Leu Val Met Ile Ala Glu 10 Arq Leu Phe Lys Leu Gly Glu His Trp His Leu Asp His Arg Leu Glu 25 Val Leu Phe Arg Arg Ile Arg His Phe Ser Met Leu Arg Thr Leu Leu 4.5 35 40 Met Ala Ala Gly Val Met Ala Ile Thr Phe Leu Leu Leu Arg Ser Leu 5.0 Tyr Gly Leu Phe Phe Asn Val Pro Leu Leu Val Val Trp Ile Leu Leu 75 70 8.0 Gly Val Leu Cys Ile Gly Ala Gly Lys Val Arg Leu His Tyr His Ala 90 Tyr Leu Lys Ala Ala Ser Arg Asp Asp Ala His Ala Arg Gly Ala Met 100 105 Ala Ser Glu Leu Thr Met Ile His Gly Val Pro Pro Asp Cys Asp Glu

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Arg Glu Phe Leu Arg Glu Leu Gln Asn Ala Leu Leu Trp Ile Asn Phe
         135 140
Arg Tyr Tyr Leu Ala Pro Leu Phe Trp Phe Val Val Gly Gly Pro Trp
                           155
          150
Gly Pro Val Leu Leu Met Gly Tyr Ala Phe Leu Arg Ala Trp Gln Thr
                          170
         165
Trp Leu Ala Arg Tyr Leu Thr Pro His Glu Arg Leu Gln Ser Gly Ile
                                       190
      180
                       185
Asp Ala Ile Leu His Val Leu Asp Trp Leu Pro Val Arg Leu Val Gly
                    200
                                    205
   195
Val Val Tyr Ala Leu Ile Gly His Gly Glu Lys Ala Leu Pro Ala Trp
 210 215
                                220
Phe Val Ser Leu Ala Asp Arg His Thr Ser Gln Tyr Gln Val Leu Thr
225 230 235
Arg Leu Ala Gln Phe Ser Leu Ala Arg Glu Pro His Thr Asp Lys Val
          245 250 255
Ala Thr Pro Lys Ala Ala Val Ser Met Ala Lys Lys Thr Ser Phe Val
   260 265 270
Val Val Val Ile Val Ala Leu Leu Thr Ile Tyr Gly Thr Leu Val
            280
<210> 9652
<211> 265
<212> PRT
<213> Enterobacter cloacae
<400> 9652
Leu Arg Ala Lys Arg Arg Lys Thr Gly Asn Met Ala Tyr Ser Lys Ile
                         10
Arg Gln Pro Lys Leu Ser Asp Val Ile Glu Gln Gln Leu Glu Phe Leu
                    25
                              30
Ile Leu Glu Gly Thr Leu Arg Pro Gly Glu Lys Leu Pro Pro Glu Arg
               40 45
Glu Leu Ala Lys Gln Phe Asp Val Ser Arg Pro Ser Leu Arg Glu Ala
              55
Ile Gln Arg Leu Glu Ala Lys Gly Leu Leu Leu Arg Arg Gln Gly Gly
65 70 75
Gly Thr Phe Val Gln Asn Ser Leu Trp Gln Ser Phe Ser Asp Pro Leu
               90 95
           8.5
Val Glu Leu Leu Ser Asp His Pro Glu Ser Gln Phe Asp Leu Leu Glu
       100 105 110
Thr Arg His Ala Leu Glu Gly Ile Ala Ala Tyr Tyr Ala Ala Leu Arg
     115 120 125
Ser Thr Asp Glu Asp Arg Val Arg Ile Arg Glu Leu His Gln Ala Ile
                 135 140
Glu Arg Ala Gln Gln Ser Gly Asp Leu Asp Ala Glu Ser Ser Ala Val
             150 155 160
Val Gln Tyr Gln Ile Ala Val Tnr Glu Ala Ala His Asn Val Val Leu
           165 170 175
Leu His Leu Leu Arg Cys Met Glu Pro Met Leu Ala Gln Asn Val Arg
                        185 190
      180
Gln Asn Phe Glu Leu Leu Tyr Ala Arg Arg Glu Met Leu Pro Leu Val
     195
                     200 205
Ser Asn His Arg Thr Arg Val Phe Glu Ala Ile Met Ala Gly Glu Pro
                                 220
                 215
Glu Gln Ala Arg Glu Ala Ser His Arg His Leu Ala Phe Ile Glu Glu
225 230 235
Ile Leu Leu Asp Arg Ser Arg Glu Gln Ser Arg Arg Glu Arg Ser Leu
            245
                          250
Arg Arg Ile Gln Gln Arg Lys Asp
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<210> 9653
<211> 893
<212> PRT
<213> Enterobacter cloacae
<400> 9653
Ile Arg Asn Thr Pro Met Ser Glu Arg Leu Gln Asn Asp Val Asp Pro
                          10
Ile Glu Thr Arg Asp Trp Leu Gln Ala Ile Glu Ser Val Ile Arg Glu
      20
                25
Glu Gly Val Glu Arg Ala Gln Tyr Leu Ile Asp Gln Leu Leu Ser Glu
35 40 45
Ala Arg Lys Gly Gly Val Lys Val Ala Ser Gly Ala Gly Ala Ser Asn
      55 60
Tyr Val Asn Thr Ile Ala Val Glu Asp Glu Pro Glu Tyr Pro Gly Asn
65 70 75
Leu Asp Leu Glu Arg Arg Ile Arg Ser Ala Ile Arg Trp Asn Ala Ile
      85 90 95
Met Thr Val Leu Arg Ala Ser Lys Lys Asp Leu Glu Leu Gly Gly His
   100 105 110
Met Ala Ser Phe Gln Ser Ser Ala Thr Ile Tyr Glu Val Cys Phe Asn
115 120 125
His Phe Phe Arg Ala Ala Asn Glu Lys Asp Gly Gly Asp Leu Val Tyr
130 135 140
Phe Gln Gly His Ile Ser Pro Gly Ile Tyr Ala Arg Ala Phe Leu Glu
145 150 155 160
Gly Arg Leu Thr Glu Glu Gln Met Asn Asn Phe Arg Gln Glu Val His
           165 170 175
Gly Lys Gly Leu Ser Ser Tyr Pro His Pro Lys Leu Met Pro Glu Phe
       180 185 190
Trp Gln Phe Pro Thr Val Ser Met Gly Leu Gly Pro Ile Gly Ala Ile
195 200 205
Tyr Gln Ala Lys Phe Leu Lys Tyr Leu Glu His Arg Gly Leu Lys Asp
210 215
                                220
Thr Ser Glu Gln Thr Val Tyr Ala Phe Leu Gly Asp Gly Glu Met Asp 225 230 235 240
Glu Pro Glu Ser Lys Gly Ala Ile Thr Ile Ala Thr Arg Glu Lys Leu
          245 250 255
Asp Asn Leu Cys Phe Ile Ile Asn Cys Asn Leu Gln Arg Leu Asp Gly
       260 265 270
Pro Val Thr Gly Asn Gly Lys Ile Ile Asn Glu Leu Glu Gly Ile Phe
                    280 285
Ala Gly Ala Gly Trp Asn Val Ile Lys Val Met Trp Gly Gly Arg Trp
290 295 300
Asp Glu Leu Leu Arg Lys Asp Thr Ser Gly Lys Leu Ile Gln Leu Met
305 310
                             315 320
Asn Glu Thr Val Asp Gly Asp Tyr Gln Thr Phe Lys Ser Lys Asp Gly
           325 330
                                         335
Ala Tyr Val Arg Glu His Phe Phe Gly Lys Tyr Pro Glu Thr Ala Ala
                    345
       340
                           350
Leu Val Ala Asp Trp Thr Asp Glu Gln Ile Trp Ala Leu Asn Arg Gly
                    360
     355
                                   365
Gly His Asp Pro Lys Lys Val Tyr Ala Ala Leu Lys Lys Ala Arg Glu
                 375
                               380
Thr Lys Gly Lys Ala Thr Val Ile Leu Ala His Thr Ile Lys Gly Tyr
                             395
           390
Gly Met Gly Asp Thr Ala Glu Gly Lys Asn Ile Ala His Gln Val Lys
           405
                          410
Lys Met Asn Met Asp Gly Val Arg Tyr Ile Arg Asp Arg Phe Asn Val
                        425
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Pro Val Thr Asp Glu Gln Val Glu Lys Leu Ser Tyr Ile Thr Phe Pro 440 Glu Gly Ser Glu Glu His Lys Tyr Leu His Glu Arg Arg Gln Ala Leu 455 460 Lys Gly Tyr Leu Pro Ala Arg Gln Pro Asn Phe Thr Glu Lys Leu Glu 470 475 Leu Pro Ala Leu Glu Asp Phe Ser Gln Leu Leu Glu Glu Gln Asn Lys 485 490 495 Glu Ile Ser Thr Thr Ile Ala Phe Val Arg Ala Leu Asn Val Met Leu 505 500 Lys Asn Lys Ser Ile Lys Asp Arg Leu Val Pro Ile Ile Ala Asp Glu 515 520 525 Ala Arg Thr Phe Gly Met Glu Gly Leu Phe Arg Gln Ile Gly Ile Tyr 530 535 540 Ser Pro Asn Gly Gln Gln Tyr Thr Pro Gln Asp Arg Glu Gln Val Ala 545 550 555 Tyr Tyr Lys Glu Asp Glu Lys Gly Gln Ile Leu Gln Glu Gly Ile Asn 565 570 575 Glu Leu Gly Ala Gly Ala Ser Trp Leu Ala Ala Ala Thr Ser Tyr Ser 580 585 590 Thr Asn Asn Leu Pro Met Ile Pro Phe Tyr Ile Tyr Tyr Ser Met Phe 595 600 605 Gly Phe Gln Arg Ile Gly Asp Leu Cys Trp Gln Ala Gly Asp Gln Gln 615 620 Ala Arg Gly Phe Leu Ile Gly Gly Thr Ser Gly Arg Thr Thr Leu Asn 630 635 Gly Glu Gly Leu Gln His Glu Asp Gly His Ser His Ile Gln Ser Leu 645 650 655 Thr Ile Pro Asn Cys Ile Ser Tyr Asp Pro Ser Tyr Ala Tyr Glu Val 665 670 660 Ala Val Ile Met His Asp Gly Leu Gln Arg Met Tyr Gly Glu Ala Gln 675 680 685 Glu Asn Ile Tyr Tyr Tyr Ile Thr Thr Leu Asn Glu Asn Tyr His Met 695 700 Pro Ala Met Pro Ala Gly Ala Glu Glu Gly Ile Arg Lys Gly Ile Tyr 710 715 Lys Leu Glu Thr Ile Glu Gly Ser Lys Gly Lys Val Gln Leu Leu Gly 730 735 725 Ser Gly Ser Ile Leu Arg His Val Arg Glu Ala Ala Glm Ile Leu Ala 740 745 750 Lys Asp Tyr Gly Val Gly Ser Asp Val Tyr Ser Val Thr Ser Phe Thr 760 765 755 Glu Leu Ala Arg Asp Gly Gln Asp Cys Glu Arg Trp Asn Met Leu His 775 780 Pro Met Glu Thr Pro Arg Val Pro Tyr Ile Ala Gln Val Met Asn Asp 790 795 Ala Pro Ala Val Ala Ser Thr Asp Tyr Met Lys Leu Phe Ala Glu Gln 805 810 815 Val Arg Thr Tyr Val Pro Ala Asp Asp Tyr Arg Val Leu Gly Thr Asp 825 820 830 Gly Phe Gly Arg Ser Asp Ser Arg Glu Asn Leu Arg His His Phe Glu 835 840 845 Val Asp Ala Ser Tyr Val Val Val Ala Ala Leu Gly Glu Leu Ala Lys 855 860 850 Arg Gly Glu Ile Asp Lys Lys Val Val Ala Asp Ala Ile Thr Lys Phe 870 875 Asn Ile Asp Ala Asp Lys Val Asn Pro Arg Leu Ala 885 890

<210> 9654 <211> 478 <212> PRT <213> Enterobacter cloacae

<400> 9654 Glu Val Met Met Ser Thr Glu Ile Lys Thr Gln Val Val Leu Gly Ala Gly Pro Ala Gly Tyr Ser Ala Ala Phe Arg Ala Ala Asp Leu Gly 25 Leu Glu Thr Val Ile Val Glu Arg Tyr Ser Thr Leu Gly Gly Val Cys 40 35 Leu Asn Val Gly Cys Ile Pro Ser Lys Ala Leu Leu His Val Ala Lys 55 60 Val Ile Glu Glu Ala Lys Ala Leu Ala Glu His Gly Ile Val Phe Gly 70 75 Glu Pro Lys Thr Asp Ile Asp Lys Ile Arg Thr Trp Lys Glu Lys Val 85 9.0 Ile Thr Gln Leu Thr Gly Gly Leu Ala Gly Met Ala Lys Gly Arg Lys 100 105 110 Val Lys Val Val Asn Gly Leu Gly Lys Phe Thr Gly Ala Asn Thr Leu 115 120 Glu Val Glu Gly Glu Asn Gly Lys Thr Val Ile Asn Phe Asp Asn Ala 130 135 140 Ile Ile Ala Ala Gly Ser Arg Pro Ile Glu Leu Pro Phe Ile Pro His 150 155 Glu Asp Pro Arg Val Trp Asp Ser Thr Asp Ala Leu Glu Leu Lys Thr 165 170 175 Val Pro Lys Arg Leu Leu Val Met Gly Gly Gly Ile Ile Gly Leu Glu 180 185 190 Met Gly Thr Val Tyr His Ala Leu Gly Ser Glu Ile Asp Val Val Glu 195 200 205 Met Phe Asp Gln Val Ile Pro Ala Ala Asp Lys Asp Ile Val Lys Val 210 215 220 Phe Thr Lys Arg Ile Ser Lys Lys Phe Asn Leu Met Leu Glu Thr Lys 225 230 235 Val Thr Ala Val Glu Ala Lys Glu Asp Gly Ile Tyr Val Ser Met Glu 245 250 255 Gly Lys Lys Ala Pro Ser Glu Pro Gln Arg Tyr Asp Ala Val Leu Val 260 265 270 Ala Ile Gly Arg Val Pro Asn Gly Lys Asn Leu Asp Ala Gly Lys Ala 275 280 Gly Val Glu Val Asp Asp Arg Gly Phe Ile Arg Val Asp Lys Gln Leu 290 295 300 Arg Thr Asn Val Pro His Ile Phe Ala Ile Gly Asp Ile Val Gly Gln 310 315 Pro Met Leu Ala His Lys Gly Val His Glu Gly His Val Ala Ala Glu 325 330 Val Ile Ala Gly Met Lys His Tyr Phe Asp Pro Lys Val Ile Pro Ser 340 345 350 Ile Ala Tyr Thr Glu Pro Glu Val Ala Trp Val Gly Leu Thr Glu Lys 355 360 365 Glu Ala Lys Glu Lys Gly Ile Ser Tyr Glu Thr Ala Thr Phe Pro Trp 370 375 380 Ala Ala Ser Gly Arg Ala Ile Ala Ser Asp Cys Ala Asp Gly Met Thr 385 390 395 Lys Leu Ile Phe Asp Lys Glu Thr His Arg Val Ile Gly Gly Ala Ile 405 410 Val Gly Thr Asn Gly Gly Glu Leu Leu Gly Glu Ile Gly Leu Ala Ile 425 Glu Met Gly Cys Asp Ala Glu Asp Ile Ala Leu Thr Ile His Ala His 435 440 Pro Thr Leu His Glu Ser Val Gly Leu Ala Ala Glu Val Phe Glu Gly 450 455 460

Ser The Thr Asp Leu Pro Asn Ala Lys Ala Lys Lys Lys Lys 465 470

<210> 9655

<211> 149

<212> PRT

<213> Enterobacter cloacae

<400> 9655 Asn His Ala Ala Gly Gly His Phe Asn Ile Arg Ala Glu Gly Thr Gln 10 Pro Ala Phe Arg Val Ala Phe Arg Val Gly Val His Ala Asp Val Ala 20 25 Phe Ile Gln Val Ser Asn His His Phe Arg Gln Arg Ala Gly Val Phe 35 4.0 Gly Phe Val Asp Lys Leu Trp Val Asn Arg Leu Phe Thr His Gln Asn 5.0 55 60 Gly Asp Ala Arg Thr Leu Arg Leu Ile Ile Leu Ala Arg Asp Ile Glu 7.0 75 Asp Val Arg Ala Asp Asn Arg Ala Gly Leu Cys Gln Asp Leu Gly Gln 85 90 Thr Val Gly Val Val Glu Phe Ile Asp Ile Gly Asp Val Thr Ile Ala 100 105 110 Leu Phe Cys Cys Phe Gly Val Ala Asp Ile Val Asn Thr Lys Thr Gln 115 120 125

Ala Phe Gly Gln Ile Val Lys Ala Met Gln Phe Lys Leu Phe Gln Leu 130 135 140

Val His Leu Leu

145

<210> 9656 <211> 588 <212> PRT <213> Enterobacter cloacae

(ZIJ) Bhicciobaccci croacac

<400> 9656 Leu Phe Ala His Ile Ala Ile Arg Leu Ala Asn Lys Ile Val Leu Lys 10 Asn Val Phe Ile Ala Phe Thr Thr Ala Ser Arg Lys Ile Asn Val Ser 2.0 25 Ile Leu Asp Ala Arg Pro Thr Ile Phe Ile Ile Ala Ala Val Leu Asp 35 40 Leu Pro Val Arg Gly Gly Phe Met Leu Lys Arg Ser Pro Ala Gly Asn 5.5 Lys Glu Met His Met Gln Arg Arg Asp Phe Leu Lys Phe Ser Ala Ala 75 7.0 65 Leu Gly Val Ala Ser Ala Ile Pro Leu Trp Ser Arg Ala Val Phe Ala 8.5 Ala Asp Arg Pro Ala Leu Pro Ile Pro Glu Leu Leu Ala Pro Asp Ala 105 100 Arg Ser Arg Ile Gln Leu Val Val Gln Ala Gly Lys Thr Thr Phe Gly 115 120 Gln His Ala Ala Thr Thr Trp Gly Tyr Asn Gly Asn Leu Leu Gly Pro 135 140 Ala Leu Gln Leu Arg Lys Gly Lys Ala Val Thr Val Asp Ile His Asn 150 155 145 Thr Leu Ala Glu Glu Thr Thr Leu His Trp His Gly Leu Glu Val Pro 165 170 175 Gly Glu Val Asp Gly Gly Pro Gln Gly Val Ile Arg Pro Gly Gly Lys 180 185

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Arg Ser Val Thr Phe Thr Pro Glu Gln Arg Ala Ala Thr Cys Trp Phe
                  200
                                   205
 195
His Pro His Gln His Gly Lys Thr Gly His Gln Val Ala Met Gly Leu
                     220
                 215
Ala Gly Leu Val Leu Ile Glu Asp Asp Glu Ser Arg Leu Leu Arg Leu
225 230 235
Pro Lys Gln Trp Gly Ile Asp Asp Val Pro Val Ile Val Gln Asp Lys $245$
Lys Phe Ser Ala Asp Gly Gln Ile Asp Tyr Gln Leu Asp Val Met Ser
   260 265 270
Ala Ala Val Gly Trp Phe Gly Asp Thr Leu Leu Thr Asn Gly Ala Ile
  275 280 285
Tyr Pro Gln His Ala Ala Pro Lys Gly Trp Leu Arg Leu Arg Leu Leu
 290 295 300
Asn Gly Cys Asn Ala Arg Ser Leu Asn Phe Ala Thr Ser Asp Lys Arg
305 310 315 320
Pro Leu Tyr Val Val Ala Ser Asp Gly Gly Leu Leu Pro Glu Pro Val
      325 330 335
Lys Val Ser Glu Leu Pro Met Leu Met Gly Glu Arg Phe Glu Val Leu
        340 345 350
Val Asp Ile Ser Asp Gly Lys Ala Phe Asp Leu Val Thr Leu Pro Val
355 360 365
Ser Gln Met Gly Met Ala Val Ala Pro Phe Asp Lys Pro His Pro Val
370 375 380
Leu Arg Ile Gln Pro Leu Gln Ile Thr Ala Ser Gly Thr Leu Pro Glu
   390 395 400
Thr Leu Thr Thr Leu Pro Ala Leu Pro Ser Leu Asp Gly Leu Thr Gln
           405 410 415
Arg Lys Leu Gln Leu Ser Met Asp Pro Met Leu Asp Met Met Gly Met
 420
                      425 430
Gln Ala Leu Met Lys Lys Tyr Gly Asn Gln Ala Met Ala Gly Met His
435 440 445
His Gly Gln Met Met Gly His Met Asn Met Asp His Gly Asn Met Gly
450
                455 460
Gly Met Asn His Gly Gly His Gly Phe Asp Phe His Asn Ala Asn Arg 465 \phantom{\bigg|}470\phantom{\bigg|}470\phantom{\bigg|}475\phantom{\bigg|}475\phantom{\bigg|}
Ile Asn Gly Lys Ala Phe Asp Met Asn Thr Pro Met Phe Ala Ala Thr
         485 490 495
Lys Gly Gln Phe Glu Arg Trp Met Ile Ser Gly Glu Gly Asp Met Met
        500 505 510
Leu His Pro Phe His Ile His Gly Thr Gln Phe Arg Ile Leu Ser Glu
     515 520 525
Asn Gly Lys Ala Pro Glu Pro His Arg Ala Gly Trp Lys Asp Thr Val
 530
                535 540
Arg Val Glu Gly Gly Val Ser Glu Val Leu Val Lys Phe Asp His Glu
545 550 555 560
Ala Pro Lys Glu Phe Ala Tyr Met Ala His Cys His Leu Leu Glu His
           565 570
Glu Asp Thr Gly Met Met Leu Gly Phe Thr Val
        580
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<210> 9657 <211> 278 <212> PRT <213> Enterobacter cloacae

<400> 9657

Gln Ser Lys Pro Thr Gly Arg Ala Val Cys Leu Ser Gly Ala Arg Gln

1 5 10 15

Thr Arg Arg Gln Gly Met Thr His Leu Tyr Trp Val Ala Leu Lys Ser
20 25 30

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Ile Trp Ala Lys Glu Ile Asn Arg Phe Met Arg Ile Trp Val Gln Thr
                     40
Leu Val Pro Pro Val Ile Thr Met Thr Leu Tyr Phe Ile Ile Phe Gly
Asn Leu Ile Gly Ser Arg Ile Gly Glu Met His Gly Phe Thr Tyr Met
               7.0
Gln Phe Ile Val Pro Gly Leu Ile Met Met Ala Val Ile Thr Asn Ala
           85
                          90
Tyr Ala Asn Val Ala Ser Ser Phe Phe Ser Ala Lys Phe Gln Arg Asn
                     105
        100
Ile Glu Glu Leu Leu Val Ala Pro Val Pro Thr His Val Ile Ile Ala
   115 120
Gly Tyr Val Gly Gly Val Ala Arg Gly Leu Cys Val Gly Ile Leu
 130 135 140
Val Thr Ala Ile Ser Leu Phe Phe Val Pro Phe Gln Val His Ser Trp
    150 155 160
Leu Phe Val Ala Leu Thr Leu Leu Leu Thr Ala Ile Leu Phe Ser Leu
           165 170
Ala Gly Leu Leu Asn Ala Val Phe Ala Lys Thr Phe Asp Asp Ile Ser
        180 185 190
Leu Ile Pro Thr Phe Val Leu Thr Pro Leu Thr Tyr Leu Gly Gly Val
    195 200 205
Phe Tyr Ser Leu Thr Leu Leu Pro Pro Phe Trp Gln Ala Leu Ser His
 210 215 220
Leu Asn Pro Ile Val Tyr Met Ile Ser Gly Phe Arg Phe Gly Phe Leu
225 230 235
Gly Ile Thr Asp Val Pro Leu Phe Thr Thr Val Val Val Leu Val Val
           245 250 255
Phe Ile Ile Ala Phe Tyr Leu Leu Cys Trp Tyr Leu Ile Gln Arg Gly
        260
                       265
Arg Gly Leu Arg Ser
     275
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<210> 9658 <211> 79 <212> PRT <213> Enterobacter cloacae

<210> 9659 <211> 201 <212> PRT <213> Enterobacter cloacae

<400> 9659
Met Arg Leu Ile Val Gly Met Thr Gly Ala Thr Gly Ala Pro Leu Gly
1 5 10 15
Val Ala Leu Leu Gln Ala Leu Arg Glu Met Pro Glu Val Glu Thr His 20 25 30
Leu Val Met Ser Lys Trp Ala Lys Thr Thr Ile Glu Leu Glu Thr Pro

```
Phe Thr Ala His Asp Val Ala Ala Leu Ala Asp Val Val His Ser Pro
Ala Asp Gln Ala Ala Thr Ile Ser Ser Gly Ser Phe Arg Thr Asp Gly
                  70
Met Ile Val Ile Pro Cys Ser Met Lys Thr Leu Ala Gly Ile Arg Ala
                                90
Gly Tyr Ala Glu Gly Leu Val Gly Arg Ala Ala Asp Val Val Leu Lys
                             105
Glu Gly Arg Lys Leu Val Leu Val Pro Arg Glu Thr Pro Leu Ser Thr
      115
                     120
                                            125
Ile His Leu Glu Asn Met Leu Ala Leu Ser Arg Met Gly Val Ala Met
  130
                   135
                                    140
Val Pro Pro Met Pro Ala Tyr Tyr Asn His Pro Gln Thr Ala Asp Asp
              150
                          155
Ile Thr Gln His Ile Val Thr Arg Val Leu Asp Gln Phe Gly Leu Glu
        165 170
His Lys Lys Ala Arg Arg Trp Glu Gly Leu Gln Ala Ala Lys His Phe
        180 185
Ser Gln Glu Asn Lys Asp Gly Ile
<210> 9660
<211> 119
<212> PRT
<213> Enterobacter cloacae
<400> 9660
Gly Gly Met Lys Met Ala Gly Lys Arg Ile Ala Arg Glu Lys Glu Thr
                                10
Ile Ala Lys Met Ile Ala Leu Tyr Glu Lys Asn Cys Pro Gln Ala Val
 20
                            25
Lys Asp Glu Gly His Tyr Gln Ala Leu Asn Ala Tyr Ala Asp Lys Arg
35
                         40
                                            45
Leu Asp Lys Cys Ile Phe Gly Glu Glu Lys Pro Ala Cys Lys Gln Cys
              5.5
                                        60
Pro Val His Cys Tyr Gln Pro Ala Arg Arg Glu Glu Met Lys Gln Val
                 70
                                    7.5
Met Arg Trp Ala Gly Pro Arg Met Leu Trp Arg His Pro Ile Leu Thr
              85
                                90
Leu Arg His Leu Ile Asp Asp Arg Pro Val Pro Glu Leu Pro Glu
         100
                            105
Lys Tyr Arg Pro Lys Lys
      115
<210> 9661
<211> 208
<212> PRT
<213> Enterobacter cloacae
<400> 9661
Phe Ala Leu Arg Arg Asp Asp Val Asn Ala Val Glu Met Thr Arg Arg
                                1.0
His Arg Gly Gly Asp Ser Thr Ser Leu Val Lys Ser Tyr Leu Asn Gln
          2.0
                            2.5
Gln Ile Lys Asn Trp His Glu Asn Cys Leu Thr Ala Ala Asn Ser Ile
      3.5
                         4.0
Asn Arg Ile Pro Phe Met Thr Ile Trp Glu Ile Ser Glu Lys Ala Asp
                  5.5
Tyr Ile Ala Gln Arg His Gln Gln Leu Gln Asp Gln Trp His Leu Tyr
                                    7.5
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Cys Asn Ser Leu Ile Gln Gly Ile Thr Leu Ser Lys Ala Arg Leu His His Ala Met Ser Cys Ala Ala Gln Gly Asp Met Arg Phe Val Leu Phe 100 105 Gly His Phe Thr Ile Phe Val Thr Leu Ala Glu Ser Phe Asn Ser His 120 Thr Ile Glu Tyr Tyr Val Glu Thr Lys Glu Gly Glu Lys Gln Cys Ile 135 130 140 Ala Lys Ala Gln Leu Met Ala Asp Gly Met Val Asp Gly His Val Ser 145 150 155 Asn Arg Asp Arg Gln Gln Val Leu Glu His Tyr Leu Glu Lys Ile Ala 165 170 175 Pro Val Tyr Asn Gly Leu Tyr Ala Ala Val Glu His Asp Gln Ser Ile 180 185 190 Asn Leu Lys Gln Leu Ile Asp Gly Lys Ser Ser Ala Asn Val Ala 200

<210> 9662 <211> 609 <212> PRT

<213> Enterobacter cloacae

<400> 9662 Arg Gly Glu Met Asn Ala Ile Val Met Met Thr Ser Gly Val Ala 10 Trp Phe Ala Ala Ala Ala Val Leu Ala Leu Leu Leu Ala Phe His Lys 20 25 Thr Leu Ser Gly Val Ile Ala Gly Ile Gly Gly Ala Val Gly Ser Leu 40 Met Thr Leu Ala Ala Gly Gly Val Val Leu Ile Asp Gly Gln Ser Val 5.5 Asp Thr Leu Ile Pro Leu Ile His His Ala Val Glu Leu Thr Pro Leu 70 75 Asn Ala Ile Trp Leu Ile Thr Phe Gly Leu Cys Gly Leu Phe Ile Ser 85 90 Leu Phe Asn Ile Asp Trp His Arg His Gln His Thr Lys Ala Asn Gly 100 105 Leu Leu Val Asn Leu Leu Met Ala Ala Ala Val Cys Thr Val Val Ala 115 120 125 Ser Asn Leu Gly Ala Leu Val Val Met Ala Glu Ile Met Ala Leu Cys 135 140 130 Gly Val Phe Leu Thr Gly Cys Ser Ala Ser Gly Lys Leu Trp Phe Ala 145 150 155 Leu Gly Arg Leu Gly Thr Leu Let Leu Ala Leu Ala Cys Trp Leu Val 165 170 Trp Gln Arg Phe Gly Thr Leu Asp Phe Ala Ala Leu Asn Gly Gln Pro 190 185 180 Leu Gly Asn Asp Val Trp Leu Leu Gly Val Val Gly Phe Gly Leu Leu 200 205 195 Ala Gly Ile Ile Pro Leu His Gly Trp Val Pro Gln Ala His Ala Asn 215 210 220 Ala Ser Ala Pro Ala Ala Ala Leu Phe Ser Thr Val Val Met Lys Val 230 225 235 Gly Leu Phe Gly Ile Leu Thr Ile Thr Leu Thr Gly Asp Gln Pro Pro 250 Leu Trp Trp Gly Val Ala Leu Leu Ile Ala Gly Met Ile Thr Ala Phe 265 260 270 Val Gly Gly Leu Tyr Ala Leu Met Glu His Asn Ile Gln Arg Leu Leu 275 280 Ala Tyr His Thr Leu Glu Asn Ile Gly Ile Ile Leu Leu Gly Met Gly 290 295 300

Ala Gly Val Thr Gly Leu Ala Leu Asn Gln Pro Ala Leu Ile Ala Ala 315 Gly Phe Ile Gly Gly Leu Tyr His Leu Ile Asn His Ser Leu Phe Lys 325 Ser Thr Leu Phe Leu Gly Ala Gly Ser Val Trp Phe Arg Thr Gly His 345 340 350 Arg Asp Ile Glu Lys Leu Gly Gly Ile Gly Lys Lys Met Pro Val Ile 365 355 360 Ser Leu Ala Met Leu Val Gly Leu Met Ala Met Ala Ala Leu Pro Pro 380 375 Leu Asn Gly Phe Ala Gly Glu Trp Val Ile Tyr Gln Ser Phe Phe Ala 385 390 395 400 Leu Gly Gln Ser Glu Ala Phe Ile Gly Arg Leu Leu Gly Pro Leu Leu 405 410 415 Ala Val Gly Leu Ala Ile Thr Gly Ala Leu Ala Val Met Cys Met Ala 420 425 430 Lys Val Tyr Gly Val Thr Phe Leu Gly Ala Pro Arg Thr Arg Glu Ala 435 440 445 Glu Asn Ala Cys Cys Ala Pro Val Leu Met Thr Thr Ser Val Val Ala 450 455 460 Leu Ala Leu Cys Cys Ile Ala Gly Gly Val Ala Ala Pro Trp Leu Leu 465 470 475 Pro Leu Leu Gly His Ala Ile Pro Leu Pro Leu Val Thr Ala His Thr 485 490 Val Val Ser Gln Pro Met Met Ala Leu Leu Leu Ile Ala Ala Pro Leu 500 505 Leu Pro Phe Val Leu Met Leu Phe Phe Arg Arg Asp Arg Leu Ala Ser 520 525 Arg Ser Arg Gly Ala Ala Trp Ala Cys Gly Tyr Glu His Glu Gln Ser 530 535 540 Met Val Ile Thr Ala His Gly Phe Ala Met Pro Val Lys Glu Asn Phe 550 555 Ala Ala Val Leu Lys Leu Arg His Trp Leu Asn Pro Val Gly Trp Val 565 570 575 Pro Gly Trp Gln Gly Ala Ala Val Pro Val Leu Phe Arg Arg Leu Ala 580 585 590 Leu Ile Glu Leu Ala Val Leu Val Val Ile Val Ile Ser Arg Gly Ala

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<210> 9663
<211> 269
<212> PRT
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595

<213> Enterobacter cloacae

<400> 9663 Pro His Arg Phe Asn Pro Pro Tyr Glu Arg Gly Gln Leu Met Glu Asn 10 Leu Leu Gly Pro Arg Asp Ala Asn Gly Ile Pro Val Pro Leu Thr Val 20 Glu Glu Ser Ile Ala Ser Met Lys Ala Ser Leu Leu Lys Lys Ile Lys 35 40 Arg Ser Ala Tyr Val Tyr Arg Val Asp Cys Gly Gly Cys Asn Gly Cys 55 60 Glu Ile Glu Ile Phe Ala Thr Leu Ser Pro Leu Phe Asp Ala Glu Arg 75 7.0 80 Phe Gly Ile Lys Val Val Pro Ser Pro Arg His Ala Asp Ile Leu Leu 8.5 90 Phe Thr Gly Ala Val Thr Arg Ala Met Arg Ser Pro Ala Leu Arg Ala 100 105 110

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Trp Gln Ser Ala Pro Asp Pro Lys Ile Cys Ile Ser Tyr Gly Ala Cys
                    120
                                   125
   115
Gly Asn Ser Gly Gly Ile Phe His Asp Leu Tyr Cys Val Trp Gly Gly
                    135
Thr Asp Lys Ile Val Pro Val Asp Val Tyr Ile Pro Gly Cys Pro Pro
                 150
                                  155
Thr Pro Ala Ala Thr Leu Tyr Gly Phe Ala Met Ala Leu Gly Leu Leu
             165 170
                                                175
Glu Gln Lys Ile His Ala Arg Glu Pro Gly Glu Leu Asp Asn Gln Pro
         180 185
                                             190
Ala Thr Ile Leu His Pro Asp Met Val Gln Pro Leu Arg Val Lys Ile
 195 200 205
Asp Arg Thr Ala Arg Arg Leu Ala Gly Tyr Arg Tyr Gly Arg Gln Ile
 210 215 220
Ala Asp Asp Tyr Leu Arg Leu Leu Ser Gln Gly Asp His Gln Val Ala
              230 235 240
Arg Trp Leu Glu Ala Glu Lys Asp Pro Arg Leu Asn Glu Ile Val Ala
            245 250
Asn Leu Asn Asn Ile Val Asp Glu Ala Arg Ile Arg
<210> 9664
<211> 155
<212> PRT
<213> Enterobacter cloacae
<400> 9664
Gly Asp Tyr Val Thr Asp Val Leu Leu Cys Val Gly Asn Ser Met Met
                              10
Gly Asp Asp Gly Ala Gly Pro Leu Leu Ala Glu Leu Cys Ala Ala Asn
                           25
Ser Pro Gly Asn Trp Val Val Ile Asp Gly Gly Ser Ala Pro Glu Asn
      35
                        40
                                        45
Asp Val Val Ala Ile Arg Glu Leu His Pro Asp Arg Leu Leu Ile Val
 50
                    55
Asp Ala Thr Asp Met Gly Leu Asn Pro Gly Glu Ile Arg Leu Ile Asp
              70
                                  75
Pro Asp Asp Ile Ala Glu Met Pne Met Met Thr Thr His Asn Met Pro
                               90
             85
Leu Asn Tyr Leu Val Asp Gln Ile Lys Gly Asp Val Gly Glu Val Leu
         100
                           105
Phe Leu Gly Ile Gln Pro Asp Ile Val Gly Phe Tyr Tyr Pro Met Thr
    115
                        120
                                         125
Pro Pro Val Lys Glu Ala Val Asp Val Val Tyr Ser Arg Leu Ala Gly
                    135
Trp Val Gly Asp Gly Gly Phe Ser Pro Leu
145
                 150
<210> 9665
<211> 371
<212> PRT
<213> Enterobacter cloacae
<2200>
<221>UNSURE
<400> 9665
Phe Leu Val Glu Lys Gly Thr Asp Leu Arg Trp Gly Gly Ala Asn Arg
                               10
Phe Leu Glu Glu Leu Gly Met Leu Tyr His Thr Gly Phe Leu Pro Asn
```

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25
Ser Leu Asn Gly Cys His Met Phe Lys Arg Arg Tyr Ala Ala Leu Leu
                       4.0
Pro Ala Leu Ile Leu Leu Ser Ala Cys Ser Ser Lys Pro Lys Thr Glu
                   5.5
Ala Val Gln Pro Thr Ala Gly Ala Pro Ser Gly Gly Phe Leu Leu Glu
                70
                                 75
Pro Gln His Asn Met Met Gln Met Gly Gly Asp Phe Ala Asn Asn Pro
            85
                             90
Ala Ala Glu Gln Phe Ile Asp Lys Met Val Ser Lys His Gly Phe Asp
         100
             105
                                    110
Arg Gln Gln Leu His Ala Ile Leu Ser Gln Ala Lys Arg Leu Asp Tyr
   115 120
                             125
Val Leu Arg Leu Met Asp Arg Gln Ala Pro Thr Ala Gln Val Pro Thr
130 135 140
Gly Pro Asn Gly Ala Trp Leu Arg Tyr Arg Lys Gln Phe Ile Thr Pro
    150 155
Asp Asn Val Gln Asn Gly Val Val Phe Trp Asn Gln Tyr Glu Asp Ala
        165 170 175
Leu Asn Arg Ala Trp Gln Val Tyr Gly Val Pro Pro Glu Ile Ile Val
        180 185
Gly Ile Ile Gly Val Glu Thr Arg Trp Gly Arg Ile Met Gly Lys Thr
   195 200
                            205
Arg Ile Leu Asp Ala Leu Ala Thr Leu Ser Phe Asn Tyr Pro Arg Arg
210 215 220
Ala Glu Tyr Phe Ser Ser Glu Leu Glu Thr Phe Leu Leu Met Ala Arg
       230 235
Asp Glu Gln Asp Asp Pro Leu Asp Leu Lys Gly Ser Phe Ala Gly Ala
            245 250 255
Met Gly Tyr Gly Gln Phe Met Pro Ser Ser Tyr Lys Gln Tyr Ala Val
         260 265 270
Asp Phe Asn Gly Asp Gly His Ile Asn Leu Trp Asp Pro Glu Asp Ala
275 280 285
Ile Gly Ser Val Ala Asn Tyr Phe Lys Ala His Gly Trp Thr Pro Gly
       295 300
Gly Gln Val Ala Val Gln Ala Asn Gly Glu Ala Phe Gly Leu Glu Asn
               310 315
Gly Phe Lys Thr Lys Tyr Ser Val Ala Gln Leu Ala Ala Ala Gly Leu 325 330 335
Thr Pro Ser Gln Pro Leu Gly Asn Val Asp Gln Val Ser Leu Leu Arg
                          345
Leu Asp Gly Leu His His Gly Ala Arg Arg Ser Arg Ala Lys Arg Ile
      355
                       360
Lys Glu Xaa
   370
<210> 9666
<211> 507
<212> PRT
<213> Enterobacter cloacae
<400> 9666
Pro Val Phe Ser Thr Ser Leu Val Trp Ser Ile Lys Lys Pro Asp Ala
                              1.0
Gly Lys Val Cys Arg Gln Arg Asn Ile Phe His Arg Arg Ile Lys Met
Ala Phe Asp Asp Leu Arg Ser Phe Leu Gln Ala Leu Asp Glu Gln Gly
     35
                    40
                                       45
Gln Leu Leu Lys Ile Glu Glu Glu Val Asn Ala Glu Pro Asp Leu Ala
                   55
Ala Ala Ala Asn Ala Thr Gly Arg Ile Gly Asp Gly Ala Pro Ala Leu
```

Trp Phe Asp Asn Ile Arg Gly Phe Thr Asp Ala Arg Val Val Met Asn 8.5 90 Thr Ile Gly Ser Trp Gln Asn His Ala Ile Ser Met Gly Leu Pro Ala 100 105 Asn Thr Pro Val Lys Lys Gln Ile Asp Glu Phe Ile Arg Arg Trp Asp 115 120 125 Lvs Phe Pro Val Ser Pro Glu Arg Arg Ala Asn Pro Ala Trp Ala Gln 130 135 140 Asn Thr Val Asp Gly Glu Asp Ile Asn Leu Phe Asp Ile Leu Pro Leu 145 150 155 160 Phe Arg Leu Asn Asp Gly Asp Gly Gly Phe Tyr Leu Asp Lys Ala Cys 165 170 175 Val Val Ser Arg Asp Pro Leu Asp Pro Asp His Phe Gly Lys Gln Asn 180 185 190 Val Gly Ile Tyr Arg Met Glu Val Lys Gly Lys Arg Lys Leu Gly Leu 195 200 205 Gln Pro Val Pro Met His Asp Ile Ala Leu His Leu His Lys Ala Glu 210 215 220 Glu Arg Gly Glu Asp Leu Pro Ile Ala Ile Thr Leu Gly Asn Asp Pro 225 230 235 240 Ile Ile Thr Leu Met Gly Ala Thr Pro Leu Lys Tyr Asp Gln Ser Glu 245 250 255 Tyr Glu Met Ala Gly Ala Leu Arg Glu Ser Pro Tyr Pro Ile Ala Thr 260 265 270 Ala Pro Leu Thr Gly Phe Asp Val Pro Trp Gly Ser Glu Val Ile Leu 275 280 285 Glu Gly Val Ile Glu Gly Arg Lys Arg Glu Ile Glu Gly Pro Phe Gly 290 295 Glu Phe Thr Gly His Tyr Ser Gly Gly Arg Asn Met Thr Val Val Arg 305 310 315 Ile Asp Lys Val Ser Tyr Arg Thr Lys Pro Ile Phe Glu Ser Leu Tyr 325 330 335 Leu Gly Met Pro Trp Thr Glu Ile Asp Tyr Leu Met Gly Pro Ala Thr 345 350 340 Cys Val Pro Leu Tyr Gln Gln Leu Lys Ser Glu Phe Pro Glu Val Gln 355 360 Ala Val Asn Ala Met Tyr Thr His Gly Leu Leu Ala Ile Ile Ser Thr 375 Lys Lys Arg Tyr Gly Gly Phe Ala Arg Ala Val Gly Leu Arg Ala Met 390 395 400 Thr Thr Pro His Gly Leu Gly Tyr Val Lys Met Val Ile Met Val Asp $405 \hspace{0.25in} 410 \hspace{0.25in} 415$ Glu Asp Val Asp Pro Phe Asn Leu Pro Gln Val Met Trp Ala Leu Ser 420 425 Ser Lys Val Asn Pro Ala Gly Asp Leu Val Gln Leu Pro Asn Met Ser 435 440 Val Leu Glu Leu Asp Pro Gly Ser Ser Pro Ala Gly Ile Thr Asp Lys 450 455 460 Leu Ile Ile Asp Ala Thr Thr Pro Val Ala Pro Asp Asn Arg Gly His 470 475 Tyr Ser Gln Pro Val Gln Asp Leu Pro Glu Thr Lys Ala Trp Ala Glu 490 485 Lys Leu Thr Ala Met Leu Ala Ala Arg Gln 500

<210> 9667 <211> 165

<211> 165 <212> PRT

<213> Enterobacter cloacae

```
<400> 9667
Arg Thr Ser Leu Met Thr Lys Lys Ala Thr Val Leu Leu Phe Leu Val
                           1.0
Phe Phe Leu Ala Gly Ala Leu Ala Ala Trp Leu Tyr Arg Leu His Gln
   20
                       25
                                        3.0
Gln Asn Ser Glu Asn Thr Glu Ala Cys Ser Ala Ser Ile Val Val Tyr
                  40
                          45
His Glu Asp Ile Arg Ala Asn Leu Thr Met Asp Phe Met Tyr Thr Met
               5.5
                        60
Lys Lys Gln Thr Gly Val Ile Ala Leu Ser Gly Ala Tyr Tyr Lys Asn
            70 75
Asp Lys Leu Ala Gly Val Ile Arg Arg Asp Val Ser Tyr Val Trp Thr
           85
                  90
Glu Asn Lys Asp Ser Phe His Phe Thr Ser Val Asn Ile His Asp Ile
       100 105 110
Asn Gly Gln Gln Thr Ala Pro Asn Glu Ile Met Asn Glu Ile Leu Pro
    115 120 125
Asp Phe Phe Leu Tyr Pro Lys Lys Asn Leu Asn Tyr Ser Ile Thr Gln
130 135 140
Gin Gly Pro Arg Gly Phe Met Phe Ser Val Gly Lys Arg Pro Ile Phe
                              155
Tyr Cys Ser Arg
            165
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<210> 9668

<211> 210

<212> PRT <213> Enterobacter cloacae

<400> 9668

Pro Ser Pro Glu Asp Asp Pro Val Asn Arg Phe Val Ile Ala Asp Ser 10 Thr Val Cys Ile Gly Cys Arg Thr Cys Glu Ala Ala Cys Ser Glu Thr 25 20 His Arg Leu His Gly Leu Gln Ser Met Pro Arg Leu Arg Val Met Arg 3.5 4.0 4.5 Asn Glu Lys Glu Ser Ala Pro Gln Leu Cys His His Cys Glu Asp Ala 55 60 Pro Cys Ala Gly Val Cys Pro Val Asn Ala Ile Thr Arg Val Asp Gly 70 75 Ala Val Gln Leu Asn Glu Ser Leu Cys Val Ser Cys Lys Leu Cys Gly 8.5 90 Ile Ala Cys Pro Phe Gly Ala Ile Glu Phe Ser Gly Ser Arg Pro Leu 100 105 110 His Ile Pro Ala Asn Ala Asn Thr Pro Lys Ala Pro Pro Ala Pro Pro 115 120 125 Ala Pro Ala Arg Val Ser Thr Leu Leu Asp Trp Val Pro Gly Ile Arg 135 140 Ala Val Ala Val Lys Cys Asp Leu Cys Ser Phe Asp Glu Gln Gly Pro 1.4.5 150 155 Ala Cys Val Arg Thr Cys Pro Thr Arg Ala Leu Val Leu Val Asn Ile 165 170 175 Arg Asp Ile Ala Arg Thr Ser Lys Arg Lys Arg Glu Leu Thr Ile Asn 180 185 190 Thr Asp Val Gly Asp Leu Ser Leu Leu Arg Ala Leu Asn Glu Gly Ala 195 200 205

210

<210> 9669 <211> 316

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<212> PRT
<213> Enterobacter cloacae
<400> 9669
Leu Ser Phe His Glu Glu Pro Asp Met Ser Leu Leu Leu Ala Ile Leu
                        1.0
Gln Ala Leu Val Leu Phe Ala Ala Ala Pro Leu Leu Ser Gly Ile Thr
  20
                          25
                                           3.0
Arg Val Ala Arg Ala Arg Leu His Asn Arg Arg Gly Pro Gly Val Leu
     35
                    40
Gln Glu Tyr Arg Asp Leu Phe Lys Leu Leu Ser Arg Gln Ser Val Ala
                  55
                          60
Pro Asp Ala Ala Gly Trp Val Phe Arg Leu Thr Pro Phe Val Met Val
                     - 75
                70
Gly Val Met Leu Thr Ile Ala Thr Ala Leu Pro Val Val Thr Val Ala
           8.5
                    90
Ser Pro Leu Pro Val Leu Gly Asp Leu Ile Thr Leu Ile Tyr Leu Phe
                          105 110
Ala Ile Ala Arg Phe Phe Phe Ala Ile Ala Gly Leu Asp Thr Gly Ser
                    120
                                     125
Pro Phe Thr Gly Ile Gly Ala Ser Arg Glu Ala Met Leu Gly Val Leu
130 135
                                    140
Val Glu Pro Ile Leu Leu Gly Leu Trp Val Ala Ala Gln Val Ala
               150
                                155
Gly Ser Thr His Ile Ser Phe Ile Thr Asp Thr Val Tyr His Trp Pro
             165
                             170
Val Ser Arg Ser Leu Pro Leu Val Leu Ala Leu Cys Ala Cys Ala Phe
         180
                          185
                                          190
Ala Thr Phe Ile Glu Met Gly Lys Leu Pro Phe Asp Leu Ala Glu Ala
      195
                      200 205
Glu Gln Glu Leu Gln Glu Gly Pro Leu Thr Glu Tyr Ser Gly Tyr Gly
 210
                   215
                                    220
Phe Ala Val Leu Lys Trp Gly Ile Ser Leu Lys Gln Leu Val Val Leu
                230
                               235
Gln Met Phe Val Gly Val Phe Phe Pro Trp Gly Gln Met Thr His Phe
             245
                             250
Ser Ala Gly Gly Leu Leu Ala Val Val Val Ala Val Leu Lys Leu
         260
                         265
                                           270
Leu Ile Gly Val Leu Val Ile Ala Leu Phe Glu Asn Ser Met Ala Arg
                       280 285
Leu Arg Phe Val Glu Thr Ser Arg Ile Thr Trp Ala Gly Phe Gly Phe
 290 295
Ala Phe Leu Ala Phe Val Ser Leu Leu Val Ala
                310
                                 315
<210> 9670
<211> 575
<212> PRT
<213> Enterobacter cloacae
<400> 9670
Leu Lys Arg Val Phe Met Ser Glu Glu Lys Lys Gly Gln Gln Tyr Leu
                                              1.5
Ala Ala Leu His Gln Ala Phe Pro Gly Val Val Leu Glu Glu Ser Trp
         20
                          25
                                           30
Gln Thr Lys Asp Gln Ile Thr Val Thr Ile Lys Val Asn Tyr Leu Pro
    35
                      40
Glu Val Val Glu Phe Leu Tyr Tyr Gln Gln Gly Gly Trp Leu Ser Val
                   55
Leu Phe Gly Asn Asp Glu Arg Gln Leu Cys Gly Ser Tyr Ala Val Tyr
```

75

Tyr Val Met Ser Met Glu Gln Gly Glu Lys Cys Trp Ile Thr Val Arg 8.5 Val Glu Val Asp Pro Asn Lys Pro Glu Tyr Pro Ser Val Thr Pro Arg 100 105 Val Pro Ala Ala Val Trp Gly Glu Arg Glu Val Arg Asp Met Tyr Gly 115 120 125 Leu Val Pro Val Gly Leu Pro Asp Glu Arg Arg Leu Val Leu Pro Asp 130 135 140 Asp Trp Pro Asp Glu Leu Tyr Pro Leu Arg Lys Asp Ser Met Asp Tyr 150 155 Arg Gln Arg Pro Ala Pro Thr Thr Asp Ser Glu Thr Tyr Glu Phe Ile 165 170 175 Asn Glu Leu Gly Ser Lys Lys Asn Asn Val Val Pro Ile Gly Pro Leu 180 185 190 His Val Thr Ser Asp Glu Pro Gly His Phe Arg Leu Phe Val Asp Gly 195 200 205 Glu Asn Ile Ile Asp Ala Asp Tyr Arg Leu Phe Tyr Val His Arg Gly 210 215 220 Met Glu Lys Leu Ala Glu Thr Arg Met Gly Tyr Asn Glu Val Thr Phe 225 230 235 240 Leu Ser Asp Arg Val Cys Gly Ile Cys Gly Phe Ala His Ser Thr Ala 245 250 255 Tyr Thr Thr Ser Val Glu Asn Gly Met Gly Ile Val Val Pro Glu Arg 260 265 270 Ala Gln Met Ile Arg Ala Ile Leu Leu Glu Val Glu Arg Leu His Ser 275 280 285 His Leu Leu Asn Leu Gly Leu Ala Cys His Phe Val Gly Phe Asp Ser 290 295 300 Gly Phe Met Gln Phe Phe Arg Val Arg Glu Ala Ser Met Lys Met Ala 305 310 315 320 Glu Ile Leu Thr Gly Ala Arg Lys Thr Tyr Gly Leu Asn Leu Ile Gly 325 330 335Gly Ile Arg Arg Asp Leu Leu Lys Asp Asp Met Ile Gln Thr Arg Gln 340 345 350 Leu Ala Gln Gln Met Arg Arg Asp Val Gln Glu Leu Val Asp Met Leu 360 365 355 Leu Ser Thr Pro Asn Ile Glu Gln Arg Thr Val Gly Ile Gly Arg Leu 375 380 370 Asp Pro Glu Ile Ala Arg Asp Phe Ser Asn Val Gly Pro Met Val Arg 390 395 385 Ala Ser Gly His Ala Arg Asp Thr Arg Ala Asp His Pro Phe Val Gly 405 410 415 Tyr Gly Leu Leu Pro Met Thr Val His Ser Glu Gln Gly Cys Asp Val 420 425 430 Ile Ser Arg Leu Lys Val Arg Ile Asn Glu Val Phe Thr Ala Leu Asn 435 440 Met Ile Asp Tyr Gly Leu Asp Asn Leu Pro Gly Gly Pro Leu Met Val 450 450 460 Glu Gly Phe Thr Tyr Ile Pro Asn Arg Phe Ala Leu Gly Phe Ala Glu 470 475 Ala Pro Arg Gly Asp Asp Ile His Trp Ser Met Thr Gly Asp Asn Gln 485 490 495 Lys Leu Tyr Arg Trp Arg Cys Arg Ala Ala Thr Tyr Ala Asn Trp Pro 500 505 510 Thr Leu Arg Tyr Met Leu Arg Gly Asn Thr Val Ser Asp Ala Pro Leu 515 520 525 Ile Ile Gly Ser Leu Asp Pro Cys Tyr Ser Cys Thr Asp Arg Met Thr 535 540 530 Val Val Asp Val Arg Lys Lys Ser Gln Val Val Pro Tyr Lys Glu 555 550 Leu Glu Arg Tyr Ser Ile Glu Arg Lys Asn Ser Pro Leu Lys

<210> 9671

<211> 184 <212> PRT

<213> Enterobacter cloacae

<400> 9671

Gly Phe Ala Met Phe Thr Phe Ile Lys Lys Val Ile Lys Thr Gly Ala 10 Gln Thr Ser Ser Tyr Pro Leu Glu Pro Ile Pro Val Asp Lys Asn Phe

20 25 Arg Gly Lys Pro Glu His Asn Pro Gln Gln Cys Ile Gly Cys Ala Ala

4.5 35 40 Cys Val Asn Ala Cys Pro Ser Asn Ala Leu Thr Val Glu Thr Asp Leu 55 60

Lys Thr Gly Glu Leu Ala Trp Gln Phe Asn Leu Gly Arg Cys Ile Phe 70 75

Cys Gly Arg Cys Glu Glu Val Cys Pro Thr Val Ala Ile Arg Leu Ser 85 90 95

Gln Glu Tyr Glu Leu Ala Val Trp Lys Lys Glu Asp Phe Leu Gln Gln 100 105 110

Ser Arg Phe Ala Leu Cys Asn Cys Arg Val Cys Lys Arg Pro Phe Ala 115 120

Val Gln Lys Glu Ile Asp Tyr Ala Ile Ala Leu Leu Lys His Asn Gly 130 135 140 Asp Val Arg Ala Glu His His Arg Glu Ser Phe Glu Thr Cys Pro Glu 150 155 160 145

Cys Lys Arg Gln Lys Cys Leu Leu Pro Ser Asp Arg Ile Asp Leu Thr 170 165

Arg His Met Arg Glu Ala Ser 180

<210> 9672 <211> 791

<212> PRT <213> Enterobacter cloacae

<400> 9672

Pro Leu Leu Pro Pro Arg Arg Ser Gly Val Tyr Gly Ser Leu Ser Asp Ala Cys Ala Gly Leu Arg Arg Ser Arg Gln Ala Arg Thr Asp Glu 25 Cys Arg Lys Thr Ser Pro Arg Gly Val Arg His Leu Val Ile Thr Ala 35 40 Val Leu Asn Arg Met Ser Ser Asn Gly Val Gln Leu Arg Val Arg Gly 50 55 Lys Val Gln Gly Val Gly Phe Arg Pro Phe Val Trp Gln Leu Ala His 70 7.5 Arg Leu Lys Leu Val Gly Asp Val Cys Asn Asp Gly Glu Gly Val Leu 90 85 Val Arg Leu Ala Gly Ser Gly Gly Asp Phe Thr Ala Arg Leu Arg Gln 105 100

Asp Cys Pro Pro Leu Ala Arg Ile Asp Arg Val Glu Thr Gln Pro Tyr

120 125 Ser Trp Asn Thr Leu Pro Asp Glu Phe Val Ile Arg His Ser Glu Ser 130 140

Gly Ala Met Asp Thr Gln Ile Val Pro Asp Ala Ala Thr Cys Pro Ala 150 155 160 Cys Leu Ala Glu Met Arg Asp Pro Arg Glu Arg Arg Tyr Arg Tyr Pro

165 170 175

Phe Ile Asn Cys Thr His Cys Gly Pro Arg Phe Thr Ile Ile Arg Ala 190 185 180 Met Pro Tyr Asp Arg Pro Ala Thr Ser Met Ala Pro Phe Pro Leu Cys 205 195 200 Met Pro Cys Glu Thr Glu Tyr Arg Asn Pro Ala Asp Arg Arg Phe His 215 Ala Gln Pro Val Ala Cys Pro Asp Cys Gly Pro Gln Leu Glu Trp Arg 225 230 235 240 225 230 Ala Gly Glu Ala Thr Ala Thr Arg Glu Ser Ala Leu Ser Ala Ala Val 245 250 Ala Met Leu Glu Gly Gly Gly Ile Val Ala Val Lys Gly Leu Gly Gly 265 260 Phe His Leu Val Cys Asp Ala Leu Asn Pro Gln Ala Ile Arg Lys Leu 275 280 285 Arg Ala Arg Lys Gln Arg Pro Thr Arg Pro Leu Ala Val Met Ile Pro 295 300 His Ala Asn Asp Leu Pro Lys Thr Ile Gln Thr Leu Leu Arg Ser Pro 305 310 315 Ala Ala Pro Ile Met Leu Thr Pro Lys Ala Cys Leu Pro Ala Phe Pro 325 330 335 Glu Glu Ile Ala Pro Gly Leu Asn Thr Val Gly Val Met Leu Pro Ala 340 345 350 Asn Pro Leu Gln His Leu Leu Met Leu Asp Cys Gln Arg Pro Leu Val 360 365 355 Met Thr Ser Gly Asn Leu Ser Gly Tyr Pro Pro Val Ile Asn Asn Gln 375 380 Gln Ala Leu Glu Glu Leu Ser Asp Ile Ala Asp Gly Phe Leu Leu His 390 395 Asn Arg Asp Ile Leu Gln Arg Met Asp Asp Ser Val Met Asp Gln Glu 405 410 415 Gly Thr Met Leu Arg Arg Ala Arg Gly Phe Val Pro Asp Ala Ile Thr 420 425 430 Leu Pro Ala Gly Phe Arg Asp Ile Pro Pro Met Leu Cys Thr Gly Ala 440 445 435 Glu Met Lys Asn Thr Phe Cys Leu Val Arg Gly Asn Gln Ala Val Leu 450 455 460 Ser Gln His Phe Gly Asp Leu Ser Asp Glu Gly Val Glu Ala Gln Trp 470 475 480 Arg Ser Ala Leu Ser Thr Met Gln Glu Ile Tyr Ala Phe Gln Pro Glu 485 490 495 Arg Val Val Cys Asp Ala His Pro Gly Tyr His Ala Arg Gln Trp Ala 505 500 Arg Thr Gln Ala Leu Pro Val Glu Thr Val Leu His His His Ala His 515 520 525 Ala Val Ala Cys Leu Ala Glu Asn Gly Trp Pro Leu Asp Gly Gly Asp 535 540 530 Val Ile Ala Leu Thr Leu Asp Gly Ile Gly Met Gly Glu Asn Gly Ala 550 545 555 Leu Trp Gly Gly Glu Cys Leu Arg Val Asn Tyr Arg Asp Cys Glu Arg 570 565 Leu Gly Gly Leu Pro Ala Val Ala Leu Pro Gly Gly Asp Leu Ala Ala 585 580 Lys Gln Pro Trp Arg Asn Leu Leu Ala His Cys Leu Ala Phe Val Pro 605 595 600 Asp Trp Gln Gln Tyr Pro Glu Thr Val Val Val Gln Arg Gln Asn Trp 620 615 Pro Leu Leu Ala Thr Ala Val Ser Arg Gly Ile Asn Ala Pro Arg Ala 630 635 Ser Ser Cys Gly Arg Leu Phe Asp Ala Val Ala Cys Ala Leu Gly Ile 650 645 Glu Thr Gln Arg Tyr Glu Gly Glu Ala Ala Cys Arg Leu Glu Ala Leu

665 Ala Glu Arg Cys Ala Gly Val Asp His Pro Val Thr Leu Gln Thr Asp 680 685 Asn Leu Ala Leu Phe Trp Gln Gln Trp Leu Ala Trp Arg Ala Glu Pro 695 700 Gly Glu Arg Ala Trp Ala Phe His Asp Ala Leu Ala Lys Gly Leu Ser 710 715 Glu Leu Ala Ala Thr His Ala Arg Arg Arg Ser Leu Ser Thr Val Cys 725 730 Phe Ser Gly Gly Val Leu His Asn Arg Leu Leu Arg Ala Arg Leu Arg 740 745 750 His Tyr Leu Ser Asp Phe Thr Leu Leu Phe Pro Ser Arg Leu Pro Ala 755 760 765 Gly Asp Gly Ala Ile Ser Phe Gly Gln Ala Val Val Ala Ala Ala Arg 770 775 Ser Cys Ser Gln Arg Ile <210> 9673 <211> 357 <212> PRT <213> Enterobacter cloacae <400> 9673 Thr Lys Gly Ala Gly Ala Phe Val Thr Glu Ala Gln Ala Gly His Leu 10 Phe His Gln Ser Gly Asn Phe Arg His His His Val Ile His Gly Gly 25 Gly Thr His Gln His Ala Phe Gly Ala Glu Asp Val Gly Gln Tyr Leu 4.0 Ile Leu Ile Ala Ala Arg His Val Glu Asp Phe His Arg His Val Arg 5.5 60 Val Asn Phe Val Asp Ala Leu Gly Asn Gly Val Arg His His Ala Gly 65 70 75 80 Val Val Gly His Gly Val Val Glu Asp Arg Asn Ala Val Phe Leu Ile 90 85 Val Arg Arg Pro Leu Gln Val Gln Phe Asp Asn Leu Gly Trp Ile Phe 100 105 110 Thr Pro Tyr His Ala Val Gly Gly Asn His Ile His Arg Gln Val 115 120 125 Glu Ala Glu Asp Leu Gly Asp Phe Trp Arg Asp Gln Thr Ala Glu Arg 135 140 Gly Gln Asp Val Gly Val Val Ala Leu Ala Leu Phe Glu Gln Leu Gly 145 150 155 Leu Ile His Phe Val Val Glu Gln Thr Phe Val Ala Val Val Leu Ala 165 170 Glu Gly Val Val Thr Glu Gln His Arg Val Thr Gly His Val Gly His 180 185 190 His Ala Val Arg Pro Val Gln His Trp Gly Phe His Glu Asp Gln Leu 195 200 205 Phe Ala Val Ala Asp Ile Glr Arg Val Ala Gly Phe His Ser Val Glu 210 215 220 Val Pro Leu Arg Met Val Val Val Ala Val Asp Gly Val Asn Gly Val 230 235 Ser Gly Ala Val Asp Arg Gly Ile Arg Asn Val Gly His Gln Leu Gly 245 250 Gln Arg Pro Gly Met Ile Leu Phe Arg Val Val Asp Asp Asn Val Val 260 265 Asp Leu Ile Gln Ile Asp Phe Ala Ala Gln Val Leu His Glu Leu Ala 280 285

Ala Glu Phe Val Ile Asp Gly Ile Asp Gln Asp Val Phe Thr Phe Thr

<400> 9675

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295
Asn Glu Ile Ala Val Val Ala Ala Ala Gln Arg Phe Val Phe Arg
                         315
             310
Pro Val Lys Ile Thr Tyr Phe Pro Val Thr Leu Thr His Pro Met Asn
          325
                330
Val Ile Phe Asn Gln Asn Arg His Ser Asn Leu Asn Leu Ile Arg Arg
       340
               345
Phe Gln Ile Arg
     355
<210> 9674
<211> 302
<212> PRT
<213> Enterobacter cloacae
<400> 9674
Gln Leu Thr Arg Gln Ala Met Leu Asn Leu Gln Arg Thr Ala Met Phe
                       10
Ile Ala Val Ala Asp Thr Gly Ser Phe Thr Ala Ala Ala Glu Ala Met
                 25
                                         3.0
Gly Leu Thr Lys Ala Val Val Ser Phe His Ile Arg Gln Leu Glu Glu
3.5
                   4.0
                                      4.5
Glu Leu Gly Val Thr Leu Leu Leu Arg Thr Thr Arg Arg Leu Thr Leu
                   55
                                  60
Thr Glu Ala Gly Lys Leu Phe His Gln Arg Ser Val Met Leu Leu Arg
                7.0
                              7.5
Asp Ala Glu Arg Leu Gln Asp Asp Val Arg Ala Asn His Ala Gly Leu
                         90
            8.5
Thr Gly Glu Leu Arg Ile Thr Thr Thr Pro Glu Tyr Gly Ser Gln Val
        100
                       105
Val Val Pro Leu Leu Ala Glu Phe Ser Gln Leu His Pro Asp Leu Arg
 115
                      120
                                      125
Val Arg His Val Ser Ser Ser Leu His Ala Asp Leu Ile Ala Glu Arg
 130 135 140
Phe Asp Val Ala Ile Arg Leu Gly Thr Leu Ala Asp Ser Arg Tyr His
               150 155
Ala Ala Leu Met Thr Ser Phe Thr Ile Leu Pro Val Ala Thr Pro Gly
           165
                            170 175
Trp Leu Ala Asn His Pro Val Asp Ser Leu Glu Gln Leu Ala Glu Ala
         180 185
                                         190
Asp Trp Ile Ile His Glu Arg Leu Thr Ser Pro Leu Arg Trp Gln Val
      195 200 205
Arg Gly Val Asp Gly His Pro Val Ser Phe Glu Ile Lys Lys Ala Pro
                   215 220
   210
Arg Leu Tyr Ala Asp Ser Ala Gln Ala Leu Met Ala Phe Ala Leu Ala
                230 235 240
Gly Cys Gly Val Ala Leu Leu Pro Glu Trp Leu Val Arg Asn Ala Leu
             245
                            250 255
Asp Ala Gly Glu Leu Val Ser Leu Leu Pro Ala Tyr Thr Phe Ala Gln
                         265 270
          260
Gln Gly Ile Tyr Ala Val Tyr Pro Asp Ala Arg His Val Pro Ala Lys
     275
                      280 285
Val Arg Thr Phe Ile Asp Phe Met Arg Val Arg Val Thr
                   295
   290
<210> 9675
<211> 86
<212> PRT
<213> Enterobacter cloacae
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Pro Arg Cys Trp Arg His Val Asn Lys Glu Glu Lys Met Ile Cys Pro 10 Arg Cys Ala Asp Glu His Ile Glu Val Met Ala Thr Ser Pro Val Lys 30 Gly Val Trp Thr Val Tyr Gln Cys Gln His Cys Leu Tyr Thr Trp Arg 3.5 Asp Thr Glu Pro Leu Arg Arg Thr Ser Arg Glu His Tyr Pro Glu Ala Phe Arg Met Thr Gln Lys Asp Ile Asp Glu Ala Pro Gln Val Pro Thr Ile Pro Pro Leu Leu <210> 9676 <211> 300 <212> PRT <213> Enterobacter cloacae <400> 9676 Gln Gly Leu Thr Ala Glu Tyr Asn Tyr Thr Ser Pro Arg Gln Leu Thr 10 Ile Leu Phe Ile Val Ser Glu Arg His Met Phe Trp Ile Ile Asn Asp 25 3.0 Lys Ile Lys Phe Cys Pro Glu Arg Asn Leu Leu Ile Ser Leu Thr Arg 4.5 40 Pro Asp Leu Asn Val Ile Leu Thr Thr Pro Ala Ser Arg Cys Leu Asn 55 60 Leu Leu Leu Glu Ser Phe Pro Glu Val Val Thr Gln Lys Tyr Phe Phe 75 7.0 Asp Lys Val Trp Gly Glu Asp Gly Met Leu Val Pro Ala Asn Thr Leu 85 90 Tyr Gln Asn Ile Ser Ile Ile Arg Arg Gly Leu Arg Thr Thr Gly Glu 100 105 110 Thr Asp Asp Thr Leu Val Ala Thr Val Pro Arg Lys Gly Phe Gln Ile 115 120 125 Glu Lys Asn Val Arg Val Thr Arg Val Asp Thr Asp Cys Val Asp Asp 130 135 140 Gly Lys Lys Ala Thr Ala Thr Gly Val Glu Thr Ser Pro Val Glu Thr 150 155 145 Lys Asp Lys Pro Val Glu Asn Ile Pro Val Met Pro Gly Gly Arg Lys 165 170 Lys Gln Arg Gln Leu Arg Gln Tyr Ile Phe Pro Thr Ala Leu Met Ile 185 190 180 Ile Ala Phe Cys Ala Gly Phe Phe Ala Phe Gln Tyr Leu Leu His Asp 200 205 195 Asn Pro Glu Lys Asp Phe Phe Arg Asp Tyr Pro Ile Thr Leu Thr Gln 215 210 Asn Gly Cys His Phe Ser Ser Gln Asn Asp Asp Ile Arg Gly Val Gly 230 235 Asn Phe Arg Arg Phe Ile Lys Ile Ile Leu Asp Thr Gly Leu Asp Cys 250 245 Lys Lys Tyr Pro Trp Val Tyr Phe Ser Ser Ser Ser His Ala Pro Ala 265 260 Leu Ser Val Leu Ala Cys Arg Glu Pro Phe Glu Ile Lys Ala Asn Ala 280 Gly Cys Ile Ser Leu Tyr Phe Arg Gly His Leu 295 <210> 9677

<210> 967 <211> 141 <212> PRT

<213> Enterobacter cloacae

<400> 9677 Gly Ala Tyr Pro Met Ser Glu Thr Val Val Phe Ser Gln Leu Ser Arg 10 Lys Phe Ile Asp Glu Asn Asp Ala Thr Pro Asp Ala Ala Gln Gln Val 20 25 3.0 Val Tyr Tyr Ser Leu Ala Ile Gly His His Leu Gly Val Ile Asp Cys 4.0 35 Leu Glu Ala Ala Leu Thr Cys Pro Trp Pro Glu Tyr Leu Ala Trp Ile 55 Val Thr Leu Glu Glu Gly Ser Thr Ala Arg Arg Lys Met Glu Gly Val 70 75 Pro Lys Tyr Gly Glu Ile Val Ile Asp Ala Asn His Ile Ala Met Leu 95 90 85 Ala Asn Ala Phe Asp Ala Ala Leu Ser Val Gln Thr Pro Ala Gln Gln 100 105 Ala Trp Ser Lys Thr Leu Leu Gly Met Leu His Asp Ile His Gln Glu 120 115 Ser Ala Ile Tyr Leu Met Val Arg Arg Leu Arg Asp 135

<210> 9678 <211> 351 <212> PRT

<213> Enterobacter cloacae

<400> 9678 Ser Thr Leu Arg Leu Ile Gly Phe Glu Trp Asn Asn Thr Met Thr Thr 10 Met Leu Glu Val Ala Lys Arg Ala Gly Val Ser Lys Ala Thr Val Ser 20 Arg Val Leu Ser Gly Asn Gly Tyr Val Ser Gln Glu Thr Lys Asp Arg 4.0 45 35 Val Phe Gln Ala Ile Glu Glu Ser Gly Tyr Arg Pro Asn Leu Leu Ala 5.5 60 50 Arg Asn Leu Ala Thr Lys Arg Thr Gln Thr Leu Gly Leu Val Val Thr 70 7.5 Asn Thr Leu Tyr His Gly Val Tyr Phe Ser Glu Leu Leu Phe Asn Ala 85 90 9.5 Ala Arg Met Thr Glu Glu Lys Gly Arg Gln Leu Ile Leu Ala Asp Gly 100 105 Lys His Ser Ala Glu Glu Glu Arg Glu Ala Ile Gln Tyr Leu Leu Asp 115 120 125 Met Arg Cys Asp Ala Val Ile Ile Tyr Pro Arg Phe Leu Ser Val Glu 135 140 130 Ala Leu Asp Glu Ile Ile Glu Lys Cys Glu Gln Pro Ile Met Val Leu 150 155 145 Asn Arg Arg Leu Arg Lys Asn Ser Ser His Ser Val Trp Ser Asp His 170 175 165 Lys Ala Ser Cys Gln Asp Ala Val Ser Gln Leu Ile Ala Lys Gly His 185 190 180 Arg Glu Ile Ala Phe Ile Thr Gly Ser Leu Asp Ser Pro Thr Gly Val 205 200 195 Glu Arg Leu Ser Gly Tyr Arg Glu Ala Leu Ala Gln His Gly Ile Ala 215 220 Val Arg Asp Ala Leu Ile Ala Glu Gly Lys Trp Ser Pro Ala Ser Gly 230 235 Ala Ala Ala Val Ser Gln Leu Leu Thr Arg Gly Glu Ala Phe Thr Ala 250 245 Leu Val Ala Ser Asn Asp Asp Met Ala Ile Gly Ala Ile Arg Gln Leu

```
5247
                           265
His Glu Ser Gly Val Ala Thr Pro Gly Ala Val Ser Val Ile Gly Phe
                    280
                                        285
    275
Asp Asp Val Ala Ile Ala Pro Tyr Ile Val Pro Ser Leu Ser Ser Val
                                     300
  290
                    295
Arg Ile Pro Val Thr Glu Met Ile Gln Glu Thr Ile Ser Arg Leu Ile
                310
                                 315
Phe Met Leu Asp Gly Gly Glu Phe Lys Leu Gln Gln Thr Phe Ser Gly
          325 330 335
Glu Leu Ile Leu Arg Asp Ser Val Ile Asp Gly Pro His Arg
                           345
<210> 9679
<211> 194
<212> PRT
<213> Enterobacter cloacae
<400> 9679
Ile Ala Ser Arg Ile Thr Val Met Pro Glu Lys Gln Met Asn Arg Phe
                              10
Ile Met Ala Asp Ala Ser Lys Cys Ile Gly Cys Arg Thr Cys Glu Val
 20
                          25
Ala Cys Val Val Ser His Gln Ala Glu Gln Asp Cys Ala Ser Leu Thr
                    40
                                         45
Pro Asp Thr Phe Leu Pro Arg Ile His Val Ile Lys Gly Val Asn Ile
                    55
                                     60
Ser Thr Ala Ala Ile Cys Arg Gln Cys Glu Asp Ala Pro Cys Ala Asn
                 70
                                  75
Val Cys Pro Asn Gly Ala Ile Lys Arg Glu Lys Gly Phe Val His Val
                                                95
                               90
             8.5
Met Gln Glu Arg Cys Ile Gly Cys Lys Thr Cys Val Val Ala Cys Pro
         100
                           105
Tyr Gly Ala Met Glu Val Val Val Arg Pro Val Val Arg Asn Ser Gly
      115
                        120
                             125
Ile Gly Leu Ser Val Arg Ala Glu Lys Ala Glu Ala Asn Lys Cys Asp
                   135
                                     140
 130
Leu Cys Tyr His Arg Asp Ala Gly Pro Ala Cys Met Glu Ala Cys Pro
                150 155
145
Thr His Ala Leu Val Cys Val Asp Arg Asp Lys Leu Glu Gln Met Ser
                  170 175
             165
Ala Glu Lys Arg Arg Arg Ala Ala Phe Asp Thr Ser Ser Ser Leu Leu
          180
Phe
<210> 9680
<211> 413
<212> PRT
<213> Enterobacter cloacae
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Asp His Val His Lys Gly Phe Lys Met Leu Arg Leu Leu Arg Asn Glu 65 70 75 80

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Pro Arg Ala Ala Cys Leu Leu Leu Ala Leu Gly Met Ala Asn Leu Leu
                          90
Ala Trp Gly Leu Ala Trp His Thr Phe Ser Asp Ser Thr Ala Leu Met
        100
                        105
Ala Ala Ser Leu Leu Ala Trp Cys Tyr Gly Leu Arg His Ala Val Asp
                    120
     115
Ala Asp His Ile Ala Ala Ile Asp Thr Val Thr Arg Lys Met Met Gln
 130 135
                                140
Gln Gly Lys Arg Pro Ser Gly Val Gly Ala Trp Phe Ser Leu Gly His
145 150
                             155 160
Ser Thr Ile Val Val Leu Ala Ser Ile Ala Ile Ala Ala Thr Ala Thr
      165
                          170
Ala Phe Gln Lys Asn Met Ala Trp Phe His Glu Thr Gly Ser Leu Ile
  180 185
                                       190
Gly Thr Ala Val Ser Ala Thr Phe Leu Leu Ala Met Ala Leu Val Asn 195 $200$
Met Val Ile Leu Arg Gly Val Trp Arg Ser Phe Gln Ala Leu Lys His
 210 215 220
Gly Arg Pro Val Gln Gly Asp Ile Thr Leu Pro Ala Gln Gly Gly Val
225 230 235
Met Asn Trp Leu Phe Gly Lys Thr Phe Arg Leu Val Asn Lys Ser Trp 245
Gln Met Tyr Leu Val Gly Phe Leu Phe Gly Leu Gly Phe Asp Thr Ala
        260 265 270
Thr Glu Ile Gly Val Leu Gly Ile Ser Ala Ala Ser Ala Ser Ser Gly
275 280 285
Met Ser Val Trp Ser Ile Met Ile Phe Pro Ala Leu Phe Ala Ser Gly
 290 295 300
Met Ala Leu Val Asp Thr Leu Asp Asn Leu Leu Met Val Gly Ala Tyr
305 310 315
Gly Trp Ala Phe Asn Lys Pro Gln Arg Lys Leu Tyr Tyr Asn Met Thr $325$
Ile Thr Gly Thr Ser Val Val Val Ala Leu Phe Ile Gly Gly Leu Glu
        340 345
                                       350
Ala Leu Gly Leu Leu Met Asp Lys Phe Ser Leu Ser Gly Gly Val Trp
      355 360 365
Asp Leu Ile Gly Ala Val Asn Asp Asn Leu Gly Asp Ala Gly Phe Val
 370 375 380
Val Val Gly Leu Phe Val Ala Cys Trp Leu Ile Ser Met Ala Asn Tyr
385 390 395 400
Arg Trp Arg Gly Tyr Asp Ala Leu Val Val Arg Ser
```

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<210> 9681
<211> 533
<212> PRT
<213> Enterobacter cloacae
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8.5

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Thr Leu Glu Gly His Pro Arg Leu Glu Thr Ile Ala Arg Ala Gly Asp
            105
    100
Val Val Arg Phe Pro Ala Asp Ser Asp Leu Pro Asp Pro Tyr Asp Gly
 115 120
Leu Ile Pro Gly Gln Glu Ser Leu Lys Val His Ala Cys Ile Gly Leu
      135
                               140
Pro Leu Phe Ala Gly Gln Asn Leu Ile Gly Ala Leu Thr Leu Asp Gly
145 150 155 160
Met Ser Pro Asp Gln Phe Asp Thr Phe Ser Asp Glu Glu Leu Arg Leu
      165 170 175
Ile Ala Ala Leu Ala Ala Gly Ala Leu Asn Asn Ala Leu Leu Ile Glu
        180 185 190
Gln Leu Glu Ser Gln Asn Ile Leu Pro Gly Ser Pro Thr Ala Phe Glu
 195 200 205
Gln Val Ala His Thr Glu Met Ile Gly Leu Ser Pro Gly Met Ala Gln
                215 220
Leu Lys Lys Glu Ile Glu Ile Val Ala Ala Ser Asp Leu Asn Val Leu
225 230
                  235 240
Ile Phe Gly Glu Thr Gly Thr Gly Lys Glu Leu Val Ala Lys Ala Ile
     245 250 255
His Glu Ala Ser Pro Arg Ala Val Asn Pro Leu Val Tyr Leu Asn Cys
            265 270
        260
Ala Ala Leu Pro Glu Ser Val Ala Glu Ser Glu Leu Phe Gly His Val
 275 280 285
Lys Gly Ala Phe Thr Gly Ala Ile Ser Asn Arg Ser Gly Lys Phe Glu
 290 295 300
Met Ala Asp Asn Gly Thr Leu Phe Leu Asp Glu Ile Gly Glu Leu Ser
              310 315
305
Leu Ser Leu Gln Ala Lys Leu Leu Arg Val Leu Gln Tyr Gly Asp Ile
                         330 335
           325
Gln Arg Val Gly Asp Asp Arg Ser Leu Arg Val Asp Val Arg Val Leu
                       345
                                     350
        340
Ala Ala Thr Asn Arg Asp Leu Arg Glu Glu Val Leu Ala Gly Asn Phe
                   360 365
 355
Arg Ala Asp Leu Phe His Arg Leu Ser Val Phe Pro Leu Thr Val Pro
                 375
                               380
  370
Pro Leu Arg Glu Arg Gly Glu Asp Val Val Leu Leu Ala Gly Phe Phe
              390
                            395
Cys Glu Gln Cys Arg Leu Lys Met Gly Leu Ser Arg Val Val Leu Ser
                         410 415
           405
Pro Gly Ala Arg Thr His Leu Leu Ser Tyr Gly Trp Pro Gly Asn Val
        420
                       425
                                     430
Arg Glu Leu Glu His Ala Ile His Arg Ala Val Val Leu Ala Arg Ala
                    440
                         445
Thr Arg Ser Gly Asp Glu Val Val Ile His Ala Arg His Phe Ala Leu
  450
                 455
                     460
His Glu Glu Thr Thr Pro Ser Val Lys Pro Val Ile Pro Glu Ser Val
                   475
              470
Asn Glu Asn Leu Arg Glu Ala Thr Asn Ala Phe Gln Arg Gln Met Ile
               490
           485
Ala Arg Ala Leu Glu Gln Asn Asn Arg Ser Trp Ala Ala Gys Ala Arg
       500 505 510
Ala Leu Glu Met Asp Val Ala Asn Leu His Arg Leu Ala Lys Arg Leu
                  520
 515
Gly Leu Lys Gly
   530
```

<210> 9682

<211> 283

<212> PRT

<213> Enterobacter cloacae

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<400> 9682
Gly Ser Gly Ser Ala Gly Cys His Pro Arg Leu His Val Lys Ile Tyr
Phe Val Ile Lys Glu Arg His Met Ser Gln Val Ala Val Val Ile Gly
                         25
        20
Gly Gly Gln Thr Leu Gly Glu Phe Leu Cys His Gly Leu Ala Ala Glu
      35
                     40
Gly Tyr Arg Val Ala Val Val Asp Ile Gln Ser Glu Lys Ala Ala Arg
 50 55
Val Ala Asp Ala Ile Asn Thr Glu Phe Gly Glu Gly Met Ala Tyr Gly
    70
                               7.5
Phe Gly Ala Asp Ala Thr Ser Glu Gln Ser Val Met Ala Leu Ala Arg
       85 90
Gly Val Asp Glu Ile Phe Gly Arg Ile Asp Leu Leu Val Tyr Ser Ala
        100 105 110
Gly Ile Ala Lys Ala Ala Phe Ile Ser Asp Phe Glu Leu Gly Asp Phe
     115 120
                          125
Asp Arg Ser Leu Gln Val Asn Leu Val Gly Tyr Phe Leu Cys Ala Arg
 130 135 140
Glu Phe Ser Arg Leu Met Ile Arg Asp Gly Ile Gln Gly Arg Ile Ile
145 150 155 160
Gln Ile Asn Ser Lys Ser Gly Lys Val Gly Ser Lys His Asn Ser Gly
      165 170 175
Tyr Ser Ala Ala Lys Phe Gly Gly Val Gly Leu Thr Gln Ser Leu Ala
         180 185 190
Leu Asp Leu Ala Glu Tyr Gly Ile Thr Val His Ala Leu Met Leu Gly
 195
                     200 205
Asn Leu Leu Lys Ser Pro Met Phe Gln Ser Leu Leu Pro Gln Tyr Ala
210 225 220
 210
Ala Lys Leu Gly Ile Lys Ala Glu Glu Val Glu Gln Tyr Tyr Ile Asp
               230 235 240
Lys Val Pro Leu Lys Arg Gly Cys Asp Tyr Gln Asp Val Leu Asn Met
            245 250 255
Leu Leu Phe Tyr Ala Ser Pro Lys Ala Ser Tyr Cys Thr Gly Gln Ser
   260 265
Ile Asn Val Thr Gly Gly Gln Val Met Phe
<210> 9683
<211> 120
<212> PRT
<213> Enterobacter cloacae
<400> 9683
Gly Gly Val Met His Glu Ile Thr Leu Cys Gln Arg Ala Leu Glu Leu
                            10
Ile Glu Gln Gln Ala Val Gln Asr His Ala Lys Arg Val Thr Gly Val
         20
                        25
Trp Leu Lys Val Gly Ala Phe Ser Cys Val Glu Thr Ser Ala Leu Thr
                     40
Phe Cys Phe Glu Leu Val Cys Arg Gly Thr Leu Ala Glu Gly Cys Ala
                   55
 50
                                  60
Leu His Ile Glu Glu Gln Gln Ala Glu Cys Trp Cys Glu Gln Cys Gln
```

Arg Leu Glu Ile Glu Lys Glu

Glu Tyr Val Thr Leu Leu Ser Ser Lys Val Gln Arg Cys Pro Gln Cys 90 Gln Ser Ser Gly Leu Arg Ile Val Ala Asp Asp Gly Met Gln Ile Gln

105

7.5

70

100

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<210> 9684
<211> 289
<212> PRT
<213> Enterobacter cloacae
<400> 9684
Ser Met Cys Ser Thr Cys Gly Cys Ala Glu Gly Asn Leu Tyr Ile Glu
                          10
Gly Asp Glu His Arg Pro His Ser Ala Phe Arg Ser Ala Pro Phe Ser
        20
                       25
Pro Ala Pro Arg Pro Ala Ala Ala Leu Thr Gly Ile Thr Phe Ala Pro
                  4.0
Gln Arg Ser Asp Ala Gly Asp Leu His Tyr Gly Arg Gly Glu Ala Gly
                55
Thr His Ala Pro Gly Ile Ser Gln Arg Gln Met Leu Glu Val Glu Ile
         70 75
Asn Val Leu Asp Lys Asn Asn Gln Leu Ala Val Arg Asn Arg Ala Arg
           85
                90
Phe Ala Ala Arg Glu Gln Leu Val Leu Asn Leu Val Ser Ser Pro Gly
      100 105
Ser Gly Lys Thr Thr Leu Leu Thr Glu Thr Leu Lys Arg Leu Asn Lys
115 120
Arg Val Ser Cys Ala Val Ile Glu Gly Asp Gln Gln Thr Val Asn Asp
 130 135 140
Ala Ala Arg Ile Arg Glu Thr Gly Thr Pro Ala Ile Gln Val Asn Thr
145 150 155 160
Gly Lys Gly Cys His Leu Asp Ala Gln Met Ile Ala Asp Ala Ala Pro
         165 170
                                         175
Arg Leu Pro Leu Ala Asn Asn Gly Ile Leu Phe Ile Glu Asn Val Gly
   180 185 190
Asn Leu Val Cys Pro Ala Ser Phe Asp Leu Gly Glu Arg His Lys Val
195 200 205
Ala Val Leu Ser Val Thr Glu Gly Glu Asp Lys Pro Leu Lys Tyr Pro
 210 215
                              220
His Met Phe Ala Ala Ala Ser Leu Met Leu Leu Asn Lys Val Asp Leu
   230 235
Leu Pro Tyr Leu Asn Phe Asp Val Asp Lys Cys Leu Ala Tyr Ala Arg
       245
                         250
Glu Val Asn Pro Asp Ile Glu Ile Leu Leu Val Ser Ala Thr Arg Gly
      260 265 270
Asp Gly Met Asp Ala Trp Leu Asn Trp Leu Glu Asn Glu Arg Cys Ala
```

```
<210> 9685
<211> 703
<212> PRT
<213> Enterobacter cloacae
```

His Ser Ala Thr His Arg Ala Ser Tyr Phe Ser Thr Arg Asp Asn Gly

Lys Ile Phe Glu Tyr Glu Asp Glu Thr Phe Leu Ala His Gly Pro Val 8.5 90 Arg Arg Ile Leu Ser Arg Pro Glu Ala Leu His Cys Asn Phe Asp Gln 100 105 Phe Arg Gln Ala Trp Pro Lys Leu Ala Glu Ser Asn Leu Tyr His Pro 120 125 Phe Gly His Tyr Ser Met Leu Pro Leu Ala Val Glu Gly Gln Ile Phe 130 135 140 Gly Gly Cys Glu Phe Ile Arg Asp Thr Asp Gln Pro Trp Ser Glu Ala 150 155 160 Glu Tyr Glu Arg Leu His Thr Phe Thr Gln Ile Val Ala Val Val Ala 165 170 175 Glu Gln Ile Gln Ser Arg Val Thr Asn Asn Val Asp Tyr Asp Leu Leu 180 185 190 Ser Arg Glu Arg Asp Asn Phe Arg Ile Leu Val Ala Ile Thr Asn Ala 195 200 205 Val Leu Ser Arg Leu Asp Met Asp Glu Leu Val Ser Glu Val Ser Lys 210 215 220 Glu Ile His His Tyr Phe Lys Ile Asp Ala Ile Ser Ile Ala Leu Arg 225 230 235 Gly Asn Arg Lys Gly Lys Leu Asn Ile Tyr Ser Thr His Tyr Leu Asp 245 250 255 Glu Ala Asn Pro Ala His Glu Gln Ser Glu Val Asp Glu Ala Gly Thr 260 265 270 Leu Ser Glu Arg Val Phe Lys Ser Lys Glu Ile Leu Leu Leu Asn Leu 275 280 285 Asn Glu Gln Asp Pro Val Ala Pro Tyr Glu Arg Met Leu Phe Asn Thr 290 295 300 Trp Gly Asn Lys Ile Gln Thr Leu Cys Leu Leu Pro Leu Met Ser Gly 305 310 315 Asn Thr Met Leu Gly Val Leu Lys Leu Ala Gln Cys Asp Glu Ala Val 325 330 335 Phe Thr Thr Ala Asn Leu Lys Leu Leu Arg Gln Ile Ala Glu Arg Ile 340 345 350 Ser Ile Ala Leu Asp Asn Ala Leu Ala Tyr Gln Glu Ile His Arg Leu 355 360 365 Lys Glu Arg Leu Val Asp Glu Asn Leu Ala Leu Thr Glu Gln Leu Asn 370 375 380 Asn Val Asp Ser Glu Phe Gly Glu Ile Ile Trp Arg Ser Asp Ala Met 385 390 395 400 Tyr Ser Val Leu Lys Gln Val Glu Met Val Ala Gln Ser Asp Ser Thr 405 410 415 Val Leu Ile Leu Gly Glu Thr Gly Thr Gly Lys Glu Leu Ile Ala Arg 420 425 430 Ala Ile His Asn Leu Ser Asn Arg Asn Ser Arg Arg Met Val Lys Met 435 440 445 Asn Cys Ala Ala Met Pro Ala Gly Leu Leu Glu Ser Asp Leu Phe Gly 450 455 460 His Glu Arg Gly Ala Phe Thr Gly Ala Ser Ser Gln Arg Leu Gly Arg 470 475 Phe Glu Leu Ala Asp Lys Ser Ser Leu Phe Leu Asp Glu Val Gly Asp 485 490 495 Met Pro Leu Glu Leu Gln Pro Lys Leu Leu Arg Val Leu Gln Glu Gln 505 510 500 Glu Phe Glu Arg Leu Gly Ser Asn Lys Leu Ile Gln Thr Asp Val Arg 515 520 525 Leu Ile Ala Ala Thr Asn Arg Asp Leu Lys Lys Met Val Ala Asp Arg 530 535 540 Glu Phe Arg Ser Asp Leu Tyr Tyr Arg Leu Asn Val Phe Pro Ile Cys 555

```
Leu Pro Pro Leu Arg Glu Arg Pro Glu Asp Ile Pro Leu Leu Val Lys
                                   575
                     570
            565
Ala Phe Thr Ala Lys Ile Ala Arg Arg Met Gly Arg Asn Ile Asp Ser
         580
                        585
                                  590
Ile Pro Ala Glu Thr Leu Arg Thr Leu Ser Ala Met Glu Trp Pro Gly
     595
                  600
                         605
Asn Val Arg Glu Leu Glu Asn Val Ile Glu Arg Ala Val Leu Leu Thr
  610
                 615
                       620
Arg Gly Asn Val Leu Gln Leu Ser Leu Pro Glu Val Ser Leu Ala Glu
            630 635
Thr Thr Val Ala Ala Thr Glu Val Ala Lys Asp Gly Glu Asp Glu Tyr
           645 650 655
Gln Leu Ile Leu Arg Val Leu Arg Glu Thr Asn Gly Val Val Ala Gly
         660
                        665 670
Pro Lys Gly Ala Ala Gln Arg Leu Glu Leu Lys Arg Thr Thr Leu Leu
   675
                     680
Ser Arg Met Lys Arg Leu Gly Ile Asp Lys Glu Ser Leu Asn
 690
                 695
```

<210> 9686 <211> 110

<212> PRT <213> Enterobacter cloacae

<400> 9686

Arg Val Phe Thr Val IIe Leu Tyr Arg Gln Ser Glu His Thr Leu Pro 1
Thr Val Thr Gly Gly Ser Met Gln Gly Met Ala IIe Thr Lys Pro Tyr 25 30
Arg His Leu Lys Val Gly Tyr Phe Arg Lys Arg His Glu Asp Arg Lys 35 40 45
Thr Lys IIe Pro Thr Arg Tyr Ser Val His Ala Ala Leu Asn Leu Lys 50 50 60
Gly Asp Trp Leu Glu Lys Ala Gly Phe Leu Thr His Ser Gln Val Arg Val Glu Val Gly Pro Gly Lys IIe IIe IIe Glu Leu Ile Lys Gu Pro

85 90
Asp Asp Gly His Pro Gly His Val Val Gln Arg Glu Gln

110

<210> 9687 <211> 330 <212> PRT <213> Enterobacter cloacae

<400> 9687

Thr Glu Ser Pro Ser Phe Arg Ser His Ser Met Asn Arg Ile Arg Ile Glu Lys Gly Thr Gly Gly Trp Gly Gly Pro Leu Glu Phe Asp Ala Thr 25 Glu Gly Lys Lys Ile Val Tyr Ile Thr Ala Gly Thr Arg Pro Ala Ile 35 40 Val Asp Lys Leu Arg Glu Leu Thr Gly Trp Glu Ala Val Asp Gly Phe 50 55 Lys Glu Gly Glu Pro Pro Glu Ala Glu Ile Gly Val Ala Val Ile Asp 70 7.5 Cys Gly Gly Thr Leu Arg Cys Gly Ile Tyr Pro Lys Arg Arg Ile Pro 85 90 Thr Val Asn Ile His Ser Thr Gly Lys Ser Gly Pro Leu Ala Gln Tyr 105 Ile Val Glu Asp Ile Tyr Val Ser Gly Val Lys Glu Asp Asn Ile Thr

```
Leu Val Asn Gly Thr Ser Ala Pro Gln Lys Ala Ala Pro Arg Glu Tyr
                  135
Asp Thr Ser Lys Lys Ile Thr Glu Gln Ser Asp Gly Leu Leu Ala Lys
               150
                             155
Val Gly Met Gly Met Gly Ser Ala Val Ala Val Leu Phe Gln Ser Gly
            165
                      170
Arg Asp Thr Ile Asp Thr Val Leu Lys Thr Ile Leu Pro Phe Met Ala
       180
                185
                             190
Phe Val Ser Ala Leu Ile Gly Ile Ile Met Ala Ser Gly Leu Gly Asp
      195
             200 205
Trp Ile Ala His Gly Leu Ala Pro Leu Ala Ser His Pro Leu Gly Leu
  210 215 220
Val Thr Leu Ala Leu Ile Cys Ser Phe Pro Leu Leu Ser Pro Phe Leu
            230 235
Gly Pro Gly Ala Val Ile Ala Gln Val Ile Gly Val Leu Ile Gly Val
         245 250 255
Gln Ile Gly Leu Gly Asn Ile Leu Pro His Leu Ala Leu Pro Ala Leu
        260 265 270
Phe Ala Ile Asn Ala Gln Ala Ala Cys Asp Phe Ile Pro Val Gly Leu
275 280 285
Ser Leu Ala Glu Ala Arg Gln Glu Thr Val Arg Val Gly Val Pro Ser
290 295 300
Val Leu Val Ser Arg Phe Leu Thr Gly Ala Pro Thr Val Leu Ile Ala
305 310
Trp Phe Val Ser Gly Phe Ile Tyr Gln
            325
<210> 9688
<211> 125
<212> PRT
<213> Enterobacter cloacae
<400> 9688
Glu Val Pro Ala Met Thr Val Ile Tyr Gln Thr Thr Ile Thr Arg Ile
                          10
Gly Gln Ser Ala Ala Asp Ala Leu Ser Asp Gln Met Leu Ile Thr Phe
 20
                         25
                                        3.0
Arg Glu Gly Ala Pro Ala Asp Ile Glu Glu Phe Cys Phe Ile His Cys
35
                     40
                                     45
His Gly Glu Leu Asn Gly Glu Leu Lys Ala Gly Ser Gln Leu Glu Leu
 50 55
                                60
Gly Lys Ala Arg Tyr Ala Val Thr Ala Val Gly Asp Val Ala Glu Gln
              70
                              75
Asn Leu Arg Glu Leu Gly His Ile Thr Leu Arg Phe Asp Gly Gln Pro
          85
                            90
Gln Ala Glu Tyr Pro Gly Thr Val His Val Glu Gly Pro Val Pro Gln
       100
                        105
Ala Val Thr Pro Gly Cys Thr Leu Lys Phe Ile Ser
<210> 9689
<211> 124
<212> PRT
<213> Enterobacter cloacae
<400> 9689
Gln Gly Ala Asp Met Val Thr Ala Leu Ile Thr Val Ala Ala Leu Ala
                         10
                                     1.5
```

Trp Ile Cys Gln Met Ala Phe Gly Gly Trp Gln Ile Tyr Gln Phe Asn

```
Arg Ala Phe Asp Ala Leu Cys Gln Lys Gly Arg Val Gly Val Gly Arg
                    40
Ser Gly Gly Arg Phe Lys Pro Arg Val Val Val Ala Val Ala Leu Asp
                 55
Glu His Asn Arg Val Ser Asp Ser Leu Ile Met Arg Gly Val Thr Val
              70
Phe Ala Arg Pro Thr Lys Ile Gln Ala Ile Asn Gly Ile Ser Leu His
                          90
                              95
Glu Leu Gln Pro Asp Val Ile Phe Pro His Asp Ser Leu Cys Gln Asn
       100
                  105 110
Ala Leu Ser Leu Ala Leu Asn Leu Lys His Gly
<210> 9690
<211> 279
<212> PRT
<213> Enterobacter cloacae
<400> 9690
Phe Arg Cys Glu Ser Tyr Lys Leu Ala Glu Leu Ser Phe Arg Asn Val
        5
                1.0
Arg Asn Glu Ala Pro Met Lys Pro Arg Gln Arg Gln Ala Ala Ile Leu
20
                  25
Glu His Leu Gln Lys Gln Gly Lys Cys Ser Val Glu Asp Leu Ala His
35 40 45
Tyr Phe Asp Thr Thr Gly Thr Thr Ile Arg Lys Asp Leu Val Leu Leu
50 55
Glu Asn Ser Gly Ala Val Ile Arg Thr Tyr Gly Gly Val Val Leu Asn
65 70
                           75
Lys Asp Glu Ala Asp Pro Pro Ile Asp His Lys Thr Leu Ile Asn Thr
      85
                         90
His Gln Lys Ala Leu Ile Ala Glu Ala Ala Val Lys Phe Ile His Asp
 100 105 110
Gly Asp Ser Ile Ile Leu Asp Ala Gly Ser Thr Val Leu Gln Met Ile
115 120 125
Pro Leu Leu Ser Arg Phe Asn Asn Ile Thr Val Met Thr Asn Ser Leu
130 135 140
His Ile Val Asn Ala Leu Ser Glu Phe Asp Ser Glu Gln Thr Ile Leu
145 150 155 160
Met Pro Gly Gly Thr Phe Arg Lys Lys Ser Ala Ser Phe His Gly Gln
         165 170 175
Leu Ala Glu Asn Ala Phe Asp His Phe Ser Phe Asp Lys Leu Phe Met
   180 185 190
Gly Thr Asp Gly Ile Asp Leu Asn Ala Gly Val Thr Thr Phe Asn Glu
   195 200 205
Val Phe Ser Val Ser Lys Ala Met Cys Asn Ala Ala Arg Glu Val Phe
                215 220
Leu Met Ala Asp Ser Ser Lys Phe Gly Arg Lys Ser Pro Asn Ile Val
             230 235 240
Cys Ser Leu Glu Ser Val Asp Lys Leu Ile Thr Asp Ala Gly Ile Asp
          245 250 255
Pro Ala Phe Lys Lys Ala Leu Glu Ala Lys Gly Ile Asp Val Ile Val
       260
                      265 270
Thr Gly Glu Lys Asn Glu
```

<210> 9691

<211> 384

<212> PRT <213> Enterobacter cloacae

```
<400> 9691
Thr Gly Asn Gly Gly Lys Met Ser His Gly Ile Val Ile Ile Gly Ser
                           10
Gly Phe Ala Ala Arg Gln Leu Val Lys Asn Ile Arg Lys Gln Asp Ala
        20
                        25
Asn Val Pro Leu Thr Val Ile Ala Ala Asp Ser Met Asp Glu Tyr Asn
     35
                     40
Lys Pro Asp Leu Ser His Val Ile Ser Gln Asn Gln Arg Ala Asp Asp
                 55
                              60
Leu Thr Arg Gln Thr Ala Gly Glu Phe Ala Glu Gln Phe Asn Leu Arg
               7.0
                             7.5
Leu Phe Pro Tyr Thr Trp Val Thr Asp Ile Asp Ala Asp Ala His Val
           85
                          90 95
Val Asn Ala Lys Asp Lys Thr Trp His Tyr Asp Lys Leu Val Leu Ala
        100
                     105
Thr Gly Ala Ser Ala Phe Val Pro Pro Val Glu Gly Arg Glu Leu Met
    115 120 125
Val Thr Leu Asn Ser Gln Gln Glu Tyr Gln Ala Ser Glu Thr Leu Leu
  130
      135 140
Arg Asp Ala Thr Arg Val Met Ile Val Gly Gly Leu Ile Gly Thr
   150 155
Glu Leu Ala Met Asp Phe Cys Arg Ala Gly Lys Ser Val Thr Leu Val
      165 170 175
Asp His Ala Ala Ser Ile Leu Ser Ala Leu Met Pro Ala Glu Val Ser
   180 185 190
Ser Arg Leu Gln His Arg Leu Thr Asp Met Gly Val His Leu Leu Leu
195 200 205
Lys Ser Gln Leu Gln Ser Leu Ser Lys Thr Glu Thr Gly Ile Cys Ala
210 215 220
Thr Leu Asp Arg Asn Arg Ser Val Glu Val Asp Val Val Ile Ala Ala
225 230 235
Thr Gly Leu Arg Pro Glu Thr Ala Leu Ala His Arg Ala Gly Ala Glu
           245 250 255
Ile Asn Arg Gly Val Lys Val Asp Ser Tyr Leu Gln Thr Thr Gln Pro
      260 265
Asp Ile Tyr Ala Leu Gly Asp Cys Ala Glu Ile Asn Gly Gln Val Leu
   275 280 285
Pro Phe Leu Gln Pro Ile Gln Leu Ser Ala Met Phe Leu Ala Lys Asn
 290 295 300
Leu Leu Gly Gly Asn Ala Pro Val Lys Leu Pro Ala Met Leu Val Lys
305 310 315
                                            320
Val Lys Thr Pro Glu Leu Pro Leu His Leu Ala Gly Glu Thr Gln Arg
         325 330
Gln Asp Leu Asp Trp Gln Ile Ala Leu Ser Pro Gln Gly Met Val Ala
      340 345 350
Arg Gly Thr Asp Thr Ala Gly Gln Met Arg Ala Phe Val Val Ser Glu
    355 360
                                   365
Asp Arg Met Lys Glu Ala Phe Ala Leu Leu Lys Ser Leu Pro Ala
```

<210> 9692 <211> 114 <212> PRT

<213> Enterobacter cloacae

<400> 9692

His Pro Arg Arg Arg Ala Ala Ser Arg Ser Pro Pro Asp Thr Leu Pro 15 10 15 15 16 18 18 Ala His Asp Asp Ala Ala Arg Ser Gln Arg Ala Ala Leu Ala Ser 20 20 30 Gly Pro Thr Val Gly Arg Asp Ile Pro Asp Gly His Arg Thr Pro His

4.0 Ala Leu Ala Gly Lys Arg Arg Ser Pro Ala Ser Ser Arg Ala His Cys 55 60 Ala Thr Ala Pro Leu Arg Pro Arg Arg Ser Asp Arg Gln Asn Ala Gly 70 75 Ser Ala Pro Pro Gly Cys His Val Pro Gly Arg Arg Tyr Phe Ser Ser 85 90 95 Pro Arg Arg Cys Ile Thr Trp Ala Gly Cys Arg Gly Ile Arg Arg Ala 105

Met

<210> 9693 <211> 338 <212> PRT

<213> Enterobacter cloacae

325

Cys

<400> 9693 Ser Met Asn Thr Val Glu Met Ala His Gly Ser Gly Gly Gln Ala Met 10 Gln Gln Leu Ile Asn Arg Leu Phe Met Asp Ala Phe Asp Asn Pro Trp 20 25 Leu Ala Glu Gln Glu Asp Gln Ala Arg Ile Ala Leu Ser Thr Leu Thr 35 40 Ala His Gly Asp Arg Leu Ala Phe Ser Thr Asp Ser Tyr Val Ile Asp 5.5 Pro Leu Phe Pro Gly Gly Asp Ile Gly Lys Leu Ala Val Cys Gly 65 70 Thr Ala Asn Asp Val Ala Val Ser Gly Ala Ile Pro Arg Tyr Leu Ser 8.5 90 Cys Gly Phe Ile Leu Glu Glu Gly Leu Pro Met Glu Thr Leu Thr Ala 100 105 110 Val Val Asn Ser Met Ala His Thr Ala Arg Glu Ala Gly Ile Ala Ile 115 120 125 Val Thr Gly Asp Thr Lys Val Val Gln Arg Gly Ala Ala Asp Lys Leu 130 135 140 Phe Ile Asn Thr Ala Gly Met Gly Ala Ile Pro Ala Asp Ile His Trp 150 155 Gly Ala Gln Gln Leu Cys Ala Gly Asp Val Leu Ile Val Ser Gly Thr 165 170 Leu Gly Cys His Gly Ala Thr Ile Leu Asn Leu Arg Glu Gly Leu Arg 180 185 190 Leu Asp Gly Glu Leu Arg Ser Asp Cys Ala Val Leu Thr Pro Leu Ile 195 200 205 Gln Thr Leu Arg Asp Met Pro Gly Val Lys Ala Leu Arg Asp Ala Thr 210 220 Arg Gly Gly Val Asn Ala Val Val His Glu Phe Ala Ala Ser Ser Gly 225 230 235 Cys Gly Ile Glu Leu Thr Glu Arg Gly Leu Pro Val Lys Gly Ala Val 245 250 Arg Gly Leu Cys Glu Leu Leu Gly Leu Asp Pro Leu Asn Phe Ala Asn 260 265 Glu Gly Lys Leu Val Ile Gly Val Glu Arg Thr Ala Ala Glu Ala Val 275 280 285 Leu Ala Gln Leu Arg Ala His Pro Leu Gly Lys Asp Ala Ala Ile Ile 290 295 300 Gly Asp Val Val Glu Arg Lys Gly Val Arg Leu Thr Gly Leu Tyr Gly 315 310 Val Lys Arg Thr Leu Asp Leu Pro His Ala Glu Pro Leu Pro Arg Ile

```
<210> 9694
<211> 255
<212> PRT
<213> Enterobacter cloacae
<400> 9694
Val Met Ser Ile Cys Ala Glu Lys Ile Thr Trp Lys Val Gly Lys Lys
      5
                         10
Ile Ile Val Asn His Val Ser Leu Lys Val Ser Arg Gly Glu Thr Val
 20
                         25
Gly Leu Leu Gly Pro Asn Gly Cys Gly Lys Ser Ser Leu Leu Arg Ile
   35 40 45
Leu Ala Gly Leu Arg Arg Pro Asp Ala Gly Cys Val Thr Leu Asp Gly
 50
                  55
Gln Asp Ile Ala Arg Ile Ala Lys Lys Gln Leu Ala Arg Arg Val Ala
               70
                               7.5
Phe Val Glu Gln His Gly Met Thr Asp Ala Asn Met Arg Val Arg Asp
       85 90
Val Val Lys Leu Gly Arg Ile Pro His His Ser Pro Phe Ser Asn Trp
 100 105 110
Ser Ala Gln Asp Asp Glu Thr Vai Thr Ala Ala Leu Gln Arg Val Asp
115
                     120
                                      125
Met Leu Asp Arg Ser Glu Gln Gly Trp Leu Ser Leu Ser Gly Gly Glu
130 135 140
Arg Gln Arg Val His Ile Ala Arg Ala Leu Ala Gln Thr Pro Thr Glu
               150
                               155
Ile Leu Leu Asp Glu Pro Thr Asn His Leu Asp Ile His His Gln Met
           165 170
                                             175
Gln Leu Met Gln Leu Ile Ser Glu Leu Pro Val Thr Ser Ile Val Ala
   180
                         185
                                         190
Ile His Asp Leu Asn His Ala Ser Met Phe Cys Asp Ser Leu Ile Val
                      200 205
Met Gln Gln Gly Gln Ile Val Ala Thr Gly Thr Pro Gln Glu Ile Leu
                  215
                                  220
Ser Glu Glu Leu Leu Trp Asp Val Phe Arg Val Lys Thr Arg Ile Glu
225 230 235
Ile Ser Pro Tyr His Gly Lys Lys His Ile His Phe Ile Val
             245
                             250
                                             255
<210> 9695
<211> 410
<212> PRT
<213> Enterobacter cloacae
<400> 9695
Val Lys Thr Met Pro Leu Arg Thr Ala Thr Thr Leu Trp Pro Pro Val
Leu Leu Gly Ser Gln Phe Val Phe Asn Ile Gly Phe Tyr Ala Val Val
         20
                         25
                                         30
Pro Phe Leu Ala Ile Phe Leu Arg Asp Asp Met Leu Leu Ser Gly Gly
                    40
                                      45
Leu Ile Gly Leu Val Leu Gly Leu Arg Thr Phe Ser Gln Gln Gly Met
                  55
Phe Ile Val Gly Gly Ala Leu Ser Asp Arg Phe Gly Ala Lys Ser Val
                7.0
Ile Leu Ser Gly Cys Ile Val Arg Val Val Gly Tyr Leu Leu Leu Ala
            85
                            90
Phe Gly Gln Ser Leu Trp Pro Val Ile Leu Gly Ala Cys Leu Thr Gly
```

110

```
Val Gly Gly Ala Leu Phe Ser Pro Ser Ile Glu Ala Leu Leu Ala Lys
   115
            120
                             125
Ala Gly Thr Gln Ser Glu Ala Lys Gly Lys Arg Ser Arg Ala Glu Trp
  130 135
                                  140
Phe Ala Leu Phe Ala Val Cys Gly Glu Leu Gly Ala Val Leu Gly Pro
145
    150 155
Val Met Gly Ala Leu Leu Thr Gly Leu Gly Phe Arg Gln Val Ala Leu
       165 170 175
Ala Gly Ala Gly Ile Phe Ile Val Ala Leu Val Val Leu Phe Phe Cys
        180 185 190
Leu Pro Ala Ala His Arg Ser Thr Lys Pro Leu Lys Ile Leu Pro Trp
 195 200
                                     205
Trp Thr Thr Phe Arg Gln Pro Arg Phe Val Ala Phe Ile Ile Ala Tyr
                   215
                                  220
Ser Ser Trp Leu Leu Ser Tyr Asn Gln Leu Tyr Leu Ala Leu Pro Val
               230
                               235
                                                240
Glu Ile Gln Arg Ala Gly Gly Asn Glu Lys Asp Leu Gly Pro Leu Phe
            245
                             250
                                            255
Met Leu Ala Ser Val Leu Ile Ile Val Leu Gln Leu Pro Leu Ala Arg
         260
                         265
                              270
Phe Ala Arg Asn Val Gly Ala Val Arg Ile Leu Pro Val Gly Phe Leu
275
                      280
                                     285
Leu Leu Ser Ala Ser Phe Ala Ser Val Ala Leu Phe Ala Ala Thr Glu
                   295
                                   300
Pro Pro Glu Gly Trp Leu Arg Leu Leu Pro Ser Ala Ser Leu Val Thr
                310
                                315
Leu Leu Thr Leu Gly Gln Met Leu Leu Val Pro Ser Ala Lys Asp Leu
            325
                             330
Ile Pro Arg Phe Ala Glu Glu Ser Thr Leu Gly Ala His Tyr Gly Ala
         340
                         345
                                         350
Leu Ser Thr Ala Gly Gly Ile Ala Val Leu Val Gly Asn Leu Gly Leu
     355
                      360
                                      365
Gly Ser Leu Leu Asp Lys Ala Leu Val Pro Ser Thr Glu Ala Ile Tyr
370
                   375 380
Pro Trp Leu Leu Leu Ala Val Phe Pro Leu Cys Ser Ala Val Ala Leu
385 390
                                395
Ser Val Ile Cys Arg Pro Leu Arg Arg
```

<210> 9696 <211> 861 <212> PRT

<213> Enterobacter cloacae

405

<400> 9696 Glu His Gly His Gln Asp Phe Met Ser Thr Leu Glu Asn Phe Asp Ala 10 His Thr Pro Met Met Gln Gln Tyr Leu Lys Leu Lys Ala Gln His Pro 20 25 Glu Ile Leu Leu Phe Tyr Arg Met Gly Asp Phe Tyr Glu Leu Phe Tyr 35 40 45 Asp Asp Ala Lys Arg Ala Ser Gln Leu Leu Asp Ile Ser Leu Thr Lys 50 55 Arg Gly Ala Ser Ala Gly Glu Pro Ile Pro Met Ala Gly Ile Pro His 70 75 His Ala Val Glu Asn Tyr Leu Ala Lys Leu Val Asn Gln Gly Glu Ser 85 90 Val Ala Ile Cys Glu Gln Ile Gly Asp Pro Ala Thr Ser Lys Gly Pro 100 105 110 Val Glu Arg Lys Val Val Arg Ile Val Thr Pro Gly Thr Ile Ser Asp 115 120

Glu Ala Leu Leu Gln Glu Arg Gln Asp Asn Leu Leu Ala Ala Ile Trp Gln Asp Gly Lys Gly Phe Gly Tyr Ala Thr Leu Asp Ile Ser Ser Gly 155 160 Arg Phe Arg Leu Ser Glu Pro Ala Asp Arg Glu Thr Met Ala Ala Glu 170 175 Leu Gln Arg Thr Asn Pro Ala Glu Leu Leu Tyr Ala Glu Asp Phe Ala 185 190 Glu Met Ala Leu Ile Glu Gly Arg Arg Gly Leu Arg Arg Arg Pro Leu 195 \$200Trp Glu Phe Glu Ile Asp Thr Ala Arg Gln Gln Leu Asn Leu Gln Phe 210 215 220 Gly Thr Arg Asp Leu Ile Gly Phe Gly Val Glu Asn Ala Pro Arg Gly Leu Cys Ala Ala Gly Cys Leu Leu Gln Tyr Val Lys Asp Thr Gln Arg Thr Ala Leu Pro His Ile Arg Ser Ile Thr Met Glu Arg Gln Gln Asp 265 270 Ser Ile Ile Met Asp Ala Ala Thr Arg Arg Asn Leu Glu Ile Thr Gln Asn Leu Ala Gly Gly Met Glu Asn Thr Leu Ala Ser Val Leu Asp Ser Thr Val Thr Pro Met Gly Ser Arg Met Leu Lys Arg Trp Leu His Met Pro Ile Arg Asn Thr Glu Thr Leu Thr Gly Arg Gln Gln Thr Ile Ala Ala Leu Gln Asp Arg Tyr Thr Glu Leu Gln Pro Val Leu Arg Gln Val Gly Asp Leu Glu Arg Ile Leu Ala Arg Leu Ala Leu Arg Thr Ala Arg Pro Arg Asp Leu Ala Arg Met Arg His Ala Phe Gln Gln Leu Pro Glu Leu Arg Ala Gin Leu Gly Glu Ile Asp Ser Ala Pro Val Gin Lys Leu Arg Glu Thr Met Gly Glu Phe Thr Glu Leu Arg Glu Leu Leu Glu Arg Ala Ile Ile Asp Ala Pro Pro Val Leu Val Arg Asp Gly Gly Val Ile Ala Pro Gly Tyr Asn Glu Glu Leu Asp Glu Trp Arg Ala Leu Ala Asp Gly Ala Thr Asp Tyr Leu Asp Lys Leu Glu Ile Arg Glu Arg Glu Arg Leu Gly Leu Asp Thr Leu Lys Val Gly Tyr Asn Ala Val His Gly Tyr Tyr Ile Gln Ile Ser Arg Gly Gln Ser His Leu Ala Pro Ile His Tyr Val Arg Arg Gln Thr Leu Lys Asn Ala Glu Arg Tyr Ile Ile Pro Glu Leu Lys Glu Tyr Glu Asp Lys Val Leu Thr Ser Lys Gly Lys Ala Leu Ala Leu Glu Lys Gln Leu Tyr Asp Glu Leu Phe Asp Ile Leu Met Pro His Leu Ala Asp Leu Gln Leu Ser Ala Ala Ala Leu Ala Glu Leu Asp Val Leu Val Asn Leu Ala Glu Arg Ala Asp Thr Leu Asn Tyr Thr Cys Pro Thr Phe Thr Asp Lys Pro Gly Ile Arg Ile Thr Glu Gly Arg His Pro Val Val Glu Gln Val Leu Asn Glu Pro Phe Ile Ala Asn Pro Leu Asn Leu Ser Pro Gln Arg Arg Met Leu Ile Ile Thr Glv Pro Asn Met

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A Section of the last of the l
```

```
610
                  615
Gly Gly Lys Ser Thr Tyr Met Arg Gln Tnr Ala Leu Ile Ala Leu Leu
          630
                              635
Ala Tyr Ile Gly Ser Tyr Val Pro Ala Gln Lys Val Glu Ile Gly Pro
        645 650 655
Ile Asp Arg Ile Phe Thr Arg Val Gly Ala Ala Asp Asp Leu Ala Ser
       660 665 670
Gly Arg Ser Thr Phe Met Val Glu Met Thr Glu Thr Ala Asn Ile Leu
     675 680 685
His Asn Ala Thr Glu Asn Ser Leu Val Leu Met Asp Glu Val Gly Arg
 690 695
                                    700
Gly Thr Ser Thr Tyr Asp Gly Leu Ser Leu Ala Trp Ala Cys Ala Glu
              710
                                715
                                                 720
Ser Leu Ala Asn Lys Ile Lys Ala Leu Thr Leu Phe Ala Thr His Tyr
             725
                             730
Phe Glu Leu Thr Gln Leu Pro Glu Lys Met Glu Gly Val Ala Asn Val
        740
                          745
                                 750
His Leu Asp Ala Leu Glu His Gly Asp Thr Ile Ala Phe Met His Thr
    755 760
                           765
Val Gln Asp Gly Ala Ala Ser Lys Ser Tyr Gly Leu Ala Val Ala Ala
                   775
Leu Ala Gly Val Pro Lys Glu Val Ile Lys Arg Ala Arg Gln Lys Leu
                790
                                795
Arg Glu Leu Glu Ser Leu Ser Pro Asn Ala Ala Ala Thr Gln Ile Asp
            805 810
Gly Thr Gln Met Ser Leu Leu Ala Val Pro Glu Glu Thr Ser Pro Ala
         820 825
                              830
Val Glu Ala Leu Glu Asn Leu Asp Pro Asp Ser Leu Thr Pro Arg Gln
      835
                     840
Ala Leu Glu Trp Ile Tyr Arg Leu Lys Ser Leu Val
                   855
<210> 9697
<211> 88
<212> PRT
<213> Enterobacter cloacae
<400> 9697
Phe Ser Ala Val Phe Cys Arg Val Ala Ala Ser Pro Tyr Pro Ala Tyr
                             10
Lys Thr Arg Arg Thr Gly Lys Arg Ser Ala Thr Gly Leu Phe Leu Gln
        20
                          25
Gln Arg Arg Asp Arg Arg His Leu Arg Cys Phe Ile Asn Ile Leu Leu
      35
                      40
                                    4.5
Arg His Ala Glu Arg Phe Arg Val Met Leu Ala Ala Gly Thr Ala Gln
                 5.5
                             60
Arg Phe Gly Ile Ala Pro Gly Ile Gln Thr Val Leu Thr Leu Ile Tyr
65
               70
                              75
Arg Pro Asp Thr Phe His Arg
             85
<210> 9698
<211> 198
<212> PRT
<213> Enterobacter cloacae
<400> 9698
Thr Lys Thr Asn Ala Leu Gln Glu Arg Arg Met Ile Glu Thr Ile Thr
                       10
His Gly Ala Glu Trp Phe Ile Gly Leu Phe Gln Lys Gly Gly Glu Val
```

Phe Thr Gly Met Val Thr Gly Ile Leu Pro Leu Leu Ile Ser Leu Leu 40 45 Val Ile Met Asn Ala Leu Ile Asn Phe Ile Gly Gln Gln Arg Ile Glu 55 60 Arg Phe Ala Gln Arg Cys Ala Gly Asn Pro Leu Ser Arg Tyr Leu Ile 70 75 Leu Pro Phe Ile Gly Thr Phe Val Phe Cys Asn Pro Met Thr Leu Ser 85 90 Leu Gly Arg Phe Met Pro Glu Lys Tyr Lys Pro Ser Tyr Tyr Ala Ala 100 105 110 Ala Ser Tyr Ser Cys His Ser Met Asn Gly Leu Phe Pro His Ile Asn 115 120 125 Pro Gly Glu Leu Phe Val Tyr Leu Gly Ile Ala Ser Gly Leu Thr Thr 130 140 Leu Gly Leu Pro Leu Gly Pro Leu Ala Val Ser Tyr Leu Leu Val Gly 150 155 160 Leu Val Thr Asn Phe Phe Arg Gly Trp Val Thr Asp Leu Thr Thr Ala 165 170 175 Ile Phe Glu Lys Lys Met Gly Ile Gln Leu Glu Gln Lys Val His Leu 180 185 Ser Gly Ala Thr Ala

<210> 9699 <211> 326 <212> PRT

<213> Enterobacter cloacae

<400> 9699 Pro Glu Arg Lys Met Ser Asp Phe Leu Leu Asn Ala Gly Arg Gln Thr 10 Leu Leu Glu Leu Gln Glu Ala Ser Arg Leu Pro Glu Arg Leu Gly 20 25 30 Glu Asp Phe Val Arg Ala Ala Asn Thr Ile Ile His Cys Glu Gly Lys 35 Val Ile Val Ala Gly Ile Gly Lys Ser Gly His Ile Gly Lys Lys Ile 55 Ala Ala Thr Leu Ala Ser Thr Gly Thr Pro Ala Phe Phe Val His Pro 70 75 8.0 Ala Glu Ala Leu His Gly Asp Leu Gly Met Ile Glu Ser Arg Asp Val 85 90 Met Leu Phe Ile Ser Tyr Ser Gly Ser Ala Lys Glu Leu Asp Leu Ile 100 105 110 Ile Pro Arg Leu Gln Glu Lys Ser Val Ala Leu Leu Ala Met Thr Gly 115 120 Lys Ser Arg Ser Pro Leu Ala Leu Ala Ala Lys Ala Thr Leu Asp Ile 130 135 140 Ser Val Glu Arg Glu Ala Cys Pro Met His Leu Ala Pro Thr Ser Ser 155 145 150 Thr Val Asn Thr Leu Met Met Gly Asp Ala Leu Ala Met Ala Val Met 165 170 175 Gln Ala Arg Gly Phe Asn Glu Glu Asp Phe Ala Arg Ser His Pro Ala 180 185 Gly Ala Leu Gly Ala Arg Leu Leu Asn Lys Val His His Leu Met Arg 195 200 Thr Asp Asp Ala Ile Pro Gln Val Lys Leu Asp Thr Ser Val Met Asp 215 220 Ala Met Leu Glu Leu Ser Arg Thr Gly Leu Gly Leu Val Ala Val Cys 230 235 Asp Asn Asp Arg Glm Val Lys Gly Val Phe Thr Asp Gly Asp Leu Arg 250

Arg Trp Leu Val Gly Gly Gly Lys Leu Glu Ala Arg Val Ser Glu Ala 265 260 270 Met Thr Gln Gly Gly Leu Thr Leu Asn Ala Asp Ser Arg Ala Ile Glu 275 280 285 Ala Lys Glu Val Leu Met Lys Arg Lys Ile Thr Ala Ala Pro Val Val 295 300 Asp Glu His Gly Arg Leu Cys Gly Ala Ile Asn Leu Gln Asp Phe Tyr 310 315 320 Gln Ala Gly Ile Ile

<210> 9700 <211> 487 <212> PRT

<213> Enterobacter cloacae

<400> 9700 Val Glu Val Ala Met Ser Ile Leu Val Lys Asn Asn Ile His Trp Val 10 Gly Gln Arg Asp Trp Glu Val Arg Asp Phe His Gly Thr Glu Tyr Lys 20 25 Thr Leu Arg Gly Ser Ser Tyr Asn Ser Tyr Leu Ile Arg Glu Gly Lys 35 40 Asn Val Leu Ile Asp Thr Val Asp His Lys Phe Ser Arg Glu Phe Val 5.0 55 Gln Asn Leu Arg Ser Glu Ile Asp Leu Asn Glu Ile Asp Tyr Ile Ile 70 7.5 Ile Asn His Ala Glu Glu Asp His Ala Gly Ala Leu Thr Glu Leu Met 85 90 Ser His Ile Pro Asp Thr Pro Ile Tyr Cys Thr Thr Asn Ala Ile Asp 100 105 Ser Ile Asn Gly His His His Pro Glu Trp Asn Phe His Thr Val 115 120 125 Lys Thr Gly Asp Thr Leu Asp Ile Gly Asn Gly Lys Gln Leu Ile Phe 135 140 Val Glu Thr Pro Met Leu His Trp Pro Asp Ser Met Met Thr Tyr Met 150 155 145 Thr Gly Asp Ala Val Leu Phe Ser Asn Asp Ala Phe Gly Gln His Tyr 165 170 Cys Asp Glu Arg Leu Phe Asn Asp Glu Val Asp Gln Thr Glu Leu Phe 180 185 190 Glu Gln Cys Gln Arg Tyr Tyr Ala Asn Ile Leu Thr Pro Phe Ser Arg 195 200 205 Leu Val Thr Pro Lys Ile Thr Glu Ile Leu Gly Phe Asn Leu Pro Val 210 220 Asp Met Ile Ala Thr Ser His Gly Val Val Trp Arg Glu Asn Pro Thr 225 230 235 Gln Ile Val Glu Leu Tyr Leu Lys Trp Ala Ala Asp Tyr Gln Glu Asp 245 250 Arg Ile Thr Ile Phe Tyr Asp Thr Met Ser Asn Asn Thr Arg Met Met 260 265 Ala Asp Ala Ile Ala Gln Gly Ile Asn Glu Val Asp Pro Asn Val Ala 280 285 Val Lys Ile Phe Asn Val Ala Arg Ser Asp Lys Asn Glu Val Leu Thr 290 295 300 Asn Val Phe Arg Ser Lys Gly Val Leu Val Gly Thr Ser Thr Met Asn 315 310 Asn Val Met Met Pro Lys Ile Ala Gly Leu Val Glu Glu Met Thr Gly 325 330 335 Leu Arg Phe Arg Asn Lys Arg Ala Ser Ala Phe Gly Ser His Gly Trp 340 345

Ser Gly Gly Ala Val Asp Arg Leu Ser Thr Arg Leu Gln Asp Ala Gly 360 355 365 Phe Glu Met Ser Leu Ser Leu Lys Ala Lys Trp Arg Pro Asp Leu Asp 370 375 Ala Leu Glu Ile Cys Arg Gln His Gly Arg Asp Ile Ala Arg Gln Trp 390 395 Ala Leu Ala Pro Leu Pro Glu Thr Ala Pro Ala Ala Ala Val Ala Pro 405 410 415 Glu Ala Val Ala Glu Ala Ala Pro Ala Ala Ala Asp Leu Gly Pro Cys 420 425 430 Met Gln Cys Ser Val Cys Gln Trp Ile Tyr Asp Pro Glu Leu Gly Glu 435 440 445 Pro Leu Gln Asp Val Ala Pro Gly Thr Pro Trp Ser Glu Val Pro Asp 455 460 Asn Phe Leu Cys Pro Glu Cys Ser Leu Gly Lys Asp Val Phe Asp Glu 465 470 475 Leu Ala Thr Glu Ala Lys 485

<210> 9701 <211> 499 <212> PRT

<213> Enterobacter cloacae

<400> 9701 Asn Arg Phe Pro Thr Leu Leu Thr Thr Ile Thr Gly Ser His Pro Met 10 Ala Lys Asn Tyr Ala Ala Leu Ala Asn Asp Val Val Ser Ala Leu Gly 20 25 Gly Lys Glu Asn Ile Val Ala Val Thr His Cys Met Thr Arg Leu Arg 35 40 4.5 Phe Val Leu Lys Asp Glu Ser Leu Thr Asp Thr Ala Arg Leu Lys Ser 5.0 Ile Ser Gly Val Leu Gly Val Val Arg Asn Asp Asn Gln Cys Gln Val 70 75 Ile Ile Gly Asn Thr Val Ser Gln Ala Tyr Arg Glu Val Val Ser Leu 85 90 Leu Pro Ala Asn Leu Gln Pro Ala Val Ala Glu Gly Pro Gln Lys Leu 100 105 Thr Leu Arg Arg Ile Gly Ala Gly Ile Leu Asp Ala Leu Ile Gly Thr 115 120 Met Ser Pro Leu Ile Pro Ala Ile Ile Gly Glu Ser Met Val Lys Leu 130 135 140 Leu Ala Met Ile Leu Glu Met Thr Gly Val Leu Gly Lys Gly Asp Pro 145 150 155 Thr Leu Thr Ile Leu Thr Val Ile Gly Asp Gly Ala Phe Phe Phe Leu 165 170 Pro Leu Met Val Ala Ala Ser Ala Ala Val Lys Phe Lys Thr Asn Met 180 185 190 Ser Leu Ala Ile Ala Ile Ala Gly Val Leu Val His Pro Ser Phe Ile 195 200 205 Glu Leu Met Ala Lys Ala Ala Glr Gly Glu His Val Glu Phe Ala Phe 210 215 220 Ile Pro Val Thr Ala Val Lys Tyr Thr Tyr Thr Val Ile Pro Ala Leu 230 235 Val Met Thr Trp Cys Leu Ser Tyr Ile Glu Arg Trp Val Asp Arg Ile 245 250 255 Thr Pro Ala Val Thr Lys Asn Phe Leu Lys Pro Met Leu Ile Val Leu 260 265 270 Ile Ala Ala Pro Leu Ala Ile Val Leu Ile Gly Pro Leu Gly Ile Trp 280

Ile Gly Ser Ala Ile Ser Ala Leu Val Tyr Thr Ile His Gly Tyr Leu 295 290 300 Gly Trp Leu Ser Val Ala Ile Met Gly Ala Leu Trp Pro Leu Leu Val 310 315 Met Thr Gly Met His Arg Val Phe Thr Pro Thr Ile Ile Gln Thr Ile 325 330 Ala Glu Thr Gly Lys Glu Gly Met Val Met Pro Ser Glu Ile Gly Ala 340 345 350 Asn Leu Ser Leu Gly Gly Ser Ser Leu Ala Val Ala Trp Lys Thr Lys 355 360 365 Asn Pro Glu Leu Arg Gln Thr Ala Leu Ala Ala Ala Ala Ser Ala Ile 370 375 380 Met Ala Gly Ile Ser Glu Pro Ala Leu Tyr Gly Val Ala Val Arg Leu 390 395 Lys Arg Pro Leu Ile Ala Ser Leu Ile Ser Gly Phe Ile Cys Gly Ala 405 410 415 Val Ala Gly Met Ala Gly Leu Ala Ser His Ser Met Ala Ala Pro Gly 420 425 430 Leu Phe Thr Ser Val Gln Phe Phe Asp Pro Ala Asn Pro Met Thr Ile 435 440 445 Val Trp Val Phe Gly Val Met Gly Leu Ala Val Val Leu Ser Phe Val 450 455 460 Leu Thr Leu Leu Gly Phe Glu Asp Ile Pro Val Glu Asp Glu Ala 470 475 Glu Lys Ala Arg Ala Leu Gln Thr Ala Pro Val Gln Asn Lys Ala Ala 485 490

<211> 481 <212> PRT <213> Enterobacter cloacae

Glu Ala

<210> 9702

<400> 9702 Thr Glu Ser Glu Val Arg Met Ser Val Phe Pro Gln Gly Phe Leu Trp 1.0 Gly Gly Ala Leu Ala Ala Asn Gln Ser Glu Gly Ala Tyr Arg Glu Gly 20 25 Gly Lys Gly Leu Thr Thr Val Asp Met Ile Pro His Gly Ala Asn Arg 35 4.0 Leu Ala Val Lys Val Gly Lys Glu Lys Arg Phe Ser Leu Arg Asp Asp 50 55 Glu Phe Tyr Pro Ser His Glu Ala Ile Asp Phe Tyr His Arg Tyr Lys 70 75 80 Glu Asp Ile Ala Leu Met Ala Glu Met Gly Phe Thr Val Phe Arg Thr 8.5 90 Ser Ile Ala Trp Ser Arg Leu Tyr Pro Asn Gly Asp Glu Pro Leu Pro 105 Asn Gln Glu Gly Ile Ala Phe Tyr Arg Ala Val Phe Glu Glu Cys Lys 115 120 125 Lys Tyr Asn Ile Glu Pro Leu Val Thr Leu Cys His Phe Asp Val Pro 130 135 140 Met His Leu Val Thr Glu Tyr Gly Ser Trp Arg Asn Arg Lys Met Val 150 155 Asp Phe Phe Ala Arg Tyr Ala Arg Thr Cys Phe Glu Ala Phe Asn Gly 170 165 Leu Val Lys Tyr Trp Leu Thr Phe Asn Glu Ile Asn Ile Met Leu His 185 190 Ser Pro Phe Ser Gly Ala Gly Leu Val Phe Glu Glu Gly Glu Asn Glu 195 200 205

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Asp Gln Val Lys Tyr Gln Ala Ala His His Glu Leu Val Ala Ser Ala
             215
                          220
Leu Ala Thr Lys Ile Ala His Glu Val Asn Pro Glu Asn Gln Val Gly
            230 235 240
Cys Met Leu Ala Gly Gly Asn Phe Tyr Pro Tyr Ser Cys Lys Pro Glu
          245 250 255
Asp Val Trp Met Ala Leu Glu Lys Asp Arg Glu Asn Leu Phe Phe Ile
       260 265 270
Arg Glu Lys Gly Val Val Ile Val Lys Asp Pro Gly Asp Asp Glu Leu
 290 295 300
Leu Lys Asn Thr Val Asp Phe Val Ser Phe Ser Tyr Tyr Ala Ser Arg
             310 315
                                          320
Cys Ala Ser Ala Asp Met Asn Ala Gly Asn Thr Ser Ala Ala Asn Ile
          325
                         330
                                       335
Val Lys Ser Leu Arg Asn Pro His Ile Gln Val Ser Glu Trp Gly Trp
                      345
                                    350
Gly Ile Asp Pro Leu Gly Leu Arg Ile Thr Met Asn Met Met Tyr Asp
    355 360 365
Arg Tyr Gln Lys Pro Leu Phe Leu Val Glu Asn Gly Leu Gly Ala Lys
370 375 38Ô
Asp Val Val Asp Glu Asn Gly Glu Ile Asn Asp Asp Tyr Arg Ile Ser
385 390
                            395
Tyr Leu Arg Glu His Ile Arg Ala Met Gly Asp Ala Ile Glu Asp Gly
          405
                         410
Val Pro Leu Leu Gly Tyr Thr Thr Trp Gly Cys Ile Asp Leu Val Ser
       420
                      425
Ala Ser Thr Gly Glu Met Ser Lys Arg Tyr Gly Phe Val Tyr Val Asp
                 440
                                  445
Arg Asp Asp Ala Gly Asn Gly Thr Leu Glu Arg Lys Arg Lys Lys Ser
450 455
                    460
Phe Gly Trp Tyr Lys Lys Val Ile Ala Ser Asn Gly Gly Asp Leu Glu
             470
                           475
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<210> 9703
<211> 81
<212> PRT
<213> Enterobacter cloacae
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<210> 9704
<211> 114
<212> PRT
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<213> Enterobacter cloacae

<400> 9704 Asp Pro Ala Gly Phe Arg His Ala Arg Arg Arg Asp Gly Arg Leu Ala 1.0 Glu Leu Ala Gly Glu Arg Thr Met Cys Ile Gly Val Pro Gly Gln Ile 20 25 His Ser Ile Asp Gly Asn Gln Ala Lys Val Glu Val Cys Gly Ile Leu 35 40 Arg Asp Val Asp Leu Thr Leu Val Gly Ser His Asp Glu Thr Gly Ala 55 Ser Arg Leu Gly Gln Trp Val Leu Val His Val Gly Phe Ala Met Ser 70 75 Val Ile Asn Glu Glu Glu Ala Arg Asp Thr Leu Asp Ala Leu Gln Asn 90 Met Phe Asp Val Glu Pro Asp Val Gly Ala Leu Leu Tyr Gly Glu Glu 105 110

<210> 9705 <211> 375 <212> PRT <213> Enterobacter cloacae <400> 9705 His Met Arg Tyr Val Asp Glu Tyr Arg Ala Pro Glu Gln Val Leu Gln 10 Leu Ile Asp Arg Leu Lys Ser Arg Ala Ser Leu Leu Asp Tyr Thr Lys 20 30 Glu Lys Pro Leu Arg Ile Met Glu Val Cys Gly Gly His Thr His Ala 35 4.0 Ile Phe Lys Phe Gly Leu Asp Gln Leu Leu Pro Glu Asn Ile Glu Phe 55 Ile His Gly Pro Gly Cys Pro Val Cys Val Leu Pro Met Gly Arg Ile 70 Asp Ser Cys Leu Asp Ile Ala Ser Arg Pro Gly Val Ile Phe Cys Thr 85 90 Phe Gly Asp Ala Met Arg Val Pro Gly Lys Asn Gly Ser Leu Leu Gln 1.00 105 Ala Lys Ala Arg Gly Ala Asp Val Arg Ile Val Tyr Ser Pro Met Asp 115 120 125 Ala Leu Thr Leu Ala Met Ala Asn Pro Glu Arg Lys Val Val Phe Phe 130 135 140 Gly Leu Gly Phe Glu Thr Thr Met Pro Ala Thr Ala Ile Thr Leu Gln 145 150 155 Gln Ala Lys Ala Arg Asn Val Thr Asn Phe Tyr Phe Phe Cys Gln His 165 170 Ile Thr Leu Ile Pro Thr Leu Arg Ser Leu Leu Glu Ala Pro Asp Asn 180 185 190 Gly Ile Asp Ala Phe Leu Ala Pro Gly His Val Ser Met Val Ile Gly 200 205 Thr Glu Ala Tyr Gly Phe Ile Ala Glu Gln Tyr Asn Arg Pro Leu Val 215 220 Val Ala Gly Phe Glu Pro Leu Asp Leu Leu Gln Gly Val Thr Met Leu 230 235 Val Glu Gln Lys Ile Ala Ala Leu Ser Ala Val Glu Asn Gln Tyr Arg 245 250 255 Arg Val Val Pro Asp Ala Gly Asn Arg Arg Ala Gln Glu Ala Ile Ala 260 265 Asp Val Phe Ser Val Glu Gly Asp Ser Glu Trp Arg Gly Leu Gly Leu 280 285 Ile Ala Glu Ser Gly Val His Leu Thr Pro Ala Tyr Arg Ala Phe Asp

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295
Ala Glu Ala His Phe Arg Pro Gln Pro Gln Gln Val Cys Asp Asp Pro
             310
                           315
Arg Ala Arg Cys Gly Asp Val Leu Thr Gly Lys Cys Lys Pro His His
            325
                     330
Cys Pro Leu Phe Gly Asn Ala Cys Asn Pro Gln Thr Ala Phe Gly Ala
         340 345 350
Leu Met Val Ser Ser Glu Gly Ala Cys Ala Ala Trp Tyr His Tyr Arg
      355 360
Asn Gln Glu Cys Glu Ala
<210> 9706
<211> 335
<212> PRT
<213> Enterobacter cloacae
<400> 9706
Arg Leu Met Lys Lys Val Leu Cys Ala Leu Gly Leu Ala Val Ala Ser
                             10
Met Ser Thr Ala Leu Ala Thr Thr Tyr Pro Leu Thr Ile Glu Asn Cys
                          2.5
Gly Tyr Lys Glu Thr Phe Thr Lys Ala Pro Glu Arg Val Val Ala Leu
    35 40
Gly Gln Asn Thr Val Glu Ile Leu Leu Leu Leu Gly Leu Glu Asp Lys
                                    60
Val Lys Ala Ser Ala Phe Trp Pro Thr Lys Val Leu Pro Gln Leu Ala
               70
                              75
Glu Gln Asn Ala Lys Ile Lys Thr Leu Thr Val Glu Ile Pro Thr Leu
            85 90
Glu Ser Ile Leu Ala Gln Asn Pro Asp Phe Val Pro Ala Gln Leu Pro
         100
                          105
                                           110
Leu Leu Gly Pro Glu Ser Lys Val Ala Lys Arg Glu Asp Leu Ala
 115
                       120
Thr Val Gly Val Asn Ser Tyr Leu Ser Pro Gly Met Cys Ala Thr Lys
 130 135
                                    140
Lys Ala Ala Gly Asp Met Tyr Gly Ser Arg Gln Thr Leu Trp Asp Met
                150
                                 155
Thr Tyr Leu Tyr Gln Glu Ile Glu Asp Phe Ala Lys Ile Phe Asn Val
             165
                              170
Glu Ala Arg Gly Gln Ala Val Ile Ala Asp Phe Lys Lys Arg Glu Ala
         180
                          185
                                          190
Asp Leu Arg Gln Glu Phe Gly Lys Asn Asn Lys Asp Leu Ser Phe Val
      195
                       200
                                        205
Phe Trp Phe Ser Ser Ser Pro Ser Ala Asp Ala Tyr Val Gly Gly
                   215
Lys Asn Ser Ala Ser Gly Phe Ile Ala Asn Val Leu Gly Gly His Asn
                230
                                 235
Ala Ile Thr Ser Glu, Thr Glu Trp Pro Thr Val Gly Trp Glu Ser Ile
             245
                              250 255
Ile Ala Ala Asn Pro Asp Val Ile Val Val Ser Ser Leu Asp Arg Asn
                               270
          260
                          265
Arg Trp Ala Leu Asp Asn Ala Glu Glu Lys Ile Lys Phe Leu Lys Ser
      275
                      280
Asp Pro Ala Val Ser Gln Met Glu Ala Val Lys Lys Gly His Ile Val
  290
                   295
                                    300
Val Met Asp Gly Gln Ala Met Asn Pro Thr Ile Arg Thr Leu Tyr Gly
             310
                                315
Ala Glu Gln Val Gly Glu Gln Ile Arg Lys Leu Gly Leu Asp
             325
                              330
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<210> 9707
<211> 249
<212> PRT
<213> Enterobacter cloacae
<400> 9707
Arg Met His Trp Arg Asn Leu Thr Cys Ser Ala Cys Arg Arg Glu Arg
                                  10
Gln Pro Gly Arg Cys Gln Ser Ser Tyr Trp Val Ser Ala Pro Gly Ala
Val Ser Leu Ser Ala Gly Ala Phe Ala Gly Ala Phe Ala Ala Phe Ala
                          4.0
Phe Val Ala Phe Leu Thr Asn Gly Ala Arg Gly Gly Asn Glu Arg Thr
                      55
                                         60
Ile Leu Ala Gly Val Ala Ala Ser Gln Leu Phe Asn Ala Ile Thr Ala
                   70
                                                         80
Tyr Thr Ile Ser Thr Ser Ala Ser Ala Gin Gln Ala Arg Asp Val Met
               8.5
                                  90
Phe Trp Leu Leu Gly Ser Phe Ser Gly Val Arg Trp Pro Glu Phe Gln
           100
                              105
Leu Ala Leu Val Val Leu Ala Gly Leu Ala Val Cys Leu Tyr Tyr
 115
                                   125
Ser Arg Ala Leu Asp Ala Phe Tar Phe Gly Asp Asp Ala Ala Ala Ser
 130
                      135
                                         140
Leu Gly Ile Ala Val Pro Trp Val Arg Leu Ala Leu Phe Thr Thr Thr
145
                   150
                                    155
Ala Leu Ile Thr Ala Thr Ile Val Ser Met Ala Gly Ser Ile Gly Phe
               165
                                  170
Val Gly Leu Val Val Pro His Val Met Arg Phe Leu Phe Gly Pro Leu
           180
                              185
                                                 190
His Arg Thr Leu Leu Ile Ala Ser Ala Leu Ala Gly Ala Ile Leu Met
       195
                          200
                                             205
Val Leu Ala Asp Ile Ala Ser Arg Met Leu Ile Ala Pro Gln Ser Leu
 210
                      215
Pro Val Gly Val Val Thr Ala Leu Val Gly Val Pro Phe Phe Ala Val
225
                   230
                                      235
Ile Ile Tyr Arg Ser Arg Asn Lys
               245
<210> 9708
<211> 145
<212> PRT
<213> Enterobacter cloacae
<400> 9708
Arg Glu Tyr Phe Ser Val Gly Val Ser Met Glu Leu Arg Gln Glu Ala
                                  10
Phe His Leu Leu Arg Gln Leu Phe Gln Gln His Thr Ala Gln Trp Gln
           20
                                                 30
His Ala Leu Pro Glu Leu Thr Lys Pro Gln Tyr Ala Val Met Arg Ser
                          40
                                            45
Ile Ala Glu Asn Pro Gly Ile Glu Gln Val Ala Leu Thr Glu Val Ala
                      55
Val Ser Thr Lys Ala Thr Leu Ala Glu Met Leu Ser Arq Met Glu Ala
               70
                                     75
Arg Gly Leu Val Arg Arg Glu His Asp Pro Ala Asp Lys Arg Arg Arg
                                 90
              8.5
Phe Val Phe Leu Thr Ala Glu Gly Glu Ala Leu Leu Glu Ser Ser Lys
          100
                              105
Pro Ile Gly Asn Glu Val Asp Giu Ala Phe Leu Gly Arg Leu Asn Gly
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Ala Glu Arg Glu Gln Phe Ser Ala Leu Ile Lys Lys Met Met Gln Gly
                    135
145
<210> 9709
<211> 472
<212> PRT
<213> Enterobacter cloacae
<400> 9709
Lys Leu Thr Thr Ala Phe Val Ser Pro Ile Ala Ser Ala Ala Ala Val
                              10
Lys Leu Pro Val Ser Ala Thr Ala Ile Asn Ile Ala Val Arg Cys Lys
   20
                           25
Leu Ser Ile Ala Cys Leu Val Asn Cys Gln Asn Asn Val Asp Ser Ile
                  4.0
Ser Cys Phe Val Ala Phe Ile Arg Asn Val Arg Ala Asp Thr Ile Arg
 50 55 60
His Leu Thr Gly Gly Thr Ser Met Thr Tyr Arg Ser Lys Ile Ala Val
              70
Val Phe Leu Leu Gly Phe Phe Leu Asp Leu Ile Asn Met Phe Ile Ala
                  90
                                                95
Ser Val Ala Phe Pro Ala Met Ala Arg Ala Phe Asn Thr Thr Pro Ser
       100
                           105
                                             110
Ala Leu Ala Trp Val Ser Asn Gly Tyr Ile Ala Gly Leu Thr Leu Val
 115
                       120
                                         125
Ile Pro Phe Ser Ser Ile Leu Thr Arg Arg Val Gly Pro Lys Arg Val
                    135
                                    140
Ile Leu Leu Ser Leu Leu Phe Ser Ala Ala Ser Val Ala Ala Gly
               150
                                  155
                                                    160
Leu Ser Ser Ser Leu Glu Ser Leu Ile Ala Trp Arg Val Val Gln Gly
             165
                              170
Ala Gly Gly Gly Leu Leu Ile Pro Val Gly Gln Ala Leu Thr Trp Gln
         180
                           185
                                             190
Gln Phe Lys Pro His Glu Arg Ala Arg Leu Ser Ser Ala Val Met Leu
 195
                        200
                                         205
Val Ala Leu Leu Ala Pro Ala Cys Ser Pro Ala Val Gly Gly Met Leu
   210
                 215
                                      220
Val Gln Thr Phe Ser Trp Arg Trp Ile Phe Phe Ala Thr Leu Pro Val
225 230
                                  235
Val Ile Val Thr Phe Ala Leu Ala Cys Ala Trp Leu Lys Thr Glu Pro
             245
                               250
                                                255
Ser Pro Ile Thr Pro Thr Arg Thr Val Asn Leu Ser Leu Leu Thr Asp
          260
                           265
                                             270
Pro Leu Leu Arg Leu Ser Met Leu Ile Tyr Val Cys Val Pro Gly Ile
                     280
Phe Ile Gly Val Asn Val Thr Gly Met Tyr Tyr Leu Gln Ser Glu Ala
 290
                    295
                                      300
Asn Met Thr Pro Ala Ala Thr Gly Met Leu Met Leu Pro Trp Ser Val
                310
                                  315
                                                    320
Ala Ser Phe Leu Ala Ile Thr Ala Thr Gly Arg Tyr Phe Asn Arg Ile
             325
                               330
Gly Pro Arg Pro Leu Val Val Ile Gly Cys Leu Leu Gln Ala Thr Gly
          340
                           345
Ile Leu Leu Val Asn Val Gly Pro Ala Met Leu Leu Pro Ala Val
                        360
                                       365
Ala Phe Ala Leu Met Gly Ala Gly Gly Ser Leu Cys Ser Ser Thr Ala
                    375
                                     380
Gln Ser Ser Ala Phe Leu Thr Met Arg Pro Glu Asp Met Pro Asp Ala
```

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Ser Ala Leu Trp Asn Leu Asn Arg Gln Leu Ser Phe Phe Ala Gly Ala
            405
                     410
Leu Leu Leu Ala Gln Ala Leu Ser Phe Met Gln Ala Tyr Leu Ser Pro
          420 425 430
Leu Ala Ala Trp His Gly Met Phe Val Phe Ala Ala Val Ile Thr Leu
      435 440 445
Leu Pro Val Leu Tyr Val Tyr Arg Leu Asn Asn Thr Gln Leu Leu Ala
 450 455
                             460
Gln Leu Gln Gln Glu Gln Pro
465 470
<210> 9710
<211> 405
<212> PRT
<213> Enterobacter cloacae
<400> 9710
Asn Cys Ser Leu Met Thr Ser Arg Pro Val Ala Leu Arg Leu Pro Glv
                             10
1 5
Leu Arg Leu Arg His Thr Thr Met Lys Ile Val Ile Ala Pro Asp Ser
       20
                            25
Tyr Lys Glu Ser Leu Ser Ala Thr Glu Val Ala Gln Ala Ile Glu Lys
 35
                        40
Gly Phe Arg Glu Ile Phe Pro Asp Ala His Tyr Val Ser Val Pro Val
                    55
Ala Asp Gly Gly Glu Gly Thr Val Glu Ala Met Ile Ala Ala Thr Gln
              70
                                  75
Gly Thr Trp Gln Gln Ala Val Val Thr Gly Pro Leu Gly Glu Lys Val
             85
                               90
Lys Ala Ser Trp Gly Ile Ser Gly Asp Gly Thr Thr Ala Phe Ile Glu
          100
                            105
Met Ala Ala Ser Gly Leu Val Leu Val Pro Pro Ala Gln Arg Asn
 115
                     120
                                  125
Pro Leu Val Thr Thr Ser Arg Gly Thr Gly Glu Leu Ile Leu Arg Ala
 130
Leu Asp Lys Gly Ala Arg Asn Ile Ile Ile Gly Ile Gly Gly Ser Ala
                150
                                  155
Thr Asn Asp Gly Gly Ala Gly Met Met Gln Ala Leu Gly Ala Lys Phe
             165
                              170
Thr Asp Ala Asn Gly Thr Glu Ile Gly Tyr Gly Gly Gly Ser Leu Met
         180
                          185
Ala Leu Asn Arg Ile Asp Ile Ser Asp Leu Asp Pro Arg Leu Gln Gly
      195
                       200
                                      205
Cys Ala Ile Arg Val Ala Cys Asp Val Thr Asn Pro Leu Val Gly Glu
   210
                    215
                                     220
Ser Gly Ala Ser Arg Ile Phe Gly Pro Gln Lys Gly Ala Thr Glu Glu
                 230
                                  235
Met Ile Leu Glu Leu Asp Ala Ser Leu Ser His Tyr Ala Glu Val Ile
                              250
              245
Lys Lys Thr Leu Arg Ile Asp Val Asn Arg Val Pro Gly Ala Gly Ala
         260
                           265
                                            270
Ala Gly Gly Met Gly Ala Ala Leu Met Ala Phe Leu Gly Ala Glu Leu
                       280
                               285
Lys Ser Gly Ile Glu Ile Val Thr Gln Ala Leu Asn Leu Glu Glu His
                    295
                              300
Ile His Asp Cys Thr Trp Val Leu Thr Gly Glu Gly Arg Ile Asp Ser
305
                 310
                                  315
Gln Ser Ile Asn Gly Lys Val Pro Val Gly Val Ala Ser Val Ala Lys
             325
                           330
Lys Tyr His Lys Pro Val Ile Gly Ile Ala Gly Ser Leu Thr Gln Asp
```

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Val Gly Val Val His Gln Tyr Gly Ile Asp Ala Val Phe Ser Val Leu
                          360
Thr Arg Ile Gly Ser Leu Glu Glu Ala Phe Gln Gly Ala Tyr Asp Asn
                   375
                                  380
Ile Tyr Arg Ala Ser Arg Asn Ile Ala Ala Thr Leu Gln Val Gly Met
                  390
                         395
Arg Ser Gln Gly
<210> 9711
<211> 479
<212> PRT
<213> Enterobacter cloacae
<400> 9711
Ser Pro His Ile Asn Asn Ser His Leu His Leu Leu Thr Arg Asn Arg
            5
                   10
Trp Arg Ser Glu Ser Tyr Lys Asn Asn Gln Leu Pro Tyr Lys Ile Ser
                       25
Glu Cys Pro Met Asn Met Ala Thr Asn Ser Ser Val Ile Val Ser Asp
            40
Ser Pro Ala Ala Arg Arg Ala Gly Met Ser Glu Ser Glu Trp Arg Glu
                      55
Ala Ile Lys Phe Asp Ser Thr Asp Thr Gly Trp Val Ile Met Ser Ile
                                      75
                7.0
                                                         80
Gly Met Ala Ile Gly Ala Gly Ile Val Phe Leu Pro Val Gln Val Gly
              85
                                 90
Leu Met Gly Leu Trp Val Phe Leu Leu Ser Ser Ile Ile Gly Tyr Pro
          1.00
                          105
                                                 110
Ala Met Tyr Leu Phe Gln Arg Leu Phe Ile Asn Thr Leu Ala Glu Ser
       115
                          120
                                             125
Pro Glu Cys Lys Asp Tyr Pro Ser Val Ile Ser Gly Tyr Leu Gly Lys
 130
                      135
                                         140
Asn Trp Gly Ile Leu Leu Gly Ala Leu Tyr Phe Val Met Leu Val Ile
                 150
                                      155
Trp Met Phe Val Tyr Ser Thr Ala Ile Thr Asn Asp Ser Ala Ser Tyr
                                  170
               165
Leu His Thr Phe Gly Val Thr Asp Gly Leu Leu Ser Glu Asn Pro Phe
           180
                              185
                                                 190
Tyr Gly Leu Phe Leu Ile Cys Ile Leu Val Ala Ile Ser Ser Arg Gly
       195
                          200
                                             205
Glu Lys Leu Leu Phe Lys Val Ser Ser Leu Met Val Leu Thr Lys Leu
   210
                      215
Phe Val Val Ala Ala Leu Gly Leu Ser Met Ile Gly Leu Trp His Leu
                  230
                                      235
                                                         240
Ala Asn Val Gly Met Leu Pro Pro Met Gly Leu Leu Ile Lys Asn Ala
               245
                                  250
Ile Ile Thr Leu Pro Phe Thr Leu Thr Ser Ile Leu Phe Ile Gln Thr
           260
                              265
Leu Ser Pro Met Val Ile Ser Tyr Arg Ser Arg Glu Lys Ser Val Glu
                          280
                                             285
Val Ala Arg His Lys Ala Leu Arg Ala Met Asn Ile Ala Phe Gly Val
   290
                      295
Leu Phe Val Thr Val Phe Phe Tyr Ala Val Ser Phe Thr Leu Ala Met
                   310
                                      315
Gly His Asp Glu Ala Val Lys Ala Tyr Glu Gln Asn Ile Ser Ala Leu
               325
                                  330
Ala Ile Ala Ala Gln Phe Ile Ser Gly Asp Gly Ala Gly Trp Val Lys
           340
                              345
                                                 350
Ile Val Ser Val Ile Leu Asn Ile Phe Ala Val Met Thr Ala Phe Phe
```

```
Gly Val Tyr Leu Gly Phe Arg Glu Ala Thr Gln Gly Ile Val Met Asn
           375
                          380
Ile Leu Arg Arg Lys Met Pro Ala Glu Lys Ile Asn Glu Asn Ala Val
          390 395
Gln Arg Gly Ile Met Leu Phe Ala Ile Leu Leu Ala Trp Ser Ala Ile
       405 410 415
Val Leu Asn Ala Pro Val Leu Ser Phe Thr Ser Ile Cys Ser Pro Ile
   420 425 430
Phe Gly Met Val Gly Cys Leu Ile Pro Ala Trp Leu Val Tyr Lys Val
 435 440 445
Pro Ala Leu His Lys Tyr Lys Gly Val Ser Leu Val Ile Ile Val Ile
450 455 460
Thr Gly Leu Leu Cys Val Ser Pro Phe Leu Ala Phe Ser
     470
<210> 9712
<211> 505
<212> PRT
<213> Enterobacter cloacae
<400> 9712
Thr Glu Leu Arg Pro Phe Glu Val Asp Met Gln Tyr Ile Lys Ile His
                            10
Ser Leu Asp Asn Val Ala Val Ala Leu Ala Asp Leu Ala Glu Gly Thr
20
                          25
Glu Val Thr Phe Asp Asn Gln Ser Val Thr Leu Arg Gln Ala Ile Gly
                    40
Arg Gly His Lys Phe Ala Leu Ile Pro Ile Ala Lys Gly Glu Asn Val
                55
Val Lys Tyr Gly Leu Pro Ile Gly His Ala Leu Ala Asp Ile Ala Pro
             70
                                75
Gly Glu Tyr Ile His Ser His Asn Thr Arg Thr Asn Leu Ser Asp Leu
            85
                 90
Asp Glu Tyr Ser Tyr Gln Pro Asp Phe Gln Ala Glu Glu Gly Gln Ala
       1.00
                         105 110
Ala Asp Arg Glu Val Gin Ile Tyr Arg Arg Ala Ser Gly Glu Val Gly
      115
                      120
                                      125
Ile Arg Asn Glu Leu Trp Ile Leu Pro Thr Val Gly Cys Val Asn Gly
  130
                  135
                                   140
Ile Ala Arg Gln Ile Gln Thr Arg Phe Leu Lys Glu Thr Asn Asn Ala
               150
                   155 160
Glu Gly Thr Asp Gly Val His Leu Phe Ser His Thr Tyr Gly Cys Ser
            165
                170
Gln Leu Gly Asp Asp His Ile Asn Thr Arg Thr Met Leu Gln Asn Met
         180
                        185
Val Arg His Pro Asn Ala Gly Ala Val Leu Val Ile Gly Leu Gly Cys
      195
                      200
Glu Asn Asn Gln Val Asp Ala Phe Arg Asp Thr Leu Gly Glu Phe Asp
   210
                  215
                       220
Pro Glu Arg Val His Phe Met Val Cys Gln His Gln Asp Asp Glu Val
            230
                               235
                                                240
Glu Ala Gly Val Glu Gln Leu His Gln Leu Tyr Glu Val Met Arq His
            245
                            250
                                             255
Asp Lys Arg Glu Pro Gly Lys Leu Ser Glu Leu Lys Phe Gly Leu Glu
                         265
                                    270
Cys Gly Gly Ser Asp Gly Leu Ser Gly Ile Thr Ala Asn Pro Met Leu
      275
                      280
                                   285
Gly Arg Phe Ser Asp Tyr Val Ile Ala Asn Gly Gly Thr Thr Val Leu
   290
                  295
                                   300
Thr Glu Val Pro Glu Met Phe Gly Ala Glu Arg Ile Leu Met Ser His
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Cys Arg Asp Glu Glu Thr Phe Glu Lys Thr Val Thr Met Val Asn Asp 325 330 Phe Lys Gln Tyr Phe Ile Ala His Asn Gln Pro Ile Tyr Glu Asn Pro 345 340 350 Ser Pro Gly Asn Lys Ala Gly Gly Ile Thr Thr Leu Glu Glu Lys Ser 355 360 365 Leu Gly Cys Thr Gln Lys Ala Gly Ala Ser Gln Val Val Asp Val Leu 375 380 Arg Tyr Gly Glu Arg Leu Lys Thr His Gly Leu Asn Leu Leu Ser Ala 390 395 Pro Gly Asn Asp Ala Val Ala Thr Ser Ala Leu Ala Gly Ala Gly Cys 405 410 His Met Val Leu Phe Ser Thr Gly Arg Gly Thr Pro Tyr Gly Gly Phe 420 425 430 Val Pro Thr Val Lys Ile Ala Thr Asn Ser Glu Leu Ala Ala Lys Lys 435 440 445 Lys His Trp Ile Asp Phe Asp Ala Gly Gln Leu Ile His Gly Lys Ala 450 455 460 Met Pro Gln Leu Leu Thr Glu Phe Val Asp Thr Ile Val Glu Phe Ala 465 470 475 Asn Gly Arg Gln Thr Cys Asn Glu Lys Asn Asp Phe Arg Glu Leu Ala 485 490 Ile Phe Lys Ser Gly Val Thr Leu

He Phe Lys Ser Gly Val Thr Leu 500 50

<210> 9713 <211> 465

<212> PRT <213> Enterobacter cloacae

<400> 9713 Asp Thr Gly Phe Ser Asp Pro Ala Tyr Thr Ala Arg Gly Leu Cys Gln Ser Arg Asn His Ala Cys Pro Gly Ser Val Phe Pro Ala Pro His Arg 20 25 Ala Phe Pro Arg Gln Ser Gly His Glu Pro Gly Lys Val Asn Ala Pro 4.0 45 Asp Ser Pro Gly Asp Lys Ser Ala Gly Ser Ser Lys Pro Gln Asn Ser 5.5 Val Lys Thr Gly Ile Leu Thr His Pro Phe Gln Gly Tyr Ala Lys Phe 75 7.0 Tyr His Ser Gly Gly Pro Met Ser His Leu Asp Asn Gly Phe Arg Ser 95 90 Leu Asn Leu Lys Arg Phe Pro Glu Thr Asp Asp Val Asn Pro Leu Gln 100 105 110 Ala Trp Glu Ala Ala Asp Glu Tyr Leu Leu Gln Gln Leu Asp Glu Thr 115 120 Glu Ile Ser Gly Pro Val Leu Ile Leu Asn Asp Ala Phe Gly Ala Leu 130 135 140 Ala Cys Ala Leu Ala Glu His Ala Pro Tyr Ser Ile Gly Asp Ser Tyr 145 150 155 Leu Ser Glu Leu Ala Thr Arg Glu Asn Leu Arg His Asn Asp Ile Glu 165 170 Glu Ser Ser Val Lys Phe Leu Asp Ser Thr Ala Asp Tyr Pro Gln Ala 180 185 190 Pro Gly Val Val Leu Ile Lys Val Pro Lys Thr Met Ala Leu Leu Glu 195 200 Gln Gln Leu Arg Ala Leu Arg Lys Val Val Thr Pro Glu Thr Arg Ile 215 220 Ile Ala Gly Ala Lys Ala Arg Asp Ile His Thr Ser Thr Leu Glu Leu 230 235

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Phe Glu Lys Val Leu Gly Pro Thr Thr Thr Thr Leu Ala Trp Lys Lys
          245 250
Ala Arg Leu Ile Asn Cys Thr Phe Ser Ala Pro Ala Leu Ala Asp Ala
      260 265 270
Pro Glu Thr Leu Ser Trp Lys Leu Glu Gly Thr Asp Trp Thr Ile His
   275 280
                       285
Asn His Ala Asn Val Phe Ser Arg Thr Gly Leu Asp Ile Gly Ala Arg
290 295 300
Phe Phe Met Glu His Leu Pro Glu Asn Leu Glu Gly Glu Ile Val Asp
305 310 315
Leu Gly Cys Gly Asn Gly Val Ile Gly Leu Thr Leu Leu Ala Lys Asn
      325 330
Pro Glu Ala Ser Val Val Phe Ser Asp Glu Ser Pro Met Ala Val Ala
   340 345 350
Ser Ser Arg Leu Asn Val Glu Thr Asn Leu Pro Glu Ala Leu Asp Arg
355 360
                                 365
Cys Glu Phe Met Ile Asn Asn Ala Leu Ser Gly Val Glu Pro Phe Arg
370 375
Phe Asn Ala Val Phe Cys Asn Pro Pro Phe His Gln Lys His Ala Leu
385 390 395
Thr Asp Asn Val Ala Trp Glu Met Phe His His Ala Arg Arg Cys Leu
          405 410 415
Lys Ile Asn Gly Glu Leu Tyr Ile Val Ala Asn Arg His Leu Asp Tyr
       420
                     425 430
Phe His Lys Leu Lys Lys Ile Phe Gly Asn Cys Val Thr Ile Ala Thr
435 440
                         445
Asn Asn Lys Phe Val Val Leu Lys Ser Val Lys Leu Gly Arg Arg Arg
                455
                              460
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<210> 9714 <211> 313 <212> PRT

<213> Enterobacter cloacae

<220> <221>UNSURE <222>(313)

<400> 9714

Val Ser Arg Pro Arg Gly Ser Gly Ala Gly Asn Ala Ser Gly Arg Ala 10 Gln Arg Arg Ala Ala Ala Pro Arg Arg Gln Pro Arg Pro Asp Asp Gly 25 Ala Gly Val Trp Arg Ala Ile Met Lys Ile Leu Leu Lys Asn Arg Glu 35 40 Leu Ser Ala Phe Leu Ala Ile Leu Ala Leu Phe Ala Val Leu Val Ala 5.5 Leu Asn Pro Ser Tyr Leu Ser Leu Gln Thr Leu Gly Met Ile Phe Ala 70 75 Ser Ala Gln Ile Leu Ile Leu Leu Ala Ile Gly Ala Ala Leu Val Met 85 Leu Thr Arg Asn Ile Asp Val Ser Val Gly Ser Thr Val Gly Leu Ser 105 110 Ala Ile Ala Val Gly Val Ala Leu Asn Ser Gly Tyr Ser Leu Pro Val 120 125 Ser Ile Leu Phe Ala Leu Ser Ile Gly Ala Leu Ala Gly Ala Phe Asn 135 140 Gly Phe Leu Val Val Gly Leu Arg Ile Pro Ala Ile Val Ala Thr Leu 150

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Gly Thr Leu Gly Leu Tyr Arg Gly Ala Met Leu Leu Trp Thr Gly Gly
                        170 175
             165
Lys Trp Ile Glu Gly Leu Pro Pro Gly Leu Lys Ser Leu Ser Glu Pro
          180
                          185 190
Ala Ala Val Gly Ile Ser Pro Leu Gly Met Leu Val Leu Ile Ile Ala
      1.95
           200 205
Ala Thr Gly Ala Trp Thr Leu Ser Arg Thr Ala Phe Gly Arg Ile Phe
        215 220
Tyr Ala Val Gly Asp Asn Leu Ala Ala Ala Arg Gln Leu Gly Val Ala
225 230 235
Val Asn Arg Thr Arg Met Ile Ala Phe Thr Leu Asn Gly Leu Leu Ala
           245 250 255
Ala Cys Ala Gly Ile Val Phe Ala Ala Gln Ile Gly Phe Val Pro Asn
         260 265 270
Gln Thr Gly Ser Gly Leu Glu Met Lys Ala Ile Ala Ala Leu Arg Ala
     275 280
Gly Gly His Leu Ala Ala Gly Arg His Arg His Ala Asp Leu Ile Gln
 290 295
Pro Pro Gly Trp Lys Asp Gln Arg Xaa
                310
<210> 9715
<211> 258
<212> PRT
<213> Enterobacter cloacae
<400> 9715
Val Met Ser Asn Asp Ile Phe Pro Asn Lys Phe Lys Ala Ala Leu Ala
                            10
Ala His Gln Ile Gln Ile Gly Cys Trp Ser Ala Leu Ala Asn Pro Ile
                           25
                                            3.0
Ser Thr Glu Val Leu Gly Leu Ala Gly Phe Asp Trp Leu Val Leu Asp
35
                     4.0
                                        45
Gly Glu His Ala Pro Asn Asp Ile Asn Thr Phe Ile Pro Gln Leu Met
                 55
Ala Leu Lys Gly Ser His Ser Ala Pro Val Val Arg Val Pro Thr Asn
                70
                                 75
                                                   80
Glu Pro Val Ile Ile Lys Arg Leu Leu Asp Ile Gly Phe Tyr Asn Phe
             85
                              90
Leu Ile Pro Phe Val Glu Thr Glu Glu Glu Ala Val Gln Ala Val Ala
         100
                           105
Ala Thr Arg Tyr Pro Pro Glu Gly Ile Arg Gly Val Ser Val Ser His
      115
                       120
                                         125
Arg Ala Asn Met Phe Gly Thr Val Pro Asp Tyr Phe Ser Gln Ser Asn
                    135
                                     140
Lys Asn Ile Thr Ile Leu Val Gln Ile Glu Ser Gln Gln Glv Val Asp
145
             150
Asn Val Asp Ala Ile Ala Ala Thr Glu Gly Val Asp Gly Ile Phe Val
                              170
            165
Gly Pro Ser Asp Leu Ala Ala Ala Phe Gly His Leu Gly Asn Ala Ser
          180
                          185
His Pro Asp Val Gln Arg Ala Ile Gln His Ile Phe Ala Arg Ala Lys
      195
                       200
Ala His Gly Lys Pro Cys Gly Ile Leu Ala Pro Val Glu Ala Asp Ala
                   215
                                     220
Arg Arg Tyr Leu Glu Trp Gly Ala Thr Phe Val Ala Val Gly Ser Asp
               230
                              235
```

Leu Gly Val Phe Arg Ala Ala Thr Gln Lys Leu Ala Asp Ala Phe Lys

250

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<210> 9716
<211> 304
<212> PRT
<213> Enterobacter cloacae
<400> 9716
Pro Ser Leu Arg Lys Gln Ile Met Thr Leu Lys Val Gly Phe Ile Gly
                                 10
Leu Gly Ile Met Gly Lys Pro Met Ser Lys Asn Leu Ile Lys Ala Gly
        20
                       25
Tyr Ser Leu Val Val Leu Asp Arg Asn Ser Asp Ala Val Ala Glu Val
                         40
Ile Ala Ala Gly Ala Glu Thr Ala Thr Thr Ala Lys Ala Ile Ala Glu
                      5.5
Gln Cys Asp Val Ile Ile Thr Met Leu Pro Asn Ser Pro His Val Lys
               70
                                                         8.0
Glu Val Ala Leu Gly Glu Asn Gly Ile Ile Asp Gly Ala Lys Pro Gly
              85
                                 90
Leu Val Val Ile Asp Met Ser Ser Ile Ala Pro Leu Ala Ser Arg Glu
           100
                             105
Ile Ser Glu Glu Leu Lys Ala Lys Gly Val Glu Met Leu Asp Ala Pro
           120
                                             125
Val Ser Gly Gly Glu Pro Lys Ala Ile Asp Gly Thr Leu Ser Val Met
         135
                                         140
Val Gly Gly Asp Lys Ala Val Phe Asp Lys Tyr Tyr Asp Leu Met Lys
               150
                                     155
                                                         160
Ala Met Ala Gly Ser Val Val His Thr Gly Glu Ile Gly Ala Gly Asn
               165
                                 170
                                                     175
Val Thr Lys Leu Ala Asn Gln Val Ile Val Ala Leu Asn Ile Ala Ala
           180
                             185
                                                 190
Met Ser Glu Ala Leu Thr Leu Ala Thr Lys Ala Gly Val Asn Pro Asp
   195 200
                                             205
Leu Val Tyr Gln Ala Ile Arg Gly Gly Leu Ala Gly Ser Thr Val Leu
                   215
                                         220
Asp Ala Lys Ala Pro Met Val Met Asp Arg Asn Phe Arg Pro Gly Phe
                 230
                                     235
Arg Ile Asp Leu His Ile Lys Asp Leu Ala Asn Ala Leu Asp Thr Ser
              245
                                 250
His Gly Val Gly Ala Gln Leu Pro Leu Thr Ala Ala Val Met Glu Met
                             265
           260
                                                270
Met Gln Ala Leu Arg Ala Asp Gly Leu Gly Thr Ala Asp His Ser Ala
                         280
                                             285
Leu Ala Cys Tyr Tyr Glu Lys Leu Ala Lys Val Glu Ile Ala Arq
                      295
<210> 9717
<211> 311
<212> PRT
<213> Enterobacter cloacae
<400> 9717
Ala Gln Asn Ile Met Asn Thr Ile Ile Leu Pro Lys Thr Gln His Leu
                                  10
Val Val Phe Gln Glu Val Ile Lys Ser Gly Ser Ile Gly Ser Ala Ala
           20
Arg Gln Leu Gly Leu Thr Gln Pro Ala Val Ser Lys Ile Ile Ser Asp
       35
                          4.0
Ile Glu Ser Tyr Phe Gly Val Glu Val Met Val Arg Lys Asn Thr Gly
  50
                      55
Val Lys Leu Thr Ala Ala Gly Gln Val Leu Leu Ser Tyr Ala Glu Ser
```

```
Ile Thr Arg Glu Met Lys Asn Met Val Ser Glu Ile Asn Ser Leu Ser
         85
                         90
Phe Ser Thr Val Met Asp Val Ser Phe Gly Tyr Pro Ser Leu Ile Gly
        100
                      105
Phe Thr Phe Leu Ser Gly Met Ile Lys Lys Phe Lys Glu Val Phe Pro
     115
           120
                         125
Lys Ala Arg Val Ser Met Tyr Glu Ala Gln Leu Ser Ser Phe Leu Pro
 130 135 140
Ala Ile Arg Asp Gly Arg Leu Asp Phe Ala Ile Gly Thr Leu Ser Asp
   150 155 160
Gly Met Gln Leu Gln Asp Leu His Val Glu Pro Leu Phe Glu Ser Glu
      165 170 175
Phe Val Leu Val Ala Ser Lys Ser Arg Thr Cys Thr Gly Pro Thr Arg
      180 185 190
Leu Ala Ser Leu Thr His Glu Gln Trp Val Met Pro Gln Thr Asp Met
195 200 205
Gly Tyr Tyr Asn Glu Leu Leu Thr Thr Leu Gln Asp Asn His Ile Ser
210 215 220
Ile Glu Asn Ile Val Gln Thr Asp Ser Val Val Thr Ile Tyr Asn Leu
225 230 235
Val Leu Asn Ala Asp Tyr Leu Thr Val Ile Pro Arg Asp Met Ile Ala
   245 250 255
Pro Phe Gly Ser Asp Gln Phe Ile Val Leu Pro Val Glu Asp Glu Leu
260 265 270
Pro Val Ala Arg Tyr Ala Ala Val Trp Ser Lys Asn Tyr Ser Ile Lys
275 28C 285
Lys Ser Ala Ser Val Leu Val Glu Leu Ala Lys Gln Tyr Ser Ser Met
Asn Thr Glu Lys Arg Arg
```

<211> 343 <212> PRT <213> Enterobacter cloacae

<210> 9718

<400> 9718 Leu Cys Leu Lys Thr Met Asn Tyr Tyr Asn Glu Asp Ile Met His Ile 10 Thr Tyr Asp Leu Pro Val Thr Ile Glu Asp Ile Gln Asp Ala Arg Lys 25 Arg Leu Ala Gly Lys Ile Tyr Lys Thr Gly Met Pro Arg Ser Asn Tyr 4.0 45 Leu Ser Glu Arg Cys Lys Gly Glu Ile Phe Leu Lys Phe Glu Asn Met 55 Gln Arg Thr Gly Ser Phe Lys Ile Arg Gly Ala Phe Asn Lys Leu Ser 75 70 Ser Leu Thr Asp Ala Glu Lys Arg Lys Gly Val Val Ala Cys Ser Ala 90 Gly Asn His Ala Gln Gly Val Ser Leu Ser Cys Ala Met Leu Gly Ile 100 105 Asp Gly Lys Val Val Met Pro Met Gly Ala Pro Lys Ser Lys Val Ala 115 Ala Thr Arg Asp Tyr Ser Ala Glu Val Val Leu His Gly Glu Asn Phe 135 130 140 Asn Asp Thr Ile Ala Lys Val Ser Glu Ile Val Glu Met Glu Gly Arg 150 Ile Phe Ile Pro Pro Tyr Asp Asp Pro Lys Val Ile Ala Gly Gln Gly 165 170 Thr Ile Gly Leu Glu Ile Leu Glu Asp Leu Tyr Asp Val Asp Asn Val

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185
Ile Val Pro Ile Gly Gly Gly Leu Ile Ala Gly Ile Ala Thr Ala
                    200
   195
                                    205
Ile Lys Ser Ile Asn Pro Thr Ile Asn Ile Ile Gly Val Gln Ser Glu
  210
                215
                                 220
Asn Val His Gly Met Ala Ala Ser Tyr Gln Ala Gly Glu Ile Thr Asn
        230
                     235
His Arg Ile Thr Gly Thr Leu Ala Asp Gly Cys Asp Val Ser Arg Pro
         245
                   250 255
Gly Asn Leu Thr Phe Glu Ile Val Arg Glu Leu Val Asp Asp Ile Val
       260 265
                            270
Leu Val Ser Glu Asp Glu Ile Arg Asn Ser Met Ile Ala Leu Ile Gln
          280 285
    275
Arg Asn Lys Val Val Thr Glu Gly Ala Gly Ala Leu Ala Cys Ala Ala
          295
                        300
Leu Leu Ser Gly Lys Leu Asp His Tyr Ile Gln Gly Arg Lys Thr Val
305 310 315 320
Cys Ile Ile Ser Gly Gly Asn Ile Asp Leu Ser Arg Val Ser Gln Ile
      325 330
Thr Gly Phe Val Asp Ala
        340
<210> 9719
<211> 503
<212> PRT
<213> Enterobacter cloacae
<400> 9719
Leu Thr Lys Lys Thr Ser Asp Ser Gly Asn Trp Cys Asp Asn Phe Ala
          5
                          10
Ala Ser Glu His Lys Leu Ser Asp Ala Pro Val Met Arg Lys Thr Ile
20 25
Met Thr Pro Phe Met Thr Asp Asp Phe Leu Leu Asp Thr Glu Phe Ala
35 40
Arg Arg Leu Tyr His Asp Tyr Ala Lys Asp Gln Pro Ile Phe Asp Tyr
50 55
                         60
His Cys His Leu Pro Pro Gln Gln Val Ala Glu Asn Tyr Arg Phe Lys
      70
                             75 80
Asn Leu Tyr Asp Ile Trp Leu Lys Gly Asp His Tyr Lys Trp Arg Ala
          85 90
Met Arg Thr Asn Gly Val Ala Glu Arg Leu Cys Thr Gly Asp Ala Thr
        100 105
Asp Arg Glu Lys Phe Asp Ala Trp Ala Ala Thr Val Pro His Thr Ile
      115 120
                                   125
Gly Asn Pro Leu Tyr His Trp Thr His Leu Glu Leu Arg Arg Pro Phe
 130 135
                                 140
Gly Ile Thr Gly Lys Leu Leu Ser Pro Ala Thr Ala Asp Glu Ile Trp
              150
                              155
                                             160
Asp Gln Cys Asn Asp Leu Leu Ala Gln Asp Ser Phe Ser Ala Arg Gly
           165
                           170 175
Ile Met Lys Gln Met Asn Val Lys Met Val Gly Thr Thr Asp Asp Pro
        180
                       185
                            190
Val Asp Ser Leu Glu His His Ala Val Val Ala Lys Asp Ser Thr Phe
                        205
     195
                    200
Asp Ile Lys Val Leu Pro Ser Trp Arg Pro Asp Lys Ala Phe Asn Ile
  210
                 215
                                220
Glu Leu Pro Thr Phe Asn Asp Tyr Met Ala Lys Leu Ala Glu Val Ser
             230
                             235
Asp Thr Asp Ile Arg Arg Phe Gly Asp Leu Gln Thr Ala Leu Thr Lys
           245
                          250
Arg Leu Asp His Phe Ala Ala His Gly Cys Lys Val Ser Asp His Ala
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260 265 Leu Asp Val Val Leu Phe Ala Glu Ser Ser Glu Ala Glu Leu Asp Ser 280 275 285 Ile Leu Ala Arg Arg Leu Ser Gly Glu Ala Leu Ser Glu His Glu Val 295 300 Ala Gln Phe Lys Thr Ala Val Leu Val Phe Leu Gly Ala Glu Tyr Ala 310 315 Arg Arg Gly Trp Val Gln Gln Tyr His Ile Gly Ala Leu Arg Asn Asn 325 330 Asn Gln Arg Gln Phe Lys Leu Leu Gly Ala Asp Val Gly Phe Asp Ser 340 345 350 Ile Asn Asp Arg Pro Met Ala Glu Glu Leu Ser Lys Leu Leu Ser Lys 355 360 365 Gln Asn Glu Gln Asn Leu Leu Pro Lys Thr Ile Leu Tyr Cys Leu Asn 370 375 380 Pro Arg Asp Asn Glu Val Leu Gly Thr Met Ile Gly Asn Phe Gln Gly 390 395 400 Glu Gly Met Pro Gly Lys Met Gln Phe Gly Ser Gly Trp Trp Phe Asn 405 410 Asp Gln Lys Asp Gly Met Glu Arg Gln Met Thr Gln Leu Ala Gln Leu 420 425 430 Gly Leu Leu Ser Arg Phe Val Gly Met Leu Thr Asp Ser Arg Ser Phe 435 440 445 Leu Ser Tyr Thr Arg His Glu Tyr Phe Arg Arg Ile Leu Cys Gln Met 450 455 Ile Gly Arg Trp Val His Ala Gly Glu Ala Pro Ala Asp Ile Gln Leu 465 470 475 480 Leu Gly Glu Met Val Arg Asn Ile Cys Phe Asn Asn Ala Arg Asp Tyr 485 Phe Ala Ile Glu Leu Asn 500

<210> 9720 <211> 525 <212> PRT

<213> Enterobacter cloacae

<400> 9720 Ser Leu His Gly Cys Lys Tyr Ser Ser Pro Ser Thr Leu Leu Asn Ile 10 Ile Lys Ser Lys Asn His Leu Phe Asn Ser Gly Ala Met Met Thr Pro 2.5 3.0 Leu Leu Asp Ala Arg Asp Ile Ser Lys Gln Phe Ser Gly Val Pro Val 4.0 4.5 Leu Lys Gly Ile Asp Phe Thr Leu Leu Ala Gly Gln Val His Ala Leu 5.5 60 Met Gly Gly Asn Gly Ala Gly Lys Ser Thr Leu Met Lys Ile Ile Ala 7.0 7.5 Gly Val Glu Thr Pro Asp Cys Gly Glu Leu Ser Val Ala Gly Glu Ser 90 Phe Thr Arg Leu Thr Pro Ala Gin Ala His Arg Leu Gly Ile Tyr Leu 100 105 110 Val Pro Gln Glu Pro Leu Leu Phe Pro Asn Leu Thr Val Arg Glu Asn 120 115 Ile Leu Phe Arg Leu Pro Arg Glu Arg Asp Arg Glu Lys Arg Leu Ala 135 140 Glu Lys Leu Arg Gln Leu Gln Cys Gln Leu Asn Leu Asp Ala Thr Ala 145 150 155 Ser Thr Leu Glu Val Ala Asp Gln Gln Met Val Glu Ile Leu Arg Gly 165 170 Leu Met Arg Asn Ala Arg Ile Leu Ile Leu Asp Glu Pro Thr Ala Ser

```
185
         180
Leu Thr Pro Gly Glu Thr Glu Arg Leu Phe Arg Gln Ile Arg Ala Leu
                     20C
   195
Gln Asp Leu Gly Val Gly Ile Val Phe Ile Ser His Lys Leu Pro Glu
                  215
                                  220
Ile Arg Gln Leu Ala Ser His Val Ser Val Met Arg Asp Gly Ala Val
         230
                      235
Val Leu Ser Gly Glu Thr Ala Gln Phe Asp Asp Asn Ala Leu Ile Ala
            245
                   250
Ala Met Thr Pro Val Ser Arg Glu Thr Ser Leu Ser Asp Thr Gln Lys
        260
             265 270
Leu Trp Leu Ala Leu Pro Gly Asn Arg Arg Thr Gln Ala Gln Asp Phe
     275 280
                          285
Pro Val Leu Arg Val Glu Asp Leu Thr Gly Glu Gly Phe Ile Asp Leu
 290 295
                         300
Ser Leu Glu Ile Tyr Ala Gly Glu Ile Val Gly Leu Ala Gly Leu Val
305 310 315 320
Gly Ser Gly Arg Thr Glu Phe Ala Glu Thr Leu Tyr Gly Leu Arg Pro
           325 330 335
Val Arg Gly Gly Arg Val Trp Leu Glu Asn Gln Glu Ile Thr Thr Glu
        340 345 350
Pro Val Gly Ser Arg Leu Glu Lys Gly Leu Val Tyr Leu Pro Glu Asp
 355 360 365
Arg Gln Val Ser Gly Leu Phe Leu Asp Ala Pro Ile Arg Trp Asn Thr
370 375 380
Val Ala Leu Asn Glu Pro Ser Leu Trp Gln Gln Arg Lys Arg Glu Ser
385 390 395
Ala Val Val Glu Arg Tyr His Arg Ala Leu Gly Ile Lys Leu Asn His
         405 410 415
Ala Asp Gin Thr Val Arg Thr Leu Ser Gly Gly Asn Gin Gin Lys Val
      420 425 430
Leu Leu Ala Arg Cys Leu Glu Ala Asn Pro Leu Leu Leu Ile Val Asp
435 440 445
Glu Pro Thr Arg Gly Val Asp Val Ser Ala Arg Ala Asp Ile Tyr Gln
450 455
Leu Leu Lys Ser Val Ala Ala Gln Asn Val Ala Val Leu Met Ile Ser
465 470 475
Ser Asp Leu Asp Glu Phe Pro Gly Leu Ala Asp Arg Val Leu Val Met
           485 490
His Gln Gly Val Leu Ser Gly Glu Leu Pro Arg His Ala Val Ser Leu
       500 505
Asp Arg Met Met Ala Leu Ala Phe Gly Gly Gln Ser
<210> 9721
<211> 271
<212> PRT
<213> Enterobacter cloacae
<400> 9721
Gly Ala Arg Met Ser Ser Thr Asp Ser Ser Ala Glu Lys Arg Ile Thr
                           10
Gly Thr Ser Glu Arg Arg Glu Gln Ile Ile Gln Arg Leu Arg Ala Gln
      20
                        25
Gly Ser Val Gln Val Asn Asp Leu Ser Leu Leu Phe Gly Val Ser Thr
                    4.0
                            4.5
Val Thr Ile Arg Asn Asp Leu Ala Phe Leu Glu Lys Gln Gly Ile Ala
                 55
                                 60
Val Arg Ala Tyr Gly Gly Ala Leu Ile Cys Glu Gly Asn Ala Pro Gly
               70
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Val Glu Pro Ser Val Glu Asp Lys Ser Ser Leu Asn Thr Ala Val Lys

Arq Ser Ile Ala Gln Ala Ala Val Glu Leu Val Lys Pro Gly His Arg 105 100 Ile Ile Leu Asp Ser Gly Thr Thr Thr Phe Glu Ile Ala Arg Met Leu 115 120 Arg Gln His Thr Asp Val Ile Ala Met Thr Asn Gly Met Asn Val Ala 135 140 Asn Ala Leu Leu Glu Ala Glu Gly Val Glu Leu Leu Met Thr Gly Gly 145 150 155 His Leu Arg Arg Gln Ser Gln Ser Phe Tyr Gly Asp Gln Ala Glu Gln 165 170 175 Ser Leu Gln Asn Tyr His Phe Asp Leu Leu Phe Leu Gly Val Asp Ala 185 190 180 Ile Asp Leu Asp Arg Gly Val Ser Thr His Asn Glu Asp Glu Ala Arg 195 200 205 Leu Asn Arg Lys Met Cys Glu Val Ala Glu Arg Ile Ile Val Val Thr 210 215 220 Asp Ser Ser Lys Phe Asn Arg Ser Ser Leu His Lys Ile Ile Asp Thr 225 230 235 His Arg Ile Asp Met Ile Ile Val Asp Glu Gly Ile Pro Ala Glu Ser 245 250 255 Leu Glu Gly Leu Arg Lys Ser Gly Ile Asp Val Val Leu Val 260 265 <210> 9722 <211> 445 <212> PRT <213> Enterobacter cloacae <400> 9722 Leu Met Ser Asn Thr Glu Ser Ile Ile Val Gly Gln Thr Lys Thr Ser 10 Ser Trp Arg Lys Ser Asp Thr Thr Trp Thr Leu Gly Leu Phe Gly Thr 20 25 Ala Ile Gly Ala Gly Val Leu Phe Phe Pro Ile Arg Ala Gly Phe Gly 35 40 Gly Leu Ile Pro Ile Leu Leu Met Leu Val Leu Ala Phe Pro Ile Ala 50 55 Phe Tyr Cys His Arg Ala Leu Ala Arg Leu Cys Leu Ser Gly Ser Asn 75 70 Val Ser Gly Asn Ile Thr Glu Thr Val Glu Glu His Phe Gly Lys Thr 85 90 Gly Gly Val Val Ile Thr Phe Leu Tyr Phe Phe Ala Ile Cys Pro Leu 100 105 110 Leu Trp Ile Tyr Gly Val Thr Ile Thr Asn Thr Phe Met Thr Phe Trp 115 120 125 Glu Asn Gln Leu Gln Met Pro Ala Leu Asn Arg Gly Val Val Ala Leu 130 135 140 Phe Leu Leu Leu Met Ala Phe Val Ile Trp Phe Gly Lys Asp Leu 145 150 155 Met Val Lys Val Met Ser Tyr Leu Val Phe Pro Phe Ile Ala Ser Leu 165 170 175 Val Leu Ile Ser Leu Ser Leu Ile Pro Tyr Trp Asn Ser Ala Val Ile 180 185 190 Asp Gln Val Asn Leu Ser Asp Ile Ala Phe Thr Gly His Asp Gly Ile 200 Leu Val Thr Val Trp Leu Gly Ile Ser Ile Met Val Phe Ser Phe Asn 210 215 220 Phe Ser Pro Ile Val Ser Ser Phe Val Val Ser Lys Arg Glu Glu Tyr 230 235 Glu Pro Glu Phe Gly Lys Glu Phe Thr Glu Gln Lys Cys Ser Lys Ile

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245
                               250
Ile Gly Arg Ala Ser Leu Leu Met Val Ala Val Val Met Phe Phe Ala
          260
                      265
Phe Ser Cys Leu Phe Thr Leu Ser Pro Gln Asn Met Ala Asp Ala Lys
      275
                 280
                                         285
Ala Gln Asn Ile Pro Val Leu Ser Tyr Leu Ala Asn His Phe Ala Ser
              295
Met Ser Gly Ser Lys Ser Thr Phe Ala Thr Val Leu Glu Tyr Gly Ala
               310
                        315
Ser Ile Ile Ala Leu Val Ala Ile Phe Lys Ser Phe Phe Gly His Tyr
              325
                              330
Leu Gly Thr Leu Glu Gly Leu Asn Gly Leu Ile Ile Lys Phe Gly Tyr
         340
                        345
Lys Gly Asp Lys Lys Asn Val Ser Val Gly Lys Leu Asn Thr Ile Ser
       355
              360
                                      365
Met Val Phe Ile Met Gly Ser Thr Trp Ile Val Ala Tyr Ala Asn Pro
        375
                            380
Asn Ile Leu Asp Leu Ile Glu Ala Met Gly Ala Pro Ile Ile Ala Ser
       390
                      395
Leu Leu Cys Leu Leu Pro Met Tyr Ala Ile Arg Lys Ala Pro Ala Leu
          405 410 415
Ala Lys Tyr Lys Gly Arg Thr Glu Asn Ile Phe Val Thr Val Val Gly
       420 425 430
Leu Leu Thr Ile Leu Asn Ile Val Tyr Lys Leu Phe
                       44C
<210> 9723
<211> 413
<212> PRT
<213> Enterobacter cloacae
<400> 9723
Thr Lys Ala Gln Glu Glu Arg Ser His Thr Met Ile Glu Phe Pro Val
                              10
Val Leu Val Ile Asn Cys Gly Ser Ser Ser Val Lys Phe Ser Val Leu
   20
                           25
Asp Ala Ala Ser Cys Asp Ala Leu Met Thr Gly Ile Ala Asp Gly Ile
  35
                    40
Asn Thr Glu Lys Ala Phe Ile Ser Val Asn Gly Gly Glu Pro Val Arg
                    55
Leu Ala His Gln Asp Tyr Glu Gly Ala Leu Ala Ala Ile Ala Leu Glu
                7.0
                                  75
Leu Glu Lys Arg Asn Leu Met Gly Ser Val Ala Leu Ile Gly His Arg
             85
                              90
Ile Ala His Gly Gly Asp Leu Phe Ser Glu Ser Thr Leu Ile Thr Glu
         100 105
                                            110
Glu Val Met Ala Gln Ile Arg Gln Val Ser Pro Leu Ala Pro Leu His
      115
                       120
Asn Tyr Ala Asn Leu Ser Gly Val Glu Ala Ala Glu Arg Leu Phe Pro
                    135
                                     140
Gly Val Gln Gln Val Ala Val Phe Asp Thr Ser Phe His Gln Thr Met
                150
                                  155
Pro Pro Gln Ala Tyr Leu Tyr Gly Leu Pro Tyr Arg Tyr Phe Glu Glu
             165
                              170
                                   175
Leu Gly Val Arg Arg Tyr Gly Phe His Gly Thr Ser His Arg Tyr Val
          180
                           185
                                            190
Ser Ala Gln Ala His Ala Leu Phe Gly Leu Ser Pro Asp Asp Ser Gly
      195
                       200
                                         205
Leu Val Ile Ala His Leu Gly Asn Gly Ala Ser Ile Cys Ala Val Arg
                   215
Asn Gly Val Ser Val Asp Thr Ser Met Gly Met Thr Pro Leu Glu Gly
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235 Leu Val Met Gly Thr Arg Cys Gly Asp Val Asp Phe Gly Ala Met Ala 245 250 Trp Ile Ala Arg Gln Thr Gly Gln Ser Phe Glu Asp Leu Glu Arg Val 260 265 270 Val Asn Lys Glu Ser Gly Leu Leu Gly Ile Ser Gly Ile Ser Ser Asp 280 Leu Arg Ala Leu Glu Lys Ala Trp His Asp Gly Asn Glu Arg Ala Arg 290 295 300 Leu Ala Ile Lys Thr Phe Val His Arg Ile Ala Arg His Ile Ala Gly 305 310 315 His Ala Ala Ser Leu His Arg Leu Asp Gly Val Val Phe Thr Gly Gly 325 330 335 Ile Gly Glu Asn Ser Val Leu Ile Arg Ala Leu Val Ala Glu His Leu 340 345 350 Lys Val Phe Gly Ile Ile Leu Asp Glu Ser Lys Asn Ala Leu Pro Gly 355 360 365 Ser Ala Gly Glu Arg Val Ile Ser Thr Glu Ser Ser Arg Ala Ala Cys 370 375 380 Ala Val Ile Pro Thr Asn Glu Glu Lys Met Ile Ala Leu Asp Ala Leu 385 390 395 Arg Leu Gly Lys Val Thr Pro Ala Ala Ala Tyr Ala 405 <210> 9724 <211> 769 <212> PRT <213> Enterobacter cloacae <400> 9724 Ser Glu Asn Leu Met Lys Val Thr Ile Asp Thr Gly Val Ala Pro Tyr 10 Ser Asp Ala Trp Ala Gly Phe Arg Gly Glu Glu Trp Lys Asn Ala Ile 25 Asn Val Arg Asp Phe Ile Gln His Asn Tyr Thr Pro Tyr Glu Gly Asp 4.0 45 Glu Ala Phe Leu Ala Gln Ala Thr Pro Ala Thr Thr Ala Leu Trp Gln 50 55 60 Lys Val Met Val Gly Ile Arg Gln Glu Asn Ala Thr His Ala Pro Val 7.0 75 Asp Phe Asp Thr Asn Ile Ala Thr Thr Ile Thr Ala His Gly Pro Gly 8.5 90 Tyr Ile Asp Gln Glu Leu Glu Thr Ile Val Gly Leu Gln Thr Asp Lys 100 105 110 Pro Leu Lys Arg Ala Leu His Pro Tyr Gly Gly Ile Asn Met Ile Arg 115 120 Ser Ser Phe Glu Ala Tyr Gly Arg Glu Met Asp Pro Gln Phe Glu Tyr 135 140 Leu Phe Thr Asp Leu Arg Lys Thr His Asn Gln Gly Val Phe Asp Val 145 150 160 Tyr Ser Pro Glu Met Met Arg Cys Arg Lys Ser Gly Val Leu Thr Gly 170 165 Leu Pro Asp Gly Tyr Gly Arg Gly Arg Ile Ile Gly Asp Tyr Arg Arg 190 185 180 Val Ala Leu Tyr Gly Ile Ser Tyr Leu Val Arg Glu Arg Glu Leu Gln 205 195 200 Phe Ala Asp Leu Gln Gly Lys Leu Glu Arg Gly Glu Asp Leu Glu Ala 215 220 Thr Ile Arg Leu Arg Glu Glu Leu Ala Glu His Lys Arg Ala Leu Leu 230

Gln Ile Gln Gln Met Ala Ala Asn Tyr Gly Phe Asp Ile Ser Arg Pro

245 250 Ala Met Asn Ala Gln Glu Ala Val Gln Trp Leu Tyr Phe Ala Tyr Leu 260 265 Ala Ala Val Lys Ser Gln Asn Gly Gly Ala Met Ser Leu Gly Arg Thr 275 280 Ala Ser Phe Leu Asp Ile Tyr Ile Glu Arg Asp Met Gln Ala Gly Arg 295 300 Leu Asn Glu Val Gln Ala Gln Glu Leu Ile Asp His Phe Ile Met Lys 310 315 Ile Arg Met Val Arg Phe Leu Arg Thr Pro Glu Phe Asp Thr Leu Phe 325 330 335 Ser Gly Asp Pro Ile Trp Ala Thr Glu Val Ile Gly Gly Met Gly Leu 340 345 350 Asp Gly Arg Thr Leu Val Thr Lys Asn Ser Phe Arg Tyr Leu His Thr 355 360 365 Leu His Thr Met Gly Pro Ala Pro Glu Pro Asn Leu Thr Ile Leu Trp 370 375 380 Ser Glu Lys Leu Pro Ile Ala Phe Lys Lys Tyr Ala Ala Gln Val Ser 385 390 395 400 Ile Val Thr Ser Ser Leu Gln Tyr Glu Asn Asp Asp Leu Met Arg Thr 405 410 415 Asp Phe Asn Ser Asp Asp Tyr Ala Ile Ala Cys Cys Val Ser Pro Met 420 425 430 Val Ile Gly Lys Gln Met Gln Phe Phe Gly Ala Arg Ala Asn Leu Ala 435 440 445 Lys Thr Leu Leu Tyr Ala Ile Asn Gly Gly Val Asp Glu Lys Leu Lys 450 455 460 Ile Gln Val Gly Pro Lys Thr Glu Pro Leu Leu Asp Glu Val Leu Asp 465 470 475 480 Tyr Asp Thr Val Met Ala Ser Leu Asp His Phe Met Asp Trp Leu Ala 485 490 495 Val Gln Tyr Ile Ser Ala Leu Asn Leu Ile His Tyr Met His Asp Lys 500 505 510 Tyr Ser Tyr Glu Ala Ser Leu Met Ala Leu His Asp Arg Asp Val Tyr 515 520 525 Arg Thr Met Ala Cys Gly Ile Ala Gly Leu Ser Val Ala Ala Asp Ser 530 535 540 Leu Ser Ala Ile Lys Tyr Ala Thr Val Lys Pro Val Arg Asp His Thr 545 550 555 Gly Leu Ala Val Asp Phe Ile Ile Glu Gly Asp Tyr Pro Gln Tyr Gly 565 570 575 Asn Asn Asp Asp Arg Val Asp Ser Ile Ala Cys Asp Leu Val Glu Arg 580 585 590 Phe Met Lys Lys Ile Gln Ala Leu Pro Thr Tyr Arg Asn Ala Val Pro 595 600 605 Thr Gln Ser Ile Leu Thr Ile Thr Ser Asn Val Val Tyr Gly Gln Lys 615 620 Thr Gly Asn Thr Pro Asp Gly Arg Arg Gly Gly Thr Pro Phe Ala Pro 625 630 635 Gly Ala Asn Pro Met His Gly Arg Asp Arg Lys Gly Ala Val Ala Ser 645 650 Leu Thr Ser Val Ala Lys Leu Pro Phe Thr Tyr Ala Lys Asp Gly Ile 670 665 Ser Tyr Thr Phe Ser Ile Val Pro Gln Ala Leu Gly Lys Asp Glu Pro 680 685 Val Arg Lys Thr Asn Leu Val Gly Leu Leu Asp Gly Tyr Phe His His 695 700 Glu Ala Thr Ile Glu Gly Gly Gln His Leu Asn Val Asn Val Met Asn 710 715 Arg Glu Met Leu Leu Asp Ala Ile Ala His Pro Glu Asn Tyr Pro Asn 730

Leu Thr Ile Arg Val Ser Gly Tyr Ala Val Arg Phe Asn Ala Leu Thr 740 750 Arg Glu Gln Gln Asp Val Ile Ser Arg Thr Phe Thr Gln Ala Met 755 760 765

<210> 9725 <211> 466 <212> PRT <213> Enterobacter cloacae

<400> 9725 Arg Arg Ile Ala Gly Asn Tyr Arg Asn Tyr Arg Ala Ala Ala Leu Cys 10 Phe Ser Phe Pro Arg Leu Leu Met Arg Leu Asn Lys Val Val Thr Met 20 25 30 Ser Glu Gln Ile Asn Pro Leu Trp Asn His Phe Ile Arq Ala Val Gln 35 40 45 Glu Glu Val Lys Pro Ala Leu Gly Cys Thr Glu Pro Val Ser Leu Ala 50 55 Leu Ala Cys Ala Met Ala Ala Gly Gln Leu Ser Gly Glu Val Thr Arg 65 70 75 Ile Glu Ala Trp Val Ser Pro Asn Leu Met Lys Asn Gly Leu Gly Val 8.5 90 Thr Val Pro Gly Thr Gly Met Val Gly Leu Pro Ile Ala Ala Ala Leu 100 105 110 Gly Ala Thr Gly Gly Asn Ala His Ala Gly Leu Glu Val Leu Lys Asp 115 120 125 Ala Ser Ala Glu Ala Leu Thr Arg Ala Lys Ala Leu Leu Asn Ala Gly 135 140 Leu Val Gln Val Lys Leu Gln Glu Pro Cys Asp Glu Ile Leu Tyr Ser 150 155 Arg Ala Cys Val Tyr Ala Gly Glu Ser Ser Ala Met Val Thr Ile Ala 165 170 175 Gly Gly His Thr Arg Val Val Glu Val Val Cys Gln Gly Glu Thr Cys 180 185 190 Phe Arg Leu Asp Asp Arg Gln Ser Gln Asn Asn Asp Asp Pro Leu Ala 195 200 205 Val Leu Ser Thr Thr Thr Leu Ser Gln Ile Leu Glu Phe Val Glu Gln 215 220 Val Pro Phe Asp Ala Ile Arg Phe Ile Leu Asp Ala Gly Arg Leu Asn 225 230 235 Asp Ala Leu Ser Arg Glu Gly Leu Arg Gly Asn Trp Gly Leu His Ile 245 250 Gly Ala Thr Leu Asn Lys Gln Arg Ala Arg Gly Trp Met Ala Gln Asp 260 265 270 Leu Gly Ser Asp Ile Ile Ile Arg Thr Ser Ala Ala Ser Asp Ala Arg 280 275 285 Met Gly Gly Ala Thr Leu Pro Ala Met Ser Asn Ser Gly Ser Gly Asn 295 300 Gln Gly Ile Thr Ala Thr Met Pro Val Val Val Val Ala Glu His Val 310 315 320 Gln Ala Asp Asp Glu Arg Leu Ala Arg Ala Leu Met Leu Ser His Leu 325 330 Ser Ala Ile Tyr Ile His Tyr Gln Leu Pro Arg Leu Ser Ala Leu Cys 345 Ala Ala Thr Thr Ala Gly Met Gly Ala Ala Ala Gly Met Ala Trp Leu 355 360 365 Met Gly Gly Ser Tyr Gln Thr Ile Ala Met Ala Ile Gly Ser Met Ile 370 375 380

His Asn Lys

Gly Asp Val Ser Gly Met Ile Cys Asp Gly Ala Ser Asn Ser Cys Ala 390 395 400 Met Lys Val Ser Thr Ser Val Thr Ser Ala Trp Lys Ala Val Met Met 405 410 Ala Leu Asp Asp Thr Ala Val Thr Gly Asn Glu Gly Ile Val Ala His 420 425 430 Asp Val Glu Gln Ser Ile Ser Asn Leu Cys Ala Leu Ala Cys Arg Ser 440 435 Met Gln Ala Thr Asp Arg Gln Ile Ile Glu Ile Met Ala Ser Lys Val 455 465 <210> 9726 <211> 324 <212> PRT <213> Enterobacter cloacae <400> 9726 Arg Tyr Gly Arg Cys Ile Val Ser Gln Ile Phe Cys Leu Val Cys Ser 1 5 10 Asn Phe Leu Asn Glu Asn Glu Met Ala Lys Glu Arg Ala Leu Thr Leu 20 25 Glu Ala Leu Arg Val Met Asp Ala Ile Asp Arg Arg Gly Ser Phe Ala 35 40 Ala Ala Ala Asp Glu Leu Gly Arg Val Pro Ser Ala Leu Ser Tyr Thr 50 55 Met Gln Lys Leu Glu Glu Glu Leu Asp Val Val Leu Phe Asp Arg Ser 65 70 7.5 Gly His Arg Thr Lys Phe Thr Asn Val Gly Arg Met Leu Leu Glu Arg 85 90 Gly Arg Val Leu Leu Glu Ala Ala Asp Lys Leu Thr Thr Asp Ala Glu 100 105 110 Ala Leu Ala Arg Gly Trp Glu Thr His Leu Thr Leu Val Thr Glu Ala 115 120 125 Leu Val Pro Thr Glu Ala Leu Phe Pro Leu Val Asp Arg Leu Ala Ala 130 135 140 Lys Ala Asn Thr Gln Leu Ser Ile Ile Thr Glu Val Leu Ala Gly Ala 145 150 155 Trp Glu Arg Leu Glu Thr Gly Arg Ala Asp Ile Val Ile Ala Pro Asp 165 170 175 Met His Phe Arg Ser Ser Ser Glu Ile Asn Ser Arg Lys Leu Tyr Ser 180 185 190 Val Met Asn Val Tyr Val Ala Ala Pro Asp His Pro Ile His Gln Glu 195 200 205 Pro Glu Pro Leu Ser Glu Val Thr Arg Val Lys Tyr Arg Gly Val Ala 210 215 220 Val Ala Asp Thr Ala Arg Glu Arg Pro Val Leu Thr Val Gln Leu Leu 225 230 235 240 Asp Lys Gln Pro Arg Leu Thr Val Thr Ser Leu Glu Asp Lys Arg Gln 245 250 255 Ala Leu Leu Ala Gly Leu Gly Val Ala Thr Met Pro Tyr Pro Phe Val 265 Glu Lys Asp Ile Ala Glu Gly Arg Leu Arg Val Val Ser Pro Glu Tyr 275 280 285 Thr Ser Glu Val Asp Ile Ile Met Ala Trp Arg Arg Asp Ser Met Gly 295 300 Glu Ala Lys Ser Trp Cys Leu Arg Glu Ile Pro Lys Leu Phe Ala His 310 315

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<210> 9727
<211> 537
<212> PRT
<213> Enterobacter cloacae
<400> 9727
Gln Arg Gly Lys Leu Met Ser Tyr Leu Leu Ala Leu Asp Ala Gly Thr
Gly Ser Val Arg Ala Val Ile Phe Asp Leu Gln Gly Asn Gln Ile Ala
      20
                 25
Val Gly Gln Ala Glu Trp Lys His Leu Ser Val Glu Asn Val Pro Gly
     35 40
Ser Met Glu Phe Asp Leu Asp Thr Asn Trp Arg Leu Ala Cys Arg Cys
50 55 60
Ile Gln Gln Ala Leu Glu Arg Ala Arg Leu Ser Ala Ala Asp Ile Gln
        70 75
Ser Val Ala Cys Cys Ser Met Arg Glu Gly Ile Val Leu Tyr Asp Arg
          85
              90 95
Asn Gly Glu Ala Ile Trp Ala Cys Ala Asn Val Asp Ala Arg Ala Ser
      100 105 110
Arg Glu Val Ala Glu Leu Lys Glu Ile His Asp Tyr Arg Phe Glu Ser
 115 120 125
Glu Val Tyr Glu Val Ser Gly Gln Thr Leu Ala Leu Ser Ala Met Pro
130 135 140
Arg Leu Leu Trp Leu Ala His His Arg Pro Asp Ile Tyr Arg Lys Ala
145 150 155 160
Ala Thr Ile Thr Met Ile Ser Asp Trp Leu Ala Ala Lys Leu Ser Gly
         165 170 175
Glu Leu Ala Val Asp Pro Ser Asn Ala Gly Thr Thr Gly Met Leu Asp
 180 185 190
Leu Phe Ser Arg Asp Trp Arg Pro Ala Leu Leu Asp Met Ala Gly Leu
195 200 205
Arg Ala Asp Ile Leu Ser Pro Val Lys Glu Thr Gly Thr Val Leu Gly
210 215 220
Ala Ile Thr Arg Gln Ala Ala Gln Gln Cys Gly Leu Arg Glu Gly Thr
225 230 235
Pro Val Val Met Gly Gly Gly Asp Val Gln Leu Gly Cys Leu Gly Leu
          245 250 255
Gly Val Val Arg Ala Gly Gln Thr Ala Val Leu Gly Gly Thr Phe Trp
       260 265 270
Gln Gln Val Val Asn Leu Pro Gln Val Arg Thr Asp Pro Glu Met Asn
    275 280 285
Ile Arg Val Asn Pro His Val Ile Pro Gly Met Ala Gln Ala Glu Ser
  290 295
                               300
Ile Ser Phe Phe Thr Gly Leu Thr Met Arg Trp Phe Arg Asp Ala Phe
305 310 315
Cys Ala Glu Glu Lys Leu Ile Ala Glu Arg Met Gly Met Asp Thr Tyr
           325
                         330 335
Ser Leu Leu Glu Glu Met Ala Ser Arg Val Pro Ala Gly Ser His Gly
                       345
                                     350
        340
Val Met Pro Ile Phe Ser Asp Ala Met His Phe Lys Gln Trp Tyr His
                    360
     355
                                   365
Ala Ala Pro Ser Phe Ile Asn Leu Ser Ile Asp Pro Glu Lys Cys Asn
  370 375
                               380
Lys Ala Thr Leu Phe Arg Ala Leu Glu Glu Asn Ala Ala Ile Val Ser
                  395
385
      390
                                         400
Ala Cys Asn Leu Ala Gln Ile Ser Arg Phe Ser Gly Val Thr Phe Glu
         405
                          410 415
Ser Leu Val Phe Ala Gly Gly Gly Ala Lys Gly Ala Leu Trp Ser Gln
        420
                       425
                                     430
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Ile Leu Ser Asp Val Thr Gly Leu Pro Val Arg Val Pro Glu Val Lys 435 440 Glu Ala Thr Ala Leu Gly Cys Ala Leu Ala Ala Gly Ala Gly Ala Gly 455 Leu Phe Ala Asp Met Ala Ser Thr Gly Glu Arg Leu Val Lys Trp Ser 470 475 Arg Glu Phe Thr Pro Asn Pro Gln His Arg Glu Leu Tyr Asp Gly Met 485 490 495 Met Gln Lys Trp Gln Ala Val Tyr Ala Asp Gln Leu Gly Leu Val Asp 500 505 510 Ser Gly Leu Thr Thr Ser Met Trp Gln Ala Pro Gly Leu Val Arg Ala 515 520 525 Ser Pro Ser Pro Arg Pro Ser Pro 530

<210> 9728 <211> 335 <212> PRT <213> Enterobacter cloacae

<400> 9728 Thr Phe Met Ile Arg Phe Ala Val Ile Gly Thr Asn Trp Ile Thr Arg 10 Gln Phe Val Asp Ala Ala His Glu Thr Gly Lys Tyr Lys Leu Thr Ala 20 25 Val Tyr Ser Arg Ser Leu Glu Gln Ala Gln Ser Phe Ala Asn Asp Tyr 35 40 Leu Val Glu His Leu Phe Thr Ser Leu Asp Glu Met Ala Gln Ser Asp 50 55 Ala Ile Asp Ala Val Tyr Ile Ala Ser Pro Asn Ser Leu His Phe Pro 65 70 75 Gln Thr Lys Leu Phe Leu Ser His Lys Lys His Val Ile Cys Glu Lys 85 90 Pro Leu Ala Ser Asn Ile Glu Glu Val Glu Ala Ala Ile Ala Leu Ala 100 105 Arg Glu Asn Gln Val Val Leu Phe Glu Ala Phe Lys Thr Ala Ser Leu 115 120 Pro Asn Phe Leu Leu Gln Gln Ser Leu Pro Lys Ile Gly Lys Val Arg Lys Ala Phe Ile Asn Tyr Cys Gln Tyr Ser Ser Arg Tyr Gln Arg 145 150 155 160 Tyr Leu Asp Gly Glu Asn Pro Asn Thr Phe Asn Pro Ala Phe Ser Asn 165 170 175 Gly Ser Ile Met Asp Ile Gly Phe Tyr Cys Leu Ala Ser Ala Val Ala 180 185 190 Leu Trp Gly Glu Pro His Gly Val Thr Ala Thr Ala Ser Leu Leu Glu 195 200 205 Ser Gly Val Asp Ala His Gly Val Val Val Leu Asp Tyr Gly Asp Phe 210 215 220 Ser Val Thr Leu Gln His Ser Lys Val Ser Asp Ser Val Leu Pro Ser 230 235 Glu Ile Gln Gly Glu Asp Gly Ser Leu Val Ile Glu Lys Ile Ser Glu 245 250 Cys Gln Lys Leu Ser Ile Val Pro Arg Gly Gly Lys Ala Gln Glu Leu 260 265 270 Thr Gln Pro Gln His Ile Asn Thr Met Leu Tyr Glu Ala Glu Val Phe 275 280 Ala Arg Leu Val Glu Asp Asn Glu Val Asn His Pro Gly Leu Ala Ile 290 295 Ser Arg Thr Thr Ala Lys Leu Gln Thr Glu Ile Arg Arg Gln Thr Gly 310 315

Val Ile Phe Pro Ala Asp Gly Val Asn Val Glu Ala Val Ala 325 330

<210> 9729 <211> 415 <212> PRT

<213> Enterobacter cloacae

<400> 9729 Arg Met Ser Thr Gln Ser Arg Gly Leu Phe Ala Arg Leu Ala Gln Gly 1.0 Ser Leu Val Lys Gln Ile Leu Val Gly Leu Val Leu Gly Ile Leu Leu 20 2.5 Ala Met Val Ser Lys Pro Ala Ala Glu Ala Thr Gly Leu Leu Gly Thr 35 40 Leu Phe Val Gly Ala Leu Lys Ala Val Ala Pro Val Leu Val Leu Met 55 60 Leu Val Met Ala Ser Ile Ala Asn His Gln His Gly Gln Lys Thr Asn 65 70 75 Ile Arg Pro Ile Leu Phe Leu Tyr Leu Leu Gly Thr Phe Ser Ala Ala 85 90 Leu Thr Ala Val Val Phe Ser Phe Leu Phe Pro Ser Thr Leu His Leu 100 105 Thr Ser Ala Ala Gly Asp Ile Thr Pro Pro Ser Gly Ile Val Glu Val 115 120 125 Leu Arg Gly Leu Leu Met Ser Met Val Ser Asn Pro Ile Thr Ala Leu 130 135 140 Met Ser Gly Asn Tyr Ile Gly Ile Leu Val Trp Ala Ile Gly Leu Gly 145 150 155 Phe Ala Leu Arg His Gly Asn Glu Thr Thr Lys Asn Leu Val Asn Asp 165 170 175 Leu Ser Asn Ala Val Thr Phe Met Val Lys Leu Val Ile Arg Phe Ala 180 185 Pro Val Gly Ile Phe Gly Leu Val Ser Ser Thr Leu Ala Thr Thr Gly 195 200 205 Phe Asp Ala Leu Trp Gly Tyr Ala Gln Leu Leu Val Val Leu Val Gly 210 215 220 Cys Met Leu Leu Val Ala Leu Val Ile Asn Pro Leu Leu Val Phe Trp 225 230 235 Gln Ile Arg Arg Asn Pro Tyr Pro Leu Val Leu Thr Cys Leu Arg Glu 245 250 255 Ser Gly Val Tyr Ala Phe Phe Thr Arg Ser Ser Ala Ala Asn Ile Pro 260 265 270 Val Asn Met Ala Leu Ala Glu Lys Leu Asn Leu Asp Arg Asp Thr Tyr 275 280 285 Ser Val Ser Ile Pro Leu Gly Ala Thr Val Asn Met Ala Gly Ala Ala 295 300 Ile Thr Ile Thr Val Leu Thr Leu Ala Ala Val His Thr Leu Gly Ile 310 315 Pro Val Asp Leu Pro Thr Ala Leu Leu Leu Ser Val Val Ala Ser Leu 325 330 Cys Ala Cys Gly Ala Ser Gly Val Ala Gly Gly Ser Leu Leu Ile 340 345 350 Pro Leu Ala Cys Asn Met Phe Gly Ile Pro Asn Glu Ile Ala Met Gln 360 355 365 Val Val Ala Val Gly Phe Ile Ile Gly Val Leu Gln Asp Ser Cys Glu 375 370 380 Thr Ala Leu Asn Ser Ser Thr Asp Val Leu Phe Thr Ala Ala Ala Cys 385 390 395 400

Gln Ala Glu Asp Ala Arg Leu Ala Lys Asn Ala Leu Arg Ser

410

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<210> 9730
<211> 449
<212> PRT
<213> Enterobacter cloacae
<400> 9730
Val Val Ala Val Ser Arg His Gly Asn Asn Ile Thr Met Arg Phe Tyr
                          10
Met Arg Lys Ile Lys Gly Leu Arg Trp Tyr Met Ile Ala Leu Val Thr
       20
                       25
Leu Gly Thr Val Leu Gly Tyr Leu Thr Arg Asn Thr Val Ala Ala Ala
     3.5
                  4.0
                         45
Ala Pro Thr Leu Met Glu Glu Leu His Ile Ser Thr Gln Gln Tyr Ser
50 55
                     60
Tyr Ile Ile Ala Ala Tyr Ser Ala Ala Tyr Thr Val Met Gln Pro Val
      70 75 80
Ala Gly Tyr Val Leu Asp Ile Leu Gly Thr Lys Ile Gly Tyr Ala Phe
         85 90
Phe Ala Val Ala Trp Ala Val Phe Cys Gly Ala Thr Ala Leu Ala Gly
        100 105 110
Ser Trp Gly Gly Leu Ala Leu Ala Arg Gly Ala Val Gly Ala Ala Glu
115 120 125
Ala Ala Met Ile Pro Ala Gly Leu Lys Ala Ser Ser Glu Trp Phe Pro
130 135 140
Ala Lys Glu Arg Ser Ile Ala Val Gly Tyr Phe Asn Val Gly Ser Ser
145 150 155
Ile Gly Ala Met Ile Ala Pro Pro Leu Val Val Trp Ala Ile Val Met
         165 170
His Ser Trp Gln Met Ala Phe Ile Ile Ser Gly Val Leu Ser Phe Ala
      180 185 190
Trp Ala Met Ala Trp Leu Ile Phe Tyr Lys His Pro Arg Asp Gln Lys
195 200 205
Lys Leu Ser Asp Glu Glu Arg Asp Tyr Ile Ile Asn Gly Gln Glu Ser
210 215
                              220
Gln His Gln Thr Asp Asn Gly Lys Lys Met Ser Val Trp Gln Ile Leu
225 230
                             235
Gly Thr Arg Gln Phe Trp Gly Ile Ala Leu Pro Arg Phe Leu Ala Glu
          245
                        250 255
Pro Ala Trp Gly Thr Phe Asn Ala Trp Ile Pro Leu Phe Met Phe Lys
        260 265 270
Val Tyr Gly Phe Asn Leu Lys Glu Ile Ala Met Phe Ala Trp Met Pro
     275 280
                                   285
Met Leu Phe Ala Asp Leu Gly Cys Ile Val Gly Gly Tyr Leu Pro Pro
 290 295
                                 300
Leu Phe Gln Arg Trp Phe Gly Val Asn Leu Ile Val Ser Arg Lys Met
              310
                             315
Val Val Thr Met Gly Ala Leu Leu Met Ile Gly Pro Gly Met Ile Gly
           325
                          330
Leu Phe Thr Ser Pro Tyr Val Ala Ile Ala Leu Leu Cys Ile Gly Gly
        340
                       345
                                      350
Phe Ala His Gln Ser Leu Ser Gly Ala Leu Ile Thr Leu Ser Ser Asp
                     360
      355
                                    365
Val Phe Gly Arg Asn Glu Val Ala Thr Ala Asn Gly Leu Thr Gly Met
               375
                                 380
Ala Ala Trp Thr Ala Ser Thr Leu Phe Ala Leu Val Val Gly Ala Leu
385
               390
                    395
Ala Asp Thr Ile Gly Phe Ser Pro Leu Phe Ala Val Leu Ala Val Phe
         405 410 415
Asp Leu Leu Gly Ala Val Val Ile Trp Thr Val Leu Lys Ser Lys Ser
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425

430

Ala Asp Glu Leu Ala Lys Glu Ser Leu Gly Gly Pro Ala Thr Gln Ser 435 440 445

<210> 9731 <211> 138 <212> PRT <213> Enterobacter cloacae

valor Birchobacter croaca

<400> 9731 Phe Trp Asi

Phe Trp Asn Thr Ala Tyr Ala Val Thr Gln Trp Lys Val Ser Ile Met 1 5 10 Lys Tyr Arg Ile Thr Leu Ala Leu Ala Leu Phe Ser Leu Ser Thr Ala

20 25 30 Ser Phe Ala Met Ser Leu Cys Gln Glu Lys Glu Gln Asp Ile Gln Arg

35
Glu Ile Ser Tyr Ala Glu Lys His Asn Asn Gln His Arg Ile Asp Gly
50
60

Leu Lys Lys Ala Leu Ser Glu Val Lys Asp Asn Cys Thr Asp Ser Lys 65 70 75 80

Leu Arg Ala Asp His Gln Glu Lys Ile Ala Glu Gln Lys Asp Glu Ile 85 90 95 Ala Glu Arg Arg Gln Asp Leu Gln Glu Ala Lys Glu Lys Gly Asp Ala

100 105 110 Glu Lys Ile Ala Lys Arg Glu Arg Lys Leu Gln Glu Ala Gln Asp Glu

115 120 Leu Lys Ala Leu Glu Ala Arg Asp Tyr

130 135

<210> 9732

<211> 100 <212> PRT

<213> Enterobacter cloacae

<400> 9732

Val Val Ser Asp Lys Ala Glu Arg Gln Lys Arg Lys Ala Tyr Leu Leu 1 5 10 15

Ser Gln Ile Gln Gln Arg Leu Asp Leu Ser Ala Ser Arg Arg Asp 20 25 30 Trp Val Glu Ala Thr His Arg Phe Asp Arg Gly Trp Asn Thr Val Leu

35 40 45

Ser Leu Arg Ser Trp Ala Leu Val Gly Ser Ser Val Met Ala Ile Trp
50 55 60

Ser Val Arg His Pro Asn Met Leu Ile Arg Trp Ala Arg Arg Gly Phe

65 70 75 80 Gly Ala Trp Ser Ala Trp Arg Leu Val Lys Thr Thr Leu Arg Gln Gln Gln

Gln Leu Arg

10

<210> 9733 <211> 239

<212> PRT

<213> Enterobacter cloacae

<400> 9733

Arg Glu Val Lys Phe Met Ile Thr Thr Arg Thr Ala Lys Gln Cys Gly
1 5 10 15
Gln Ala Asp Phe Gly Trp Leu Gln Ala Arg Tyr Thr Phe Ser Phe Gly
20 25 30

His Tyr Phe Asp Pro Lys Leu Leu Gly Tyr Ala Ser Leu Arg Val Leu 35 40 Asn Gln Glu Val Leu Ala Pro Gly Ala Ser Phe Gln Pro Arg Thr Tyr Pro Lys Val Asp Ile Leu Asn Leu Ile Leu Glu Gly Glu Ala Glu Tyr 70 Arg Asp Ser Glu Gly Asn His Val Gln Ala Lys Ala Gly Glu Ala Leu 85 90 Leu Ile Ser Thr Gln Pro Gly Ile Ser Tyr Ser Glu His Asn Leu Ser 105 110 100 Lys Asp Lys Thr Leu Thr Arg Met Gln Leu Trp Leu Asp Ala Cys Pro 115 120 125 Glu Arg Glu Asn Pro Leu Val Gln Lys Ile Asp Leu Lys Gly Asp Gln 130 135 140 Gln Gln Leu Ile Ala Ser Pro Asp Gly Ser Lys Gly Ser Leu Gln Leu 145 150 155 Arg Gln Gln Val Trp Leu His His Ile Glu Leu Lys Lys Gly Glu Gln 165 170 175 Ala Ser Phe Gln Leu His Gly Pro Arg Ala Tyr Leu Gln Ser Ile His 180 185 190 Gly Thr Val His Ala Val Thr His Thr Glu Glu Lys Glu Ala Leu Thr 195 200 205 Cys Gly Asp Gly Ala Phe Ile Arg Asp Glu Ala Asn Ile Thr Leu Val 210 215 220 Ala Asp Thr Pro Leu Arg Ala Leu Leu Ile Asp Leu Pro Val 230

<210> 9734 <211> 525 <212> PRT

<213> Enterobacter cloacae

<400> 9734 Thr Met Ala Asp Ile Glu Ile Arg Gln Ala Ser Pro Thr Ala Phe Tyr Ile Lys Val His Asp Thr Asp Asn Val Ala Ile Ile Val Asn Asp Asn 25 Gly Leu Lys Ala Gly Thr Arg Phe Pro Asp Gly Leu Glu Leu Ile Glu 40 His Ile Pro Glm Gly His Lys Val Ala Leu Val Asp Ile Pro Ala His 5.5 Gly Glu Ile Val Arg Tyr Gly Glu Val Ile Gly Tyr Ala Val Arg Ala 70 75 Ile Pro Gln Gly Ser Trp Ile Glu Glu Ser Leu Val Glu Leu Pro Thr 90 Ala Pro Pro Leu Glu Thr Leu Pro Leu Ala Thr Arg Val Pro Glu Pro 100 105 Leu Pro Pro Leu Glu Gly Tyr Thr Phe Glu Gly Tyr Arg Asn Ala Asp 115 120 125 Gly Ser Val Gly Thr Lys Asn Leu Leu Gly Ile Thr Thr Ser Val His 135 140 Cys Val Ala Gly Val Val Asp Tyr Val Val Lys Ile Ile Glu Arg Asp 150 155 160 Leu Leu Pro Lys Tyr Pro Asn Val Asp Gly Val Val Gly Leu Asn His 165 170 Leu Tyr Gly Cys Gly Val Ala Ile Asn Ala Pro Ala Ala Val Val Pro 180 185 190 Ile Arg Thr Ile His Asn Ile Ala Leu Asn Pro Asn Phe Gly Gly Glu 195 200 205 Val Met Val Ile Gly Leu Gly Cys Glu Lys Leu Gln Pro Glu Arg Leu

220

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Leu Gln Gly Thr Glu Asp Val Lys Ala Ile Pro Val Asp Asp Ala Ser
              230
                              235
Val Val Arg Leu Gln Asp Glu His His Val Gly Phe Arg Ser Met Val
                          250
          245
Asp Asp Ile Leu Gln Val Ala Glu Arg His Leu Glu Lys Leu Asn Lys
                       265
Arg Gln Arg Glu Thr Cys Pro Ala Ser Glu Leu Val Val Gly Thr Gln
                         285
     275
          280
Cys Gly Gly Ser Asp Ala Phe Ser Gly Val Thr Ala Asn Pro Ala Val
                       300
       295
Gly Tyr Ala Ser Asp Leu Phe Val Arg Cys Gly Ala Thr Val Met Phe
     310 315
Ser Glu Val Thr Glu Val Arg Asp Ala Ile His Leu Leu Thr Pro Arg
       325 330 335
Ala Val Asn Glu Glu Val Gly Lys Arg Leu Leu Glu Glu Met Ala Trp
    340 345 350
Tyr Asp Asn Tyr Leu Asp Met Gly Lys Thr Asp Arg Ser Ala Asn Pro
     355 360
                         365
Ser Pro Gly Asn Lys Lys Gly Gly Leu Ala Asn Val Val Glu Lys Ala
 370 375 380
Leu Gly Ser Ile Ala Lys Ser Gly Gln Ser Ala Ile Val Glu Val Leu
385 390 395
Ser Pro Gly Gln Arg Pro Thr Lys Arg Gly Leu Ile Tyr Ala Ala Thr
        405 410
Pro Ala Ser Asp Phe Val Cys Gly Thr Gln Gln Val Ala Ser Gly Ile
        420 425
Thr Val Gln Val Phe Thr Thr Gly Arg Gly Thr Pro Tyr Gly Leu Met
 435 440
                                    445
Ala Val Pro Val Ile Lys Met Ala Thr Arg Thr Glu Leu Ala Asn Arg
                455
Trp Tyr Asp Leu Met Asp Ile Asm Ala Gly Thr Ile Ala Thr Gly Glu
              470 475
Glu Ser Ile Glu Glu Val Gly Trp Lys Leu Phe His Phe Ile Leu Asp
           485 490 495
Val Ala Ser Gly Arg Lys Lys Thr Phe Ser Asp Gln Trp Gly Leu His
        500 505
Asn Ser Leu Ala Val Phe Asn Pro Ala Pro Val Thr
                    520
<210> 9735
<211> 442
<212> PRT
<213> Enterobacter cloacae
<400> 9735
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Met Pro Thr Pro Ser Glu Met Glu Arg Lys Val Lys His Leu Thr Glu 10 Met Val Glu Gln His Lys Arg Gly Asn Thr Asn Gly Ile Tyr Ala Val 2.0 25 Cys Ser Ala His Pro Leu Val Leu Glu Ala Ala Ile Arg Tyr Ala His 40 4.5 Ser Gln Gln Thr Pro Leu Leu Ile Glu Ala Thr Ser Asn Gln Val Asp 55 60 Gin Phe Gly Gly Tyr Thr Gly Met Thr Pro Ala Asp Phe Tyr Gly Phe 75 65 7.0 Val Cys Lys Leu Ala Gly Ser Leu Gly Phe Pro Thr Ser Gln Leu Ile 85 90 Leu Gly Gly Asp His Leu Gly Pro Asn Arg Trp Gln Asn Leu Pro Ala 1.00 105 Leu Gln Ala Met Ala Asn Ala Asp Asp Leu Ile Arg Ser Tyr Val Ala

```
Ala Gly Phe Lys Lys Ile His Leu Asp Cys Ser Met Ser Cys Glu Asp
                 135
Asp Pro Val Pro Leu Thr Asp Ala Ile Val Ala Gly Arg Ala Ala Arg
145
         150
                             155
Leu Ala Lys Ile Ala Glu Thr Thr Cys Leu Glu Gln Phe Gly Val Ala
           165
                         170
Asp Leu Val Tyr Val Ile Gly Thr Glu Val Pro Val Pro Gly Gly Ala
            185
      180
                                      190
His Glu Thr Leu Thr Glu Leu Glu Val Thr Thr Pro Glu Ala Ala Arg
  195 200 205
Ala Thr Leu Glu Ala His Arg His Ala Phe Glu Lys Glu Gly Leu Ser
210 215 220
Asp Ile Trp Pro Arg Ile Ile Gly Leu Val Val Gln Pro Gly Val Glu
225 230 235
Phe Asp His Ala His Val Cys Asp Tyr Gln Pro His Lys Ala Val Ala
          245 250 255
Leu Ser Lys Met Val Glu Ala Tyr Asp Thr Leu Val Phe Glu Ala His
        260 265 270
Ser Thr Asp Tyr Gln Thr Pro Gln Ala Leu Arg Gln Leu Val Lys Asp
275 280 285
His Phe Ala Ile Leu Lys Val Gly Pro Ala Leu Thr Phe Ala Leu Arg
290 295 300
Glu Ala Leu Phe Ser Leu Ala Ala Ile Glu Glu Glu Leu Leu Pro Ala
     310 315
Lys Ala Cys Ser Gly Leu Arg His Val Leu Glu Asn Val Met Leu Asp
           325
                          330
Arg Pro Glu Tyr Trp Gln Ser His Tyr His Gly Asp Gly Asn Ala Arg
        340
                       345 350
Arg Leu Ala Arg Gly Tyr Ser Tyr Ser Asp Arg Val Arg Tyr Tyr Trp
         360 365
Pro Asp Ser Gln Ile Asp Asp Ala Phe Glu Arg Leu Val Arg Asn Leu
 370 375 380
Ala Asp Glu Pro Ile Pro Leu Pro Leu Ile Ser Gln Tyr Leu Pro Leu
              390
                           395 400
Gln Tyr Ser Lys Val Arg Asp Gly Ala Leu Ser Ser Thr Pro Arg Glu
         405 410 415
Leu Ile Leu Asp His Ile Gln Asp Ile Leu His Gln Tyr His Ala Ala
       420 425
Cys Glu Gly Val Thr Thr Gln His Ala
     435
<210> 9736
<211> 314
<212> PRT
<213> Enterobacter cloacae
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<400> 9736

Ser Thr Cys Cys Ala Asn Arg Leu Asn Pro Arg Arg Leu Arg Pro Arg 10 Lys Arg Asn Leu Lys Met Ala Ser Asn His Thr Thr Leu Pro Gly Val 20 25 3.0 Ser Glu Ser Glu Glu Thr Leu Leu Thr Gly Val Asn Glu Asn Val Tyr 4.0 4.5 Glu Asp Gln Ser Ile Gly Ala Glu Leu Thr Lys Lys Asp Ile Asn Arg 50 55 60 Val Ala Trp Arg Ser Met Leu Leu Gln Ala Ser Phe Asn Tyr Glu Arg 70 7.5 Met Gln Ala Ser Gly Trp Leu Tyr Gly Leu Leu Pro Ala Leu Lys Lys 8.5 90 Ile His Thr Asn Lys Arg Asp Leu Ala Arg Ala Met Lys Gly His Met

100 105

210

```
Gly Phe Phe Asn Thr His Pro Phe Leu Val Thr Phe Val Ile Gly Ile
   115
                120
Ile Leu Ala Met Glu Arg Ser Lys Gln Asp Val Asn Ser Ile Gln Ser
                   135
                                    140
Thr Lys Ile Ala Val Gly Ala Pro Leu Gly Gly Ile Gly Asp Ala Met
    150
                                155
Phe Trp Leu Thr Leu Leu Pro Ile Cys Gly Gly Ile Gly Ala Ser Leu
       165 170
Ala Leu Gln Gly Ser Ile Leu Gly Ala Val Val Phe Ile Val Leu Phe
     180 185
                                          190
Asn Val Val His Leu Gly Leu Arg Phe Gly Leu Ala His Tyr Ala Tyr
 195 200 205
Arg Met Gly Val Ala Ala Ile Pro Leu Ile Lys Ala Asn Thr Lys Lys
 210 215 220
Val Gly His Ala Ala Ser Ile Val Gly Met Thr Val Ile Gly Ala Leu
225 230 235 240
Val Ala Thr Tyr Val Arg Leu Asn Thr Thr Leu Glu Ile Lys Ala Gly
           245 250 255
Asp Ala Val Val Lys Leu Gln Thr Asp Val Ile Asp Lys Leu Met Pro
         260 265 270
Ala Phe Leu Pro Leu Val Tyr Thr Leu Ile Met Phe Trp Leu Val Arg
275 280 285
Arg Gly Trp Ser Pro Leu Arg Leu Ile Gly Ile Thr Val Val Leu Gly
290 295
Val Val Gly Lys Phe Cys His Phe Leu
          310
<210> 9737
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 9737
Ser Val Leu Ser Arg Gly Ser His Phe His Val Ala Pro Ser Arg Thr
                          10
Tyr Asp Leu Asn Phe Tyr Lys Ser Ser Ile Met Ser Asp Lys Arg Thr
                       25
Ala Glu Glu Gly Arg Phe Ala Gly Leu Ala Leu Ala Glu Glu Glu Leu
                    40
Val Ala Arg Val Ala Trp Cys Tyr Tyr His Asp Gly Leu Thr Gln Asn
                   5.5
Asp Ile Gly Glu Arg Leu Gly Leu Pro Arg Leu Lys Ile Ser Arg Leu
             70
                                75
Leu Glu Lys Gly Arg Gln Ser Gly Val Ile Arg Val Gln Ile Asn Ser
                             90
            8.5
Arg Tyr Glu Gly Cys Leu Ala Leu Glu Thr Glu Leu Gln Gln Arg Phe
         100
             105
                              110
Gly Leu Lys Leu Val Arg Val Met Pro Ala Leu Asn Thr Pro Pro Met
   115
                      120
                                       125
Asn Val Arg Leu Gly Ile Gly Ala Ala Gln Ser Leu Met Gly Val Leu
                   135
                                    140
Glu Pro Gly Gln Leu Leu Ala Val Gly Phe Gly Glu Thr Thr Met Ser
    150
                                155 160
145
Ser Leu Gln His Leu Ser Gly Phe Ile Ser Ser Gln Gln Ile Arg Leu
            165
                             170
                                              175
Val Thr Leu Ser Gly Gly Val Gly Pro Tyr Met Thr Gly Ile Gly Gln
       180
                          185
Leu Asp Ala Ala Cys Ser Val Ser Met Ile Pro Ala Pro Leu Arg Val
     195
                      200
                                       205
Ser Ser Ala Glu Val Ala Gly Ile Leu Lys Arg Glu Thr Ser Val Arg
                   215
```

Asp Val Ile Leu Ala Ala Thr Ala Ala Asp Val Ala Val Val Gly Ile 235 225 230 Gly Ser Val Asn Gln Arg Arg Asp Ala Thr Ile Leu Arg Ser Gly Tyr 245 250 Ile Ser Glu Gly Glu Gln Leu Met Tyr Ala Arg Lys Gly Ala Val Gly 260 265 Asp Ile Leu Gly Tyr Phe Leu Asn Ala Glu Gly Glu Cys Val Glu Glu 275 280 285 Leu Glu Ile His Lys Glu Leu Leu Gly Val Thr Leu Asp Glu Leu Ala 290 295 300 Gln Leu Pro Thr Ile Val Gly Val Ala Gly Gly Glu Glu Lys Ala Asp 310 315 320 Ala Ile Tyr Ala Ala Leu Lys Gly Arg Arg Ile Asn Gly Leu Val Thr 325 330 Glu Glu Thr Thr Ala Arg Ala Val Leu Ala Leu Ala Gly 345

<210> 9738 <211> 688 <212> PRT <213> Enterobacter cloacae

<400> 9738

Leu Ile Arg Pro His Asn Asn Asn Phe Thr Leu Glu Glu Thr Met Ser

10 Arg Tyr Pro Ser Leu Phe Ala Pro Leu Asp Leu Gly Phe Thr Thr Leu 20 25 Lys Asn Arg Val Leu Met Gly Ser Met His Thr Gly Leu Glu Glu Arg 35 40 Pro Asp Gly Ala Glu Arg Leu Ala Ala Phe Tyr Ala Glu Arg Ala Arg 50 55 His Gly Val Ala Leu Ile Val Thr Gly Gly Val Ala Pro Ala Pro Ser 7.0 75 Gly Val Thr Met Glu Gly Gly Ala Val Leu Asn Asp Ala Ser Gln Leu 8.5 90 Ser His His Arg Ile Val Thr Asp Ala Val His Arg Glu Gly Gly Lys 100 105 110 Ile Ala Leu Gln Ile Leu His Thr Gly Arg Tyr Ser Tyr Gln Pro Asn 125 115 120 Leu Val Ala Pro Ser Ala 11e Gln Ala Pro Ile Asn Arg Phe Thr Pro 135 140 130 His Ala Leu Ser His Asp Glu Ile Leu Ala Leu Ile Asp Asp Phe Ala 155 150 Arg Cys Ala Ala Leu Ala Arg Glu Ala Gly Tyr Asp Gly Val Glu Val 170 165 Met Gly Ser Glu Gly Tyr Leu Ile Asn Glu Phe Leu Ala Ala Arg Thr 185 180 Asn Gln Arg Asp Asp Glu Trp Gly Gly Asp Tyr Ala Arg Arg Met Arg 200 2.05 195 Phe Ala Val Glu Val Val Arg Ala Val Arg Glu Arg Ala Gly Ala Asp 220 215 210 Phe Ile Ile Ile Phe Arg Leu Ser Met Leu Asp Leu Val Glu Gly Gly 230 235 Gly Thr Phe Asp Glu Thr Val Gln Leu Ala Gln Ala Ile Glu Ala Ala 250

Gly Ala Thr Ile Ile Asn Thr Gly Ile Gly Trp His Glu Ala Arg Ile 270 260 265 Pro Thr Ile Ala Thr Pro Val Pro Arg Ala Ala Phe Ser Trp Val Thr 275 280 285 Arg Lys Leu Lys Gly Lys Val Ser Val Pro Leu Val Thr Thr Asn Arg 290 295 300

```
Ile Asn Asp Pro Gln Val Ala Asp Asp Val Ile Ser Arg Gly Asp Ala
       310
                            315
Asp Met Val Ser Met Ala Arg Pro Phe Leu Ala Asp Ala Glu Leu Leu
           325
                         330
Ser Lys Ala Gln Ser Gly Arg Ala Asp Glu Ile Asn Thr Cys Ile Gly
             345
Cys Asn Gln Ala Cys Leu Asp Gln Ile Phe Ala Gly Lys Val Thr Ser
  355
                                   365
                    360
Cys Leu Val Asn Pro Arg Ala Cys His Glu Thr Lys Met Pro Val Val
                 375
                                380
Thr Thr Val Asn Lys Lys Arg Leu Ala Val Val Gly Ala Gly Pro Ala
385 390 395
Gly Leu Ala Phe Ala Val Asn Ala Ala Ser Arg Gly His Gly Val Thr
     405 410
                                         415
Leu Phe Asp Ala Gln Gly Glu Ile Gly Gly Gln Phe Asn Ile Ala Lys
   420 425 430
Gln Ile Pro Gly Lys Asp Glu Phe Tyr Glu Thr Leu Arg Tyr Tyr Arg
     435 440 445
Arg Met Ile Glu Val Thr Gly Val Asp Leu Arg Leu Asn Gln Phe Val
 450 455 460
Ser Ala Ala Asp Leu Ile Gly Phe Asp Glu Val Ile Leu Ala Ser Gly
   470 475 480
Ile Ala Pro Arg Thr Pro Ala Ile Glu Gly Ile Asp His Pro Lys Val
           485 490 495
Leu Ser Tyr Leu Asp Val Leu Arg Asp Lys Ala Pro Val Gly Glu Lys
        500 505 510
Val Ala Ile Ile Gly Cys Gly Gly Ile Gly Phe Asp Thr Ala Met Tyr
     515 520 525
Leu Ser Gln Pro Gly Glu Ala Thr Ser Gln Asn Ile Ala Glu Phe Cys
 530 535 540
Val Glu Trp Gly Ile Asp Thr Ser Leu Ser Gln Ser Gly Gly Leu Arg
              550 555
Pro Glu Gly Pro Gln Leu Pro Lys Ser Pro Arg Gln Ile Val Met Leu
           565 570 575
Gln Arg Lys Ala Ser Lys Pro Gly Glu Gly Leu Gly Lys Thr Thr Gly
        580 585
Trp Ile His Arg Ala Thr Leu Let Ser Arg Gly Val Lys Met Ile Pro
                    600 605
Ala Val Ser Tyr Gln Lys Ile Asp Asp Asp Gly Leu His Val Leu Ile
                 615
                               620
  610
Gly Gly Glu Pro Gln Leu Leu Arg Val Asp His Val Ile Leu Cys Ala
              630 635
Gly Gln Glu Pro Lys Arg Asp Leu Ala Asp Pro Leu Arg Glu Ala Gly
           645
                          650 655
Lys Thr Val His Leu Ile Gly Gly Cys Asp Val Ala Met Glu Leu Asp
                     665 670
        660
Ala Arg Arg Ala Ile Ala Gln Gly Thr Gln Leu Ala Leu Val Ile
```

<210> 9739 <211> 173

<212> PRT <213> Enterobacter cloacae

<400> 9739

Asn Ala Gly Leu Tyr Glu Ile Arg Arg Pro Thr Asp Val Leu Pro Asp 1 5 10 15 Ala Ala Ala Arg Arg Ser Ala Gly Val Trp Pro Gly Arg Val Pro Gly 20 25 30 Arg Thr Val Glu Glu Glu Ile Arg Gly Gln Gly Leu Thr Met Val Ile $\frac{1}{45}$

```
Ser Pro Leu Ala Leu Arg Arg Phe Ser Tyr Ala Ile Val Ala Leu Met
                                       60
Met Phe Ser Ala Leu Ile Leu Leu Trp Ser Ala Leu Gln His Gln Glu
                  70
Ser Thr Leu Ala Ile Arg Pro Val Ser Gln Gly Thr Ser Val Pro Asp
           8.5
                                90
Gly Phe Ser Ile Trp His His Leu Asp Ala Asn Gly Ile Arg Phe Lys
               105
         100
Ser Ile Thr Pro Gln Asn Asp Val Leu Leu Ile Lys Phe Asp Ser Ser
      115 120
                              125
Ala Gln Ser Ala Ala Ala Lys Ala Val Leu Asp Arg Thr Leu Pro Gln
 130 135 140
Gly Tyr Ile Ile Ala Gln Gln Asp Asp Asp Ser His Val Ala Ser Trp
145 150 155
Met Ser Arg Leu Arg Asp Thr Ser His Arg Phe Gly
              165
<210> 9740
<211> 157
<212> PRT
<213> Enterobacter cloacae
<400> 9740
Ser Leu Asp Gly Cys Gly Tyr Trp Arg Arg Ser Gly Cys Gly Ala Gly
                              1.0
Cys Pro Ala Asp Ala Ser Leu Ile Met Glu Asp Pro Arg His Ala Gln
           20
                            25
Gly Pro Ala Lys Asn Val Leu Gly Ile Gly Gln Arg Ile Leu Thr Thr
       35
                         40
Leu Val Gly Ile Ala Glu Thr Arg Val Arg Leu Ala Val Val Glu Leu
 50
                      55
Glu Glu Glu Lys Ala Asn Leu Phe Gln Met Leu Met Leu Gly Leu
                 7.0
                                 7.5
Thr Met Leu Phe Ala Ala Phe Gly Leu Met Ser Leu Met Val Leu Ile
              8.5
                                90
                                                  95
Ile Trp Ala Ile Asp Pro Gln Tyr Arg Leu Asn Ala Met Ile Ala Thr
                            105
           100
Thr Val Val Leu Leu Val Ala Ala Leu Ile Gly Gly Ile Trp Thr Leu
                         120
       115
His Lys Ala Arg Thr Ser Thr Phe Leu Arg His Thr Arg Gln Glu Leu
                   135 140
  130
Ala Asn Asp Arg Ala Leu Leu Glu Asp Asp Lys Ser
                  150
145
<210> 9741
<211> 138
<212> PRT
<213> Enterobacter cloacae
<400> 9741
Cys Gly Ser Leu Glu Ser Lys Met Lys Lys Leu Glu Asp Val Gly Val
                                 10
                                                  15
Leu Val Ala Arg Ile Leu Met Pro Ile Leu Phe Ile Thr Ala Gly Trp
                                               30
           20
Gly Lys Ile Thr Gly Tyr Ala Gly Thr Gln Gln Tyr Met Glu Ala Met
                         4.0
                                           4.5
Gly Val Pro Gly Phe Leu Leu Pro Leu Thr Ile Leu Leu Glu Phe Gly
                                       60
                      5.5
Gly Gly Leu Ala Val Leu Phe Gly Phe Leu Thr Arg Thr Thr Ala Leu
                                    75
                  70
```

Phe Thr Ala Gly Phe Thr Leu Leu Thr Ala Phe Ile Phe His Ser Asn

Phe Ala Glu Gly Val Asn Ser Leu Met Phe Met Lys Asn Leu Thr Ile 105 100 Ala Gly Gly Phe Leu Leu Leu Ala Ile Thr Gly Pro Gly Ala Tyr Ser 115 120 Ile Asp Arg Leu Leu Asn Lys Lys Trp 130 <210> 9742 <211> 353 <212> PRT <213> Enterobacter cloacae <400> 9742 Ala Gly Tyr Thr Asp Tyr Ile Gln Ser Glu Glu Thr Ser Pro Arg Phe 10 Cys Tyr Leu Thr Glu Glu Lys Lys Met Gly Gln Leu Val Asp Gly Val 25 Trp Gln Asp Val Trp Tyr Asp Thr Lys Ser Thr Gly Gly Arg Phe Lys 40 35 Arg Ser Val Ser Ala Phe Arg Asn Trp Leu Thr Ala Asp Gly Ala Pro 5.5 Gly Pro Ser Gly Glu Gly Gly Phe Ala Ala Glu Lys Asp Arg Tyr His 70 7.5 Leu Tyr Val Ser Leu Ala Cys Pro Trp Ala His Arg Thr Leu Ile Val 90 95 8.5 Arg Lys Leu Lys Gly Leu Glu Ser Leu Ile Pro Val Ser Val Val Asn 100 105 110 Pro Leu Met Leu Glu Asn Gly Trp Thr Phe Asp Ser Asp Phe Pro Ala 115 120 125 Ala Thr Gly Asp Glu Leu Tyr His His Asp Phe Leu Tyr Gln Leu Tyr 130 135 140 Leu Arg Ala Asp Pro His Tyr Thr Gly Arg Val Thr Val Pro Val Leu 150 155 Trp Asp Lys Lys Asn Gln Thr Ile Val Ser Asn Glu Ser Ala Glu Ile 165 170 Ile Arg Met Phe Asn Thr Ala Phe Asp Ala His Gly Ala Arg Ala Gly 180 185 Asp Tyr Tyr Pro Val Glu Leu Arg Glu Lys Ile Asp Glu Leu Asn Gly 195 200 Trp Ile Tyr Asp Asn Val Asn Asn Gly Val Tyr Lys Ala Gly Phe Ala 210 215 Thr Ser Gln Glu Ala Tyr Asp Glu Ala Val Gly Asn Val Phe Gly Ser 230 235 Leu Glu Arg Leu Glu Gln Ile Leu Gly Gln His Arg Tyr Leu Thr Gly 245 250 255 Asp Arg Leu Thr Glu Ala Asp Ile Arg Leu Trp Thr Thr Leu Ile Arg 265 270 260 Phe Asp Pro Val Tyr Val Thr His Phe Lys Cys Asp Lys His Arg Ile 280 285 275 Ser Asp Tyr Leu Asn Leu His Gly Phe Leu Arg Asp Ile Tyr Gln Met 300 290 295 Pro Gly Ile Ala Glu Thr Val Asn Phe Asp His Ile Arg Thr His Tyr 310 315 Phe Arg Ser His Lys Thr Ile Asn Pro Thr Gly Ile Ile Ser Ile Gly 330 325

Pro Trp Gln Asp Leu Asp Glu Pro His Gly Arg Asp Val Arg Phe Gly

345

<210> 9743 <211> 163 <212> PRT

<213> Enterobacter cloacae

<400> 9743

Lys Glu Glu Asn Ala Met Pro Asn Ile Val Leu Cys Arg Ile Asp Glu 10 Arg Leu Ile His Gly Gln Val Gly Val Gln Trp Val Gly Phe Ala Gly 20 25 Ala Asn Leu Val Leu Val Ala Asn Asp Glu Val Ala Asp Asp Pro Val

4.0 4.5 Gln Gln Asn Leu Met Glu Met Val Leu Ala Glu Gly Ile Ala Val Arg

55 60

Phe Trp Ser Leu Gln Lys Val Ile Asp Asn Ile His Arg Ala Ala Asp 75 7.0 Arg Gln Lys Ile Leu Leu Val Cys Lys Thr Pro Ala Asp Phe Leu Thr

8.5 90 Leu Val Glu Gly Gly Val Pro Ile Thr Arg Ile Asn Val Gly Asn Met

105 100 His Tyr Ala Ser Gly Lys Gln Gln Ile Ala Lys Thr Val Ser Val Asp 120 125 115

Ala Asn Asp Ile Ala Ala Phe Asn Gly Leu Lys Ala Ala Gly Val Glu 135 140 130 Cys Phe Val Gln Gly Val Pro Thr Glu Thr Ala Leu Asp Leu Phe Lys

150 145

Leu Leu

<210> 9744

<211> 392 <212> PRT

<213> Enterobacter cloacae

<400> 9744

Thr Cys Thr Leu Ser Arg Gly Ser Ala Arg Arg Gly Arg Asp Met Ser 1.0 Gln Leu Leu Arg Ala Arg Arg Leu Leu Thr Gly Gln Gly Trp Leu Asp 20 25 Asp His Gln Leu Arg Met Asp Arg Gly Val Ile Thr Ala Ile Glu Pro 40 35 Ile Pro Ala Gly Val Asn Thr Arg Glu Ala Asp Leu Leu Cys Pro Ala 55 Tyr Ile Asp Ile His Phe His Gly Gly Ala Gly Val Asp Val Met Asp 70 75 65 Asp Ala Pro Asp Val Leu Asp Arg Leu Ala Leu His Lys Ala Arg Glu 85 90 Gly Val Gly Ala Phe Leu Pro Thr Thr Val Thr Ala Ser Leu Glu Ala 110 105 Ile His Gly Ala Leu Arg Arg Ile Ala Arg Arg Cys His Ala Gly Gly 125 115 120 Pro Gly Ala Gln Leu Leu Gly Ser Tyr Leu Glu Gly Pro Tyr Phe Thr 135 130 140

Pro Gln Asn Lys Gly Ala His Pro Pro Glu Leu Phe Arg Glu Leu Asp 155 150 Leu Ala Glu Leu Asp Glu Leu Ile Ala Val Ser Gln Asn Thr Leu Arg

165 170 175 Val Val Ala Leu Ala Pro Glu Lys Val Asp Ala Leu Lys Ala Ile His

180 185

His Leu Lys Gln Lys Gly Ile Arg Val Met Leu Gly His Ser Ala Ala 195 205

```
Thr Tyr Ala Gln Thr Leu Ala Ala Phe Asp Ala Gly Ala Asp Gly Leu
 210
                215
Val His Cys Tyr Asn Gly Met Thr Gly Leu His His Arg Glu Pro Gly
            230
                             235
Met Val Gly Ala Gly Leu Thr Asp Pro Arg Ala Trp Leu Glu Leu Ile
         245
                          250
Ala Asp Gly His His Val His Pro Gly Ala Met Arg Leu Cys Cys Cys
        260 265
                           270
Cys Ala Lys Asp Arg Thr Val Leu Ile Thr Asp Ala Met Gln Ala Ala
     275 280 285
Gly Met Pro Asp Gly Gly Tyr Thr Leu Cys Gly Glu Ser Val Glu Met
 290 295 300
Gln Gly Gly Val Val Arg Thr Ala Ser Gly Gly Leu Ala Gly Ser Thr
305 310 315
Leu Ala Leu Asp Ala Ala Val Arg Asn Met Val Glu His Thr Gly Val
           325 330 335
Ala Pro Glu Asn Ala Ile His Met Ala Ser Leu His Pro Ala Arg Leu
            345 350
        340
Leu Gly Met Asp His Leu Leu Gly Ser Leu Ala Pro Gly Lys Arg Ala
                    360 365
     355
Asn Ile Ile Ala Leu Asp Ala Gly Leu His Leu Arg Gln Ile Trp Ile
                         380
370 375
Gln Gly Gln Ala Leu Ser Leu
              390
```

<210> 9745 <211> 382 <212> PRT <213> Enterobacter cloacae

<400> 9745 Val Met Pro Gln Thr Thr Thr Thr Gly Thr Trp Thr Glu Lys Glu 1.0 Ile Arg Gin Gin Pro Ala Ser Trp Leu Arg Ser Leu Asn Asn Ile Asp 25 20 Asn Leu Arg Ala Ser Ile Asp Ser Phe Leu Thr Pro Leu Leu Arg Lys 40 45 Pro Asp Leu Arg Ile Val Leu Thr Gly Ala Gly Thr Ser Ala Phe Ile 55 50 Gly Asp Ile Ile Ala Pro Trp Leu Ala Ser His Thr Arg Lys Asn Ile 7.0 75 Thr Ala Ile Pro Thr Thr Asp Leu Val Thr Asn Pro Met Asp Tyr Phe 90 8.5 Ser Pro Ala His Pro Leu Leu Leu Val Ser Phe Ala Arg Ser Gly Asn 105 Ser Pro Glu Ser Val Ala Ala Val Glu Leu Ala Asn Gln Phe Val Pro 120 125 115 Glu Cys Tyr His Leu Ser Ile Thr Cys Asn Glu Ala Gly Ser Leu Tyr 140 Gln Asn Ala Val Asp Ser Asp Asn Ala Cys Ala Leu Leu Met Pro Ala 155 150 Glu Thr His Asp Arg Gly Phe Ala Met Thr Ser Ser Ile Thr Thr Met 170 165 Met Ala Ser Cys Leu Ala Val Phe Ala Pro Glu Thr Ile Asn Ser Lys 185 180 Thr Phe Arg Asp Val Ser Asp Arg Cys Gln Ala Ile Leu Thr Ser Leu 195 205 Gly Asp Phe Ser Pro Gly Val Phe Gly Asn Glu Pro Trp Lys Arg Ile 215 220 210 Val Tyr Leu Gly Ser Gly Gly Leu Gln Gly Ala Ala Arg Glu Ser Ala 230 235

```
Leu Lys Val Leu Glu Leu Thr Ala Gly Lys Leu Ala Ala Phe Tyr Asp
                                       255
                             250
            245
Ser Pro Thr Gly Phe Arg His Gly Pro Lys Ser Leu Val Asp Asn Glu
         260
                         265
Thr Leu Val Val Val Phe Val Ser Ser His Pro Tyr Thr Arg Gln Tyr
 275
                      280
                                      285
Asp Leu Asp Leu Leu Ala Glu Leu Arg Arg Asp Arg Gln Ala Met Arg
 290 295
                                   300
Val Val Ala Ile Ala Ala Glu Thr Asp Pro Val Ile Glu Ala Gly Pro
305 310
                               315
His Ile Leu Leu Pro Pro Ser Arg Ser Phe Asn Asp Met Glu Gln Ala
      325 330 335
Phe Cys Phe Leu Met Tyr Ala Gln Val Phe Ala Leu Thr Gln Ser Leu
         340 345 350
His Val Gly Asn Thr Pro Asp Thr Pro Ser Ala Ser Gly Thr Val Asn
     355 360 365
Arg Val Val Gln Gly Val Val Ile His Pro Trp Gln Ala
          375
<210> 9746
<211> 295
<212> PRT
<213> Enterobacter cloacae
<400> 9746
Glu Asp Arg Leu Met Ser Ile Ile Ser Thr Lys Tyr Leu Leu Gln Asp
                            10
Ala Gln Ala Lys Gly Phe Ala Val Pro Ala Phe Asn Ile His Asn Ala
         20
                          25
Glu Thr Ile Gln Ala Ile Leu Glu Val Cys Ser Glu Met Arg Ser Pro
35
                      40
Val Ile Leu Ala Gly Thr Pro Gly Thr Phe Lys His Ile Ala Leu Glu
                   55
50
Glu Ile Tyr Ala Leu Cys Ser Ala Tyr Ser Leu Thr Tyr Asp Met Pro
                                75
Leu Ala Leu His Leu Asp His His Glu Ser Leu Asp Asp Ile Arg Arg
                             90
             8.5
Lys Val His Ala Gly Val Arg Ser Ala Met Ile Asp Gly Ser His Tyr
         100
                         105
Pro Phe Glu Gln Asn Val Lys Leu Val Lys Ser Val Val Asp Phe Cys
      115
                      120
                                       125
His Leu Asn Asp Cys Ser Val Glu Ala Glu Leu Gly Arg Leu Gly Gly
                135 140
 130
Val Glu Asp Asp Met Ser Val Asp Ala Glu Ser Ala Phe Leu Thr Asp
             150
                                155
Pro Gln Glu Ala Lys Arg Phe Val Glu Leu Thr Gly Val Asp Ser Leu
             165
                             170 175
Ala Val Ala Ile Gly Thr Ala His Gly Leu Tyr Thr Lys Arg Pro Lys
                          185
                                          190
          180
Ile Asp Phe Gln Arg Leu Ala Glu Ile Arg Glu Val Met Thr Val Pro
                                       205
      195
                       200
Leu Val Leu His Gly Ala Ser Asp Val Pro Asp Glu Asp Val Arg Arg
                                    220
                    215
Thr Ile Glu Leu Gly Val Cys Lys Val Asn Val Ala Thr Glu Leu Lys
                     235
                230
Ile Ala Phe Ser Asp Ala Val Lys Ala Trp Phe Ala Glu Asn Pro Gln
             245
                             250
                                              255
Gly Asn Asp Pro Arg Phe Tyr Met Arg Val Gly Met Asp Ala Met Lys
          260
                       265
Glu Val Val Arg Ser Lys Ile Thr Val Cys Gly Ser Ala Asn Arg Leu
                       280
```

130

```
Leu Leu Pro Ala Glu Ala
  290
<210> 9747
<211> 182
<212> PRT
<213> Enterobacter cloacae
<400> 9747
Arg Arg Val Leu Lys Pro Asp Ser Ala Phe His Tyr Pro Lys Asn Pro
          5
                              1.0
Arg Ser Pro Tyr Met Thr Gln Glu Lys Ser Phe Lys Ser Lys Ala Trp
                    25
Glu Phe Phe Gln Ser Leu Gly Lys Thr Phe Met Phe Pro Val Ser Leu
                             45
                 40
Leu Ala Phe Met Gly Leu Leu Gly Ile Gly Ser Ser Val Thr Ser
                 55
                                     60
Pro Ser Thr Ile Lys Ser Phe Pro Phe Leu Gly Gly Glu Leu Thr Gln
                                                  8.0
                     75
              70
Leu Thr Phe Gly Phe Ile Ala Met Val Gly Gly Phe Ala Phe Thr Tyr
                            90
             8.5
Leu Pro Leu Met Phe Ala Met Ala Ile Pro Met Gly Leu Ala Arg Arg
      100 105 110
Asn Lys Ala Val Gly Ala Phe Ala Gly Phe Val Gly Tyr Met Leu Met
115 120 125
Asn Met Ser Ile Asn Tyr Tyr Leu Thr Ala Thr His Gln Leu Ala Asp
                    135 140
Ala Ala Thr Met Arg Gln Val Gly Gln Ser Ile Val Leu Gly Ile Gln
              150 155
Thr Leu Glu Met Gly Val Leu Gly Gly Ile Val Val Gly Val Ile Thr
          165
                               170
Tyr Phe Leu His Glu Asn
          180
<210> 9748
<211> 179
<212> PRT
<213> Enterobacter cloacae
<400> 9748
Val Tyr Pro Phe Ser His Tyr Phe Gly Val Leu Met Asn Gln Leu Thr
                               10
Tyr Leu Gln Gly Tyr Pro Glu His Leu Leu Ser Gln Val Arg Asp Leu
                            25
Ile Ala Ala Gly Lys Leu Gly Ala Val Leu Glu Lys Arg Tyr Pro Gly
                        40
                                         4.5
    35
Thr His Asp Phe Ala Thr Asp Lys Ala Leu Trp Gln Tyr Thr Gln Asp
                     55
Leu Lys Asn Gln Tyr Leu Lys Ser Ala Pro Pro Ile Asn Lys Val Met
                  70
                                   75
Tyr Asp Asn Lys Ile His Val Leu Lys Asn Ala Leu Gly Leu His Thr
                               90
Ala Ile Ser Arg Val Gln Gly Gly Lys Leu Lys Ala Lys Ala Glu Ile
                           105
                                             110
          100
Arg Val Ala Thr Val Phe Arg Asn Ala Pro Glu Ala Phe Leu Arg Met
                         120
       115
```

Ile Val Val His Glu Leu Ala His Leu Lys Glu Lys Glu His Asp Lys 135 140

Ala Phe Tyr Ser Leu Cys Cys His Met Glu Pro Gln Tyr His Gln Leu

Glu Phe Asp Thr Arg Leu Trp Leu Thr His Leu Ser Leu Lys Ser Asn

150

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<210> 9749
<211> 333
<212> PRT
<213> Enterobacter cloacae
<400> 9749
```

Pro Phe Leu Phe Phe Met Cys Lys Glu Asn Ser Met His Ser Val Gly 10 Thr Pro Met Leu Trp Gly Gly Phe Ala Val Val Leu Ile Met Leu 20 25 3.0 Ala Ile Asp Leu Phe Leu Gln Gly Arg Arg Gly Glu His Gly Met Ser 40 4.5 Val Lys Gln Ala Ala Val Trp Ser Leu Val Trp Val Thr Leu Ser Leu 50 55 60 Leu Phe Cys Ala Ala Phe Trp Trp Tyr Leu Ala Ser Thr Glu Gly Arg 65 70 75 80 Ala Val Ala Asp Pro Gln Ala Leu Ala Phe Leu Thr Gly Tyr Leu Ile 85 90 95 Glu Lys Ala Leu Ala Val Asp Asn Val Phe Val Trp Leu Met Leu Phe 100 105 110 Ser Tyr Phe Ala Val Pro Ala Ala Leu Gln Arg Arg Val Leu Val Tyr 115 120 125 Gly Val Leu Gly Ala Ile Val Leu Arg Thr Ile Met Ile Phe Ala Gly 130 135 Ser Trp Leu Ile Thr Gln Phe Glu Trp Leu Leu Tyr Val Phe Gly Ala 150 155 Phe Leu Leu Phe Thr Gly Val Lys Met Ala Leu Ala Lys Glu Asp Asp 165 170 175 Thr Gly Ile Gly Asp Lys Pro Leu Val Lys Trp Phe Arg Gly His Leu 180 185 190 Arg Met Thr Asp Lys Ile Glu Ser Glu His Phe Phe Val Arg Lys Asn 195 200 205 Gly Leu Leu Phe Ala Thr Pro Leu Leu Leu Val Leu Ile Leu Val Glu 215 210 220 Leu Ser Asp Val Ile Phe Ala Val Asp Ser Ile Pro Ala Ile Phe Ala 230 235 240 225 Val Thr Thr Asp Pro Phe Ile Val Leu Thr Ser Asn Leu Phe Ala Ile 245 250 255 Leu Gly Leu Arg Ala Met Tyr Phe Leu Leu Ala Gly Ala Ala Glu Arg 260 265 270 Phe Ser Met Leu Lys Tyr Gly Leu Ser Val Ile Leu Val Phe Ile Gly 280 285 275 Ile Lys Met Leu Ile Val Asp Phe Tyr His Ile Pro Ile Ala Ile Ser

Ile Lys Met Leu Ile Val Asp Phe Tyr His Ile Pro Ile Ala Ile Ser
290 295 300

Leu Gly Val Val Phe Gly Ile Leu Leu Val Thr Leu Ile Ile Asn Thr
305 310 315 320

Trp Val Asn Arg Gln His Asp Lys Lys Gln Gln Val
325 330

<210> 9750 <211> 270 <212> PRT

<213> Enterobacter cloacae

<400> 9750 Gln Tle Ile Arg Arg Thr Leu Pro Gly Ala His Met Glu Ile Thr Glu 1 1 5

```
Ser Arg Arg Leu Tyr Gln Gln Leu Ala Ala Glu Leu Lys Asp Arg Ile
Glu Gln Gly Val Tyr Leu Val Gly Asp Lys Leu Pro Ala Glu Arg Phe
      35
                     40
Ile Ala Asp Glu Lys Ser Val Ser Arg Thr Val Val Arg Glu Ala Ile
                  55
Ile Met Leu Glu Val Glu Gly Tyr Val Glu Val Arg Lys Gly Ser Gly
               70
Ile His Val Ile Ser Ser Gln Ala Lys His Ser Pro Thr Pro Asp Glu
                            90
          85
Ser Leu Glu Phe Ala Ser Tyr Gly Pro Phe Glu Leu Leu Gln Ala Arg
        100 105
Gln Leu Ile Glu Ser Asn Ile Ala Glu Phe Ala Ala Thr Gln Val Thr
     115 120
                          125
Lys Gln Asp Ile Met Lys Leu Met Glu Ile Gln Asp His Ala Arg Lys
       135 140
Glu Lys Cys Phe Arg Asp Ser Glu Trp Asp Leu Gln Phe His Val Gln
               150 155
Val Ala Leu Ala Thr Gln Asn Thr Ala Leu Ala Ala Ile Val Glu Lys
                170 175
            165
Met Trp Thr Gln Arg Val His Asn Pro Tyr Trp Lys Lys Leu His Asp
                             190
        180 185
His Ile Asp Ser Arg Thr Val Asp Asn Trp Cys Asp Asp His Asp Gln
                     200 205
      195
Ile Leu Lys Ala Leu Ile Arg Lys Asp Pro His Ala Ala Lys Leu Ala
                       220
                   215
 210
Met Trp Gln His Leu Glu Asn Thr Lys Gln Met Leu Phe Asn Glu Thr
               230 235 240
225
Ser Asp Asp Phe Glu Phe Asn Ala Asp Arg Tyr Leu Phe Ala Asp Asn
   245 250
Pro Val Val His Leu Asp Thr Ala Thr Asn Leu Ala Lys
                         265
         260
```

<210> 9751 <211> 221 <212> PRT

<213> Enterobacter cloacae

<400> 9751

Met Glu Leu Leu Thr Gln Leu Leu Asn Ala Leu Trp Ala Gln Asp Phe 10 Glu Thr Leu Ala Asn Pro Ser Met Ile Gly Met Leu Tyr Phe Val Leu 25 30 20 Phe Met Ile Leu Phe Leu Glu Asn Gly Leu Leu Pro Ala Ala Phe Leu 35 40 Pro Gly Asp Ser Leu Leu Val Leu Val Gly Val Leu Cys Ala Lys Gly 5.5 50 Ala Met Ala Phe Pro Gln Thr Val Leu Leu Leu Thr Ile Ala Ala Ser 75 70 Leu Gly Cys Trp Val Ser Tyr Ile Gln Gly Arg Trp Leu Gly Asn Thr 90 85 Arg Ile Val Gln Asn Trp Leu Ser His Leu Pro Ala His Tyr His Gln 110 100 105 Arg Ala His His Leu Phe His Lys His Gly Leu Ser Ala Leu Leu Ile 120 125 Gly Arg Phe Ile Ala Phe Val Arg Thr Leu Leu Pro Thr Ile Ala Gly 140 130 135 Leu Ser Gly Leu Ser Ser Thr Arg Phe Gln Phe Phe Asn Trp Met Ser 155 150 Gly Leu Leu Trp Val Leu Ile Leu Thr Thr Leu Gly Tyr Ala Leu Gly 165 170

```
Lys Thr Pro Val Phe Met Lys Tyr Glu Asp Gln Leu Met Ser Cys Leu
                             185
       180
Met Leu Leu Pro Val Val Leu Leu Val Phe Gly Leu Val Gly Ser Leu
      195
                         200
Val Val Leu Trp Lys Lys Lys Tyr Gly Ala Arg Gly
  210 215
<210> 9752
<211> 110
<212> PRT
<213> Enterobacter cloacae
<400> 9752
Arg Lys Ser Gln Gln Glu Arg Ile Met Ser Lys Asp Thr Thr Ser Glu
                                 10
Asn Leu Arg Ala Glu Leu Lys Ser Leu Ala Asp Thr Leu Glu Glu Val
                        25
                                                 3.0
Leu Asn Ser Ser Ala Asp Lys Ser Lys Glu Glu Val Ser Lys Leu Arg
                         40
                                             45
Ser Lys Ala Glu Gln Ala Leu Lys Glu Ser Arg Tyr Arg Leu Gly Glu
 50
                      55
Thr Gly Asp Ala Leu Ala Lys Gln Thr Arg Glu Ala Ala Ala Arg Ala
                   70
                                     75
Asp Glu Tyr Val Arg Asp Asn Pro Trp Thr Gly Val Gly Ile Gly Ala
              8.5
Ala Val Gly Val Val Leu Gly Val Leu Leu Thr Arg Arg
<210> 9753
<211> 129
<212> PRT
<213> Enterobacter cloacae
<400> 9753
Leu Ile Lys Arg Gln Gly Lys Met Asp Trp Tyr Leu Lys Val Leu Arg
                                  10
Asn Tyr Phe Gly Phe Gly Gly Arg Ala Arg Arg Lys Glu Tyr Trp Met
           20
                              25
                                                 30
Phe Val Leu Val Asn Phe Val Leu Ile Met Val Leu Gly Ile Val Asp
                           40
       35
Lys Ile Leu Gly Trp Glu Arg Glu Gly Gly Glu Gly Ile Leu Thr Thr
                       55
   50
Ile Tyr Gly Val Leu Val Leu Leu Pro Ser Trp Ala Val Leu Phe Arg
                   70
                                      7.5
Arg Leu His Asp Thr Asp Arg Ser Ala Trp Trp Leu Leu Leu Leu
               85
                                  90
Ile Pro Leu Ile Gly Trp Ile Val Ile Leu Ile Phe Asn Cys Gln Ser
           100
                              105
                                          110
Gly Thr Pro Gly Glu Asn Arg Phe Gly Pro Asp Pro Lys Ala Ser Ala
        115
                           120
```

```
<210> 9754
<211> 288
<212> PRT
```

<213> Enterobacter cloacae

<400> 9754

Arg Arg Pro Glu Trp Asn Ala Ser Phe Arg Ala Phe Gln Gln Arg Leu 10

```
Leu Trp Ile Ser Leu Asn Cys Ser Glu Gly Phe Thr Met Glu Ile Ser
                           25
Leu Leu Gln Ala Phe Ala Leu Gly Leu Leu Ala Phe Ile Ala Gly Leu
                                         4.5
      35
                        40
Asp Met Phe Asn Gly Leu Thr His Met His Arg Pro Val Val Leu Gly
Pro Leu Val Gly Leu Ile Leu Gly Asp Leu His Thr Gly Ile Leu Thr
                70
Gly Gly Thr Leu Glu Leu Val Trp Met Gly Leu Ala Pro Leu Ala Gly
                               90
            8.5
Ala Gln Pro Pro Asn Val Ile Ile Gly Thr Ile Val Gly Thr Thr Phe
       100
Ala Ile Thr Thr Gly Val Lys Pro Asp Val Ala Val Gly Val Ala Val
      115
                     120
Pro Phe Ala Val Ala Val Gln Met Gly Ile Thr Phe Leu Phe Ser Val
         135
Met Ser Gly Val Met Ser Arg Cys Asp Arg Met Ala Ala Asn Ala Asp
145 150
                         155
Thr Arg Gly Ile Glu Arg Val Asn Tyr Leu Ala Leu Leu Ala Leu Gly
             165 170 175
Val Phe Tyr Phe Leu Cys Ala Phe Leu Pro Ile Tyr Phe Gly Ala Glu
              185 190
          180
His Ala Lys Thr Ala Ile Asp Val Leu Pro Glu Arg Leu Ile Asp Gly
                       200 205
      195
Leu Gly Val Ala Gly Gly Ile Met Pro Ala Ile Gly Phe Ala Val Leu
                          220
       215
 210
Leu Lys Ile Met Met Lys Asn Val Tyr Ile Pro Tyr Phe Ile Ile Gly 225 \phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}
Phe Val Ala Ala Ala Trp Leu Lys Leu Pro Val Leu Ala Ile Ala Ala
             245 250 255
Ala Ala Leu Ala Met Ala Leu Ile Asp Leu Leu Arg Lys Ser Pro Glu
         260 265 270
Pro Thr Ala Pro Ala Ala Gln Lys Glu Glu Phe Glu Asp Gly Ile
                        280
      275
```

<210> 9755 <211> 157 <212> PRT <213> Enterobacter cloacae

<400> 9755 Ile Leu Ser Leu Pro Val Lys Ser Lys Glu Val Ala Met Leu Gly Ile 10 Ile Leu Thr Gly His Gly Gly Phe Ala Ser Gly Leu Gln Gln Ala Met 25 Lys Gln Ile Leu Gly Glu Gln Pro Gln Phe Ile Ala Ile Asp Phe Pro 40 35 Glu Ser Ser Thr Thr Ala Arg Leu Thr Ala Gln Leu Glu Gln Ala Val 55 Asn Glu Leu Asp Ala Glu His Asp Ile Val Phe Leu Thr Asp Leu Leu 75 70 Gly Gly Thr Pro Phe Arg Val Ala Ser Thr Leu Ala Met Gln Arg Pro 90 85 Gly Ser Glu Val Ile Thr Gly Thr Asn Leu Gln Leu Leu Glu Met 105 Val Leu Glu Arg Asp Gly Leu Ser Ser Glu Ala Phe Arg Leu Gln Ala 125 115 120 Leu Glu Cys Gly His Arg Gly Leu Thr Ser Leu Val Asp Glu Leu Ala 130 135 140 Arg Cys Arg Glu Glu Ala Pro Ala Glu Glu Gly Ile

```
<210> 9756
<211> 614
<212> PRT
<213> Enterobacter cloacae
<400> 9756
Arg Glu Ala Arg Leu Asn Ser His His Gly Pro Phe Ala Met Val Asn
                            10
Asn Met Thr Asp Leu Thr Ala Gln Glu Ala Ala Trp Gln Thr Arg Asp
                       25
      20
His Leu Asp Asp Pro Val Ile Gly Glu Leu Arg Asn Arg Phe Gly Pro
                   4.0
                                    45
Asp Ala Phe Thr Val Gln Ala Thr Arg Thr Gly Val Pro Val Val Trp
               5.5
                             60
Val Lys Arg Glu Gin Leu Leu Giu Val Val Asp Phe Leu Lys Lys Leu
65 70 75
Pro Lys Pro Tyr Val Met Leu Phe Asp Leu His Gly Met Asp Glu Arg
                 90 95
Leu Arg Thr His Arg Gln Gly Leu Pro Ala Ala Asp Phe Ser Val Phe
                105 110
         100
Tyr His Leu Ile Ser Ile Asp Arg Asn Thr Asp Ile Met Leu Lys Val
                   120 125
 115
Ala Leu Ser Glu Asn Asp Met His Leu Pro Thr Ile Thr Lys Leu Phe
130 135 140
Pro Asn Ala Asn Trp Tyr Glu Arg Glu Thr Trp Glu Met Phe Gly Met
               150 155 160
Thr Phe Asp Gly His Pro His Leu Thr Arg Ile Met Met Pro Gln Thr
            165 170 175
Trp Thr Gly His Pro Leu Arg Lys Asp Tyr Pro Ala Arg Ala Thr Glu
                       185 190
         180
Phe Asp Pro Phe Glu Leu Thr Lys Ala Lys Gln Asp Leu Glu Met Glu
      195
                     200 205
Ala Leu Thr Phe Lys Pro Glu Asp Trp Gly Met Lys Arg Gly Thr Glu
                215 220
   210
Asn Glu Asp Phe Met Phe Leu Asn Leu Gly Pro Asn His Pro Ser Ala
    230 235
225
His Gly Ala Phe Arg Ile Ile Leu Gln Leu Asp Gly Glu Glu Ile Val
            245 250
Asp Cys Val Pro Asp Ile Gly Tyr His His Arg Gly Ala Glu Lys Met
       260
                         265 270
Gly Glu Arg Gln Ser Trp His Ser Tyr Ile Pro Tyr Thr Asp Arg Ile
                      280
       275
Glu Tyr Leu Gly Gly Cys Val Asn Glu Met Pro Tyr Val Leu Ala Val
                   295 300
Glu Lys Leu Ala Gly Ile Thr Val Pro Asp Arg Val Asn Val Ile Arg
                               315
                310
Val Met Leu Ser Glu Leu Phe Arg Ile Asn Ser His Leu Leu Tyr Ile
                            330
             325
Ser Thr Phe Ile Gln Asp Val Gly Ala Met Thr Pro Val Phe Phe Ala
                          345
          340
Phe Thr Asp Arg Gln Lys Ile Tyr Asp Leu Val Glu Ala Ile Thr Gly
                      360
                                      365
       355
Phe Arg Met His Pro Ala Trp Phe Arg Ile Gly Gly Val Ala His Asp
                                   380
                   375
Leu Pro Arg Gly Trp Asp Arg Leu Leu Arg Glu Phe Leu Asp Trp Met
                                395
                390
385
Pro Lys Arg Leu Ala Ser Tyr Glu Lys Ala Ala Leu Arg Asn Ser Ile
                    410 415
Leu Lys Gly Arg Ser Gln Gly Val Ala Ala Tyr Gly Ala Lys Glu Ala
                          425
```

Leu Glu Trp Gly Thr Thr Gly Ala Gly Leu Arg Ala Thr Gly Ile Asp 440 435 Phe Asp Val Arg Lys Ala Arg Pro Tyr Ser Gly Tyr Glu Asn Phe Asp 455 Phe Glu Val Pro Val Gly Gly Val Ser Asp Cys Tyr Thr Arg Val 475 465 470 Met Leu Lys Val Glu Glu Leu Arg Gln Ser Leu Arg Ile Leu Glu Gln 485 495 490 Cys Leu Asn Asn Met Pro Glu Gly Pro Phe Lys Ala Asp His Pro Leu 500 505 Thr Thr Pro Pro Pro Lys Glu Arg Thr Leu Gln His Ile Glu Thr Leu 515 520 Ile Thr His Phe Leu Gln Val Ser Trp Gly Pro Val Met Pro Ala Gln 530 535 540 Glu Ser Phe Gln Met Ile Glu Ala Thr Lys Gly Ile Asn Ser Tyr Tyr 550 555 Leu Thr Ser Asp Gly Ser Thr Met Ser Tyr Arg Thr Arg Val Arg Thr 565 570 575 Pro Ser Phe Ala His Leu Gln Gln Ile Pro Ala Ala Ile Arg Gly Ser 580 585 590 Leu Val Ser Asp Leu Ile Val Tyr Leu Gly Ser Ile Asp Phe Val Met 595 600 Ser Asp Val Asp Arg

610 <210> 9757 <211> 332

<212> PRT <213> Enterobacter cloacae

<400> 9757 Pro Ser Gly Gly Lys Ser Met Ser Trp Leu Thr Pro Asp Leu Ile Asp 10 Ile Leu Leu Ser Ile Leu Lys Ala Val Val Ile Leu Leu Val Val Val 20 25 Thr Cys Gly Ala Phe Met Ser Phe Gly Glu Arg Arg Leu Leu Gly Leu 40 35 Phe Gln Asn Arg Tyr Gly Pro Asn Arg Val Gly Trp Gly Gly Ser Leu 55 60 Gln Leu Val Ala Asp Met Ile Lys Met Phe Phe Lys Glu Asp Trp Val 65 70 75 80 Pro Arg Phe Ser Asp Arg Val Ile Phe Thr Leu Ala Pro Met Ile Ala 85 90 Phe Thr Ser Leu Leu Leu Ala Phe Ala Ile Val Pro Val Ser Pro Thr 100 105 110 Trp Val Val Ala Asp Leu Asn Ile Gly Ile Leu Phe Phe Leu Met Met 120 125 115 Ala Gly Leu Ala Val Tyr Ala Val Leu Phe Ala Gly Trp Ser Ser Asn 135 140 130 Asn Lys Tyr Ser Leu Leu Gly Ala Met Arg Ala Ser Ala Gln Thr Leu 150 155 Ser Tyr Glu Val Phe Leu Gly Leu Ser Leu Met Gly Val Val Ala Gln 170 165 Ala Gly Ser Phe Asn Met Thr Asp Ile Val Asn Asn Gln Ala Asp Ile 185 180 Trp Asn Val Ile Pro Gln Phe Phe Gly Phe Ile Thr Phe Ala Ile Ala 200 205 195 Gly Val Ala Val Cys His Arg His Pro Phe Asp Gln Pro Glu Ala Glu 220 215 Gln Glu Leu Ala Asp Gly Tyr His Ile Glu Tyr Ser Gly Met Lys Phe 230

```
Gly Leu Phe Phe Val Gly Glu Tyr Ile Gly Ile Val Thr Ile Ser Ala
                               250
             245
Leu Met Val Thr Leu Phe Phe Gly Gly Trp His Gly Pro Phe Leu Pro
          260
                           265
Pro Phe Ile Trp Phe Ala Leu Lys Thr Ala Phe Phe Met Met Phe
                        280
                                          285
Ile Leu Ile Arg Ala Ala Leu Pro Arg Pro Arg Tyr Asp Gln Vai Met
                    295
                                      300
 290
Ser Phe Gly Trp Lys Val Cys Leu Pro Leu Thr Leu Val Asn Leu Leu
305 310 315
Val Thr Ala Ala Val Ile Leu Trp Gln Gln Pro
             325
<210> 9758
<211> 231
<212> PRT
<213> Enterobacter cloacae
<400> 9758
Phe Pro Val Arg Ala Asn Thr Arg Asn Ile Thr Ser Thr Gly Trp Arg
                               10
Val Trp Gln Ser Thr Ala Lys Ile Arg Ala Lys Gln Arg Thr Lys Pro
                           25
                                              30
Ser Leu Ser Thr Ser Arg Ala Cys Tyr Arg Lys Glu Arg Ala Met Glu
                     40
                                      45
Phe Ala Phe Tyr Ile Cys Gly Leu Ile Ala Ile Leu Ala Thr Leu Arg
                   55
Val Ile Thr His Thr Asn Pro Val His Ala Leu Leu Tyr Leu Ile Ile
                 7.0
                                   75
Ser Leu Leu Ala Ile Ser Gly Val Phe Phe Ala Leu Gly Ala His Phe
             85
                             90
Ala Gly Ala Leu Glu Ile Ile Val Tyr Ala Gly Ala Ile Met Val Leu
          100
                             105 110
Phe Val Phe Val Val Met Met Leu Asr. Leu Gly Gly Ser Glu Ile Glu
     115
                        120
                                125
Gln Glu Arg Gln Trp Leu Lys Pro Gln Val Trp Ile Gly Pro Ala Ile
                   135
                                      140
Leu Ser Ala Ile Met Leu Ala Val Ile Val Tyr Ala Ile Leu Gly Val
                150 155
Asn Asp Gln Gly Ile Asp Gly Thr Pro Ile Ser Ala Lys Ala Val Gly
             165 170 175
Ile Thr Leu Phe Gly Pro Tyr Val Leu Ala Val Glu Leu Ala Ser Met
          180
                           185
Leu Leu Leu Ala Gly Leu Val Val Ala Phe His Val Gly Arg Glu Glu
                        200 205
     195
Arq Val Gly Glu Val Leu Ser Asn Arg Thr Asp Asp Arg Ala Lys Arg
  210
Lys Thr Glu Glu Arg Ala
225
<210> 9759
<211> 437
<212> PRT
<213> Enterobacter cloacae
<400> 9759
Gln Gly Glu Val Arg Val His Ser Ile Phe Leu Ala Leu Gln Ser Leu
                                10
Arg Thr Gin Leu Ala Gin Ala Leu Pro Ala Ile Pro Gly Leu Arg His
                            25
         20
Phe Asp Val Ser Phe Pro Leu Asn Asp Ala Phe Asp Pro Leu Ala Trp
```

```
4.0
Leu Gly Val Gln Arg Cys Tyr Pro Gln Phe Tyr Trp Gln Gln Arg Ser
                55
                                6.0
Gly Asp Glu Glu Leu Ala Ala Leu Gly Ser Leu Ala Gln Phe Asp Ser
            7.0
Leu Ala Ser Ala Ser Arg Phe Leu His Ala His Asp Val Ala Asn Asp
           85
                          90
Thr Arg Ile Cys Gly Leu Asn Ala Phe Asn Pro Ala Gln Gly Lys Leu
      100 105
Phe Leu Pro Arg Leu Leu Trp Arg Arg Ser Gly Gly Val Ala Thr Leu
 115 120 125
Arg Leu Gln Leu Trp Ser Glu Thr Ser Leu Arg Glu Asp Ala Arg Glu
 130 135 140
Ala Leu Asn Phe Val Asp Asn Leu Arg Asp Ala Ala Pro Ile Arg Pro
145 150 155
Leu Ser Val Gln Ile Val Gln Glu Thr His His Pro Glu Lys Pro Asp
        165 170 175
Trp Leu Ala Leu Ile Arg Gln Ala Thr Asp Thr Leu Ala Arg Gly Asp
   180 185 190
Phe Glu Lys Val Val Leu Ala Arg Ala Thr Asp Val Gln Cys Gln Gln
 195 200 205
Pro Val Asn Ala Ile Ala Leu Met Ala Ala Ser Arg Ala Leu Asn Leu
210 215 220
Asn Cys Tyr His Phe Cys Met Val Phe Asp Ala Ser Asn Ala Phe Leu
225 230 235 240
Gly Ser Thr Pro Glu Arg Leu Trp Arg Arg Arg Gly Thr Leu Leu Arg
           245 250 255
Thr Glu Ala Leu Ala Gly Thr Val Ala Ser His Ser Asp Asp Lys Gln
        260 265
                                     270
Ala Gln Arg Leu Gly Asp Trp Leu Met Asn Asp Asp Lys Asn Gln Arg
 275 280 285
Glu Asn Met Leu Val Val Glu Asp Ile Cys Gln Arg Leu Gln His His
 290 295 300
Thr Arg Thr Leu Glu Ile Leu Pro Ala Gln Val Leu Arg Leu Arg Lys
305 310 315
Val Gln His Leu Arg Arg Cys Ile Trp Thr Glu Leu Lys Gln Pro Asp
           325 330 335
Asp Glu Gln Cys Leu His Ile Leu Gln Pro Thr Ala Ala Val Ala Gly
        340 345 350
Leu Pro Arg Gln Ala Ala Arg Glu Phe Ile Ala Lys Val Glu Pro Phe
 355
                    360 365
Asp Arg Glu Trp Tyr Ala Gly Ser Ala Gly Tyr Leu Ser Arg Asp Gln
               375
Ser Glu Phe Cys Val Ala Leu Arg Ser Ala Arg Val His Asn Ala Ala
              390
                              395
Leu Arg Leu Tyr Ala Gly Ala Gly Ile Val Ser Gly Ser Asp Pro Glu
                          410
           405
Gln Glu Trp Gln Glu Ile Glu Asn Lys Ala Ala Gly Leu Arg Ser Leu
                       425
        420
Leu Leu Arg Asp
     435
```

<210> 9760

<211> 274

<212> PRT

<213> Enterobacter cloacae

<400> 9760

Arg Arg Ala Glu Ala Ala Thr Ser Ala Cys Ala Gly Glu Ser Pro Val 1 5 10 15 Ile Leu Ala Gly Val Ser Gln Pro Gly Asn Pro Gly Tyr Pro Trp Leu Val Phe Leu His Gly Phe Ser Gly Asp Cys Arg Glu Trp Gln Ala Val 4.0 Gly Ala Ser Leu His Asp Tyr Pro Arg Leu Tyr Ile Asp Leu Pro Gly His Gly Gly Ser Ala Asp Thr Gly Val Thr Gly Phe Ala Glu Val Ser 70 75 Glu Leu Leu Ser His Thr Leu Val Ser Tyr Asn Ile Leu Arg Tyr Trp 85 90 Leu Val Gly Tyr Ser Leu Gly Gly Arg Ile Ala Met Phe His Ala Cys 100 105 Gln His Pro Ala Gly Leu Asp Gly Val Ile Val Glu Gly Gly His Pro 115 120 125 Gly Leu Gln Asp Ala Asp Ala Arg Gln Ala Arg Leu Ile Ser Asp Arg 135 140 Arg Trp Ala Ser Arg Phe Arg Ser Glu Pro Leu Glu Ala Val Phe Ala 145 150 155 160 Asp Trp Tyr Gln Gln Pro Val Phe Ala Ser Leu Thr Asp Asp Gln Arg 165 170 175 Arg Ala Leu Ile Ala Leu Arg Ser Arg Asn Asn Gly Pro Arg Leu Ala 180 185 190 Glu Met Leu Glu Ala Thr Ser Leu Ala Val Gln Pro Asp Leu Arg Pro 195 200 205 Ala Leu Ile Ala Arg Asp Phe Ser Phe Asp Tyr Leu Tyr Gly Glu Arg 210 215 220 Asp Gly Lys Phe Ala Ala Ile Ala Thr Glu Leu Asn Ala Thr Arg His 230 235 225 Ala Ile Pro His Ala Gly His Asn Ala His Arg Asp Asn Pro Glu Ala 245 250 255 Val Ala Ala Ser Leu Ala Gln Ile Leu Arg Tyr Arg Thr Lys Asp Thr 260 265 T.e.11

<210> 9761 <211> 539

<212> PRT <213> Enterobacter cloacae

<400> 9761 Ala Asn Ala Asp Arg Gln Pro Arg Gln Gly Ala Arg Ala Gly Cys Gly Gly Pro Cys Arg Arg Ala Asp Gly Gly Asp Gln Phe Ile His Arg Ile 20 25 Gln Pro Arg Pro Asp Ala Ala Gly Ala His Arg Cys Met Val Asn Ala 40 Gly His Arg Ser Arg Ser Arg Tyr Ala Lys Pro Asp Ala Gly Pro Ala 50 55 Asp Ser Pro Val Ala Trp Gln His Leu Ala Val Pro Arg Arg Gly 70 75 Ala Gly Ala Ile Ala Met Ser Phe Thr Asp Trp Pro Trp Arg His Trp 90 85 Arg Thr Arg Arg Ala Asp Lys Pro Ala Leu Arg Leu Asp Asp Val Thr 105 110 100 Leu Ser Trp Thr Gln Leu Gly Lys Arg Ile Asp Arg Leu Ala Ala Gly 120 125 115 Phe Gln Ser Gln Gly Val Ala Asp Gly Asp Gly Val Met Leu Leu Ala 135 140 130 His Asn His Pro Gln Thr Leu Leu Ala Trp Leu Ala Leu Leu Gln Cys 150 155 Gly Ala Arg Ile Leu Pro Val Asn Pro Gln Leu Pro Arg Pro Leu Leu

```
170
Asp Val Leu Leu Pro Gln Met Thr Leu Arg Phe Ala Leu Val Leu Asn
        180
              185
                                     190
Gly Glu Tyr Asp Gly Leu Pro Ala Leu Ala Leu Arg Glu Gly Glu Gly
     195 200
                        205
Gln Gly Gly Val Thr Trp Arg Ala Glu Arg Leu Ala Ser Met Thr Leu
      215 220
Thr Ser Gly Ser Thr Gly Leu Pro Lys Ala Ala Val His Thr Cys Ala
225 230 235 240
Ala His Leu Ala Ser Ala Lys Gly Val Leu Ala Leu Met Pro Tyr Gly
        245 250 255
Asp Ser Asp Asp Trp Leu Leu Ser Leu Pro Leu Phe His Val Ser Gly
      260 265 270
Gln Gly Ile Leu Trp Arg Trp Leu Gln Gly Gly Gly Arg Leu Thr Val
     275 280 285
Arg Glu Lys Gln Pro Leu Glu Gln Ala Leu Gln Gly Cys Thr His Ala
 290 295 300
Ser Leu Val Pro Thr Gln Leu Trp Arg Leu Leu Asn Ser His His Pro
   310 315
Val Ala Leu Lys Ala Val Leu Leu Gly Gly Ala Glu Ile Pro Val Ala
          325 330 335
Leu Thr Glu Gln Ala Arg Glu Gln Arg Ile Arg Thr Phe Cys Gly Tyr
 340 345 350
Gly Leu Thr Glu Phe Ala Ser Thr Val Cys Ala Lys Glu Ala Asp Gly
   355 360 365
Ala Pro Asp Val Gly Ser Ala Leu Pro Gly Arg Asp Val Gln Val Val
370 375 380
Asn Gly Glu Val Trp Ile Arg Ala Glu Ser Met Ala Ala Gly Tyr Trp 385 390 395 400
Arg Asp Gly Ala Leu Leu Pro Leu Val Asn Ala Gln Gly Trp Phe Ala
         405 410
Thr Arg Asp Arg Gly Glu Trp His Asp Gly Arg Leu Thr Ile Leu Gly
            425 430
Arg Met Asp Asn Leu Phe Phe Ser Gly Gly Glu Gly Ile Gln Pro Glu
     435 440
Ala Leu Glu Arg Val Ile Ala Thr His Pro Gln Val Ser Gln Ala Phe
 450 455 460
Val Val Pro Leu Asp Asp Ala Glu Tyr Gly Gln Arg Pro Val Ala Val
   470 475
Val Glu Cys Glu Pro Gly Thr Asp Ile Thr Leu Leu Pro Glu Trp Val
          485
                         490 495
Gln Gly Arg Leu Ala Arg Phe Glu Gln Pro Val His Trp Leu Thr Leu
        500 505 510
Pro Ser Glu Leu Lys Asn Gly Gly Ile Lys Ile Ser Arg Gln Ala Leu
     515 520
Lys Gln Trp Val Asn Ala Leu Leu Arg Gly
  530
                 535
<210> 9762
<211> 171
<212> PRT
<213> Enterobacter cloacae
<400> 9762
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His His Gln Gly Lys Ile Leu Gly Arg Thr Lys Arg Gln Arg Pro Leu 70 Gly Gln Arg Arg Gly Glu Glu Asp Asp Ala Ala Asn Gly Asp Gln Gly 8.5 90 Ala Lys Glu Arg Ala Asp Gly Gly Asn Arg Glu Arg His Ala Ala Ala 100 105 Ser Leu Leu Arg His Trp Ile Ala Ile Gln Arg Gly His Asn Gly Gly 120 125 115 Gly Ile Ala Gly His Val Lys Gln Asn Arg Gly Asn Thr Pro Pro Val 130 135 140 Phe Ala Ala Asp Ile Asn Arg Arg Gln Gln Asp Gln Arg Arg Phe Arg 145 150 155 Arg Gln Val Gln Arg Lys Gly Gln Arg Gln 165

<210> 9763 <211> 243 <212> PRT

<213> Enterobacter cloacae

<400> 9763 Asn Asn Asn Leu Ser Phe Pro Phe His Cys Asp Thr Asn Phe Thr Gly 10 Cys Asp Met Arg Leu Leu Leu Ala Glu Asp Asn Arg Glu Leu Ala His 25 Trp Leu Glu Lys Ala Leu Val Gln Asn Gly Phe Ala Val Asp Cys Val 4.0 Asn Asp Gly Arg Ala Ala Asp His Leu Leu Gln Gly Glu Asn Tyr Ala 5.5 Val Ala Ile Leu Asp Ile Gly Met Pro Gly Phe Asp Gly Leu Glu Val 7.0 7.5 Val His Arg Leu Arg Lys Arg Gly Gln Thr Leu Pro Val Leu Phe Leu 85 90 Thr Ala Arg Ser Asn Val Ala Asp Arg Val Lys Gly Leu Asn Ala Gly 100 105 Ala Asp Asp Tyr Leu Pro Lys Pro Phe Glu Leu Glu Glu Leu Asp Ala 115 120 125 Arg Leu Arg Ala Leu Leu Arg Arg Ser Glu Gly Arg Thr Gln Glu Arg 130 135 140 Gln Arg Leu Gly Glu Leu Glu Tyr Asp Asp Glu Gly Phe Phe Leu Leu 150 155 Arg Asp Glu Pro Leu Ser Leu Thr Pro Arg Glu Leu Ser Leu Leu Lys 165 170 175 Val Leu Met His Arg Arg Thr Arg Pro Val Ser Arg Gln Gln Leu Phe 185 180 190 Asp Gln Val Phe Ser Leu Asn Asp Asp Val Ser Pro Glu Ser Ile Asp 195 20C 205 Leu Tyr Ile His Arg Leu Arg Lys Lys Leu Thr Gly Ser Gly Val Arg 215 220 210 Ile Thr Thr Leu Arg Gly Leu Gly Tyr Val Leu Glu Cys Gly Asp Glu 225 230 235 Val Glv

<210> 9764 <211> 122

<212> PRT

<213> Enterobacter cloacae

<400> 9764

```
Arg Arg Lys Gln Pro Val Met Ile Glu Gly Asp Asp Val Leu Leu Gly
Glu Leu Cys Ala Asn Leu Leu Glu Asn Ala Ile Lys Tyr Thr Pro Glu
         20
                            25
Gln Gly Ile Val Thr Val Tyr Leu Arg Thr Ala Asn Asp Ala Val Glu
                        40
Leu Ser Val Glu Asp Ser Gly Pro Gly Ile Ala Glu Asp Gln Ile Ser
                     55
                                       60
Gln Ala Met Leu Pro Phe His Arg Leu Glu Asn Val Gly Asp Ala Ala
                 7.0
                                   7.5
Gly Ser Gly Ile Gly Leu Ala Leu Ala Asn Asp Ile Ala Arg Leu His
            85 90
Arg Ser His Leu Gln Leu Met Pro Ser Glu Asn Leu Gly Gly Leu Ser
     100 105 110
Val Lys Met Arg Phe Leu Met Leu Ile
<210> 9765
<211> 224
<212> PRT
<213> Enterobacter cloacae
<400> 9765
Met Pro Ile Leu Ser Asn Arg Tyr Lys Leu Ile Ala Cys Arg Thr Trp
Ser Pro Leu Ile Thr Gln Ala Gly Arg Leu Lys Ser Arg Gly Phe Trp
         20
                          25
                                            30
Thr Ser Leu Asn Lys Leu Cys Gly Ile Thr Thr Met Lys Lys Val Ala
                        4.0
                                    4.5
Leu Met Gly Leu Ser Gly Leu Met Phe Val Ser Ala Ala Ala Asn Ala
Ile Ser Phe Asn Gly Ser Ala Gly Gln Asp Tyr Thr His Leu Gly Phe
                                   75
Gly Leu Gly Thr Asp Ser Ala Gly Leu Ala Met Thr Gly Gly Trp Thr
            85
                             90
His Asn Asp Asp Asp Gly Asp Ala Ala Ser Leu Gly Leu Gly Phe Asn
              105
          100
                                           110
Val Pro Leu Gly Pro Phe Leu Ala Thr Val Gly Gly Lys Gly Ile Tyr
      115 120 125
Thr Asn Pro Asn Asp Gly Asp Glu Gly Tyr Ala Ala Ala Val Gly Gly
                  135
                                       140
Gly Leu Gln Trp Lys Ile Gly Asp Ser Phe Gly Leu Phe Gly Glu Tyr
145
                150
                                  155
                                                    160
Tyr Tyr Ser Pro Asp Ser Leu Ser Ser Gly Ile Asp Ser Tyr Gln Glu
              165
                                170
Ala Asn Ala Gly Ala Arg Trp Thr Ile Met Arg Pro Ile Thr Ile Glu
         180
                            185
                                              190
Ala Gly Tyr Arg Tyr Leu Asn Leu Ala Gly Lys Asp Gly Asn Arg Asp
               200
       195
                                          205
Asn Ala Leu Ala Asp Gly Pro Tyr Val Gly Val Ser Ala Gly Phe
   210
                     215
<210> 9766
<211> 457
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<212> PRT

<213> Enterobacter cloacae

<400> 9766

Lys Ala Thr Glu Ala Val Met Leu Ser Ile Phe Lys Pro Ala Pro His I 5 10 15 Arg Ala Arg Leu Pro Glu Ala Glu Ile Asp Pro Leu Tyr Arg Arg Leu

```
25
Arg Trp Gln Ile Phe Leu Gly Ile Phe Phe Gly Tyr Ala Ala Tyr Tyr
                    40
Leu Val Arg Lys Asn Phe Ala Leu Ala Met Pro Tyr Leu Val Asp Gln
           55
Gly Phe Ser Arg Gly Asp Leu Gly Phe Ala Leu Ser Gly Ile Ser Ile
      70
Ala Tyr Gly Phe Ser Lys Phe Ile Met Gly Ser Val Ser Asp Arq Ser
        85 90 95
Asn Pro Arg Val Phe Leu Pro Ala Gly Leu Ile Leu Ala Ala Ala Val
     100 105 110
Met Leu Phe Met Gly Phe Val Pro Trp Ala Thr Ser Ser Ile Ala Ile
 115 120 125
Met Phe Val Leu Leu Phe Leu Cys Gly Trp Phe Gln Gly Met Gly Trp
130 135 140
Pro Pro Cys Gly Arg Thr Met Val His Trp Trp Ser Gln Lys Glu Arg
145 150 155 160
Gly Gly Ile Val Ser Val Trp Asn Cys Ala His Asn Val Gly Gly Gly
      165 170 175
Leu Pro Pro Leu Leu Phe Leu Leu Gly Met Ala Trp Phe Asn Asp Trp
180 185 190
His Ala Ala Leu Tyr Met Pro Ala Phe Gly Ala Ile Leu Val Ala Ile
195 200 205
Ile Ala Phe Ala Leu Met Arg Asp Thr Pro Gln Ser Cys Gly Leu Pro
210 215 220
Pro Ile Glu Glu Tyr Lys Asn Asp Tyr Pro Asp Asp Tyr Ser Glu Lys
225 230 235 240
His Glu Glu Glu Leu Thr Ala Lys Gln Ile Pne Met Lys Tyr Val Leu
        245 250 255
Pro Asn Lys Leu Leu Trp Tyr Ile Ala Val Ala Asn Val Phe Val Tyr
260 265 270
Leu Leu Arg Tyr Gly Ile Leu Asp Trp Ser Pro Thr Tyr Leu Lys Glu
275 280 285
Val Lys His Phe Ala Leu Asp Lys Ser Ser Trp Ala Tyr Phe Leu Tyr
290 295 300
Glu Tyr Ala Gly Ile Pro Gly Thr Leu Ile Cys Gly Trp Met Ser Asp 305 310 315
Lys Val Phe Lys Gly Asn Arg Gly Ala Thr Gly Val Phe Phe Met Thr 325 330 335
Leu Val Thr Ile Ala Thr Val Val Tyr Trp Leu Asn Pro Pro Gly Asn
      340 345
                           350
Pro Ser Val Asp Met Ala Cys Met Ile Ile Ile Gly Phe Leu Ile Tyr
     355 360 365
Gly Pro Val Met Leu Ile Gly Leu His Ala Leu Glu Leu Ala Pro Lys
 370 375
                                380
Lys Ala Ala Gly Thr Ala Ala Gly Phe Thr Gly Leu Phe Gly Tyr Leu
385 390
                             395
Gly Gly Ser Val Ala Ala Ser Ala Ile Val Gly Tyr Thr Val Asp Phe
                              415
         405
                          410
Phe Gly Trp Asp Gly Gly Phe Met Val Met Ile Gly Gly Ser Val Leu
        420 425
Ala Val Leu Leu Leu Val Val Val Met Ile Gly Glu Lys Arg His His
     435 440
                                  445
Ala Glu Val Leu Ala Arg Arg Gln
  450
                 455
```

<210> 9767

<211> 148 <212> PRT

<213> Enterobacter cloacae

```
<400> 9767
Ala Met Ser Met Ser Thr Ser Thr Glu Val Ile Ala His His Trp Ala
Phe Ala Ile Phe Leu Ile Val Ala Ile Gly Leu Cys Cys Leu Met Leu
         20
Val Gly Gly Trp Phe Leu Gly Gly Arg Ala Arg Ala Arg His Lys Asn
      35
                       40
Thr Pro Phe Glu Ser Gly Ile Asp Ser Val Gly Thr Ala Arg Leu Arg
                   55
Leu Ser Ala Lys Phe Tyr Leu Val Ala Met Phe Phe Val Ile Phe Asp
              70
                           75
Val Glu Ala Leu Tyr Leu Phe Ala Trp Ser Thr Ser Ile Arg Glu Ser
             8.5
                            90
Gly Trp Val Gly Phe Val Glu Ala Ala Ile Phe Ile Leu Val Leu Leu
        100 105 110
Ala Gly Leu Val Tyr Leu Val Arg Ile Gly Ala Leu Asp Trp Thr Pro
    115 120 125
Val Arg Ser Arg Arg Glu His Ile Asn Pro Glu Asn Ser Ile Ser Asn
 130
            135
Arg Gln Gln
145
<210> 9768
<211> 230
<212> PRT
<213> Enterobacter cloacae
<400> 9768
Gln Arg Gly Asn Lys Met Asp Tyr Thr Leu Thr Arg Ile Asp Pro Asn
                        1.0
Gly Glu Asn Asp Arg Tyr Pro Leu Gln Lys Gln Glu Ile Val Thr Asp
 20
                   25
Pro Leu Glu Gln Glu Val Asn Lys Ser Val Tyr Met Gly Lys Leu Glu
 35 40
His Ala Met His Asp Met Val Asn Trp Gly Arg Lys Asn Ser Ile Trp
50 55
Pro Tyr Asn Phe Gly Leu Ser Cys Cys Tyr Val Glu Met Val Thr Ser
               70
                               7.5
Phe Thr Ala Val His Asp Val Ala Arg Phe Gly Ala Glu Val Leu Arg
            85
                             90
Ala Ser Pro Arg Gln Ala Asp Leu Met Val Val Ala Gly Thr Cys Phe
         100 105
Thr Lys Met Ala Pro Val Ile Gln Arg Leu Tyr Asp Gln Met Leu Glu
   115 120
Pro Lys Trp Val Ile Ser Met Gly Ala Cys Ala Asn Ser Gly Gly Met
                   135
                                   140
Tyr Asp Ile Tyr Ser Val Val Gln Gly Val Asp Lys Phe Ile Pro Val
               150
                                155
Asp Val Tyr Ile Pro Gly Cys Pro Pro Arg Pro Glu Ala Tyr Met Gln
165 170 175
Ala Leu Met Leu Leu Gln Glu Ser Ile Gly Lys Glu Arg Arg Pro Leu
         180
                          185 190
Ser Trp Val Val Gly Asp Gln Gly Val Tyr Arg Ala Asn Met Gln Ser
      195 200
                              205
Glu Arg Glu Arg Lys Arg Gly Glu Arg Ile Ala Val Thr Asn Leu Arg
                   215
 210
Thr Pro Asp Glu Ile
                230
```

<210> 9769 <211> 452

Ala Arg Trp

13

<212> PRT <213> Enterobacter cloacae

<400> 9769 Pro Ala Gly Ala Val Gln Met Lys Thr Val Ile Arg Thr Ala Glu Thr His Pro Leu Thr Trp Arg Leu Arg Asp Asp Lys Gln Pro Val Trp Leu 25 20 Asp Glu Tyr Gln Ser Lys Asn Gly Tyr Ala Gly Ala Arg Lys Ala Leu 40 Gly Gly Met Ala Pro Asp Asp Ile Val Asn Ala Val Lys Glu Ser Gly 55 60 Leu Lys Gly Arg Gly Gly Ala Gly Phe Ser Thr Gly Leu Lys Trp Ser 75 7.0 Leu Met Pro Lys Asp Glu Ser Met Asn Ile Arg Tyr Leu Leu Cys Asn 85 90 95 Ala Asp Glu Met Glu Pro Gly Thr Tyr Lys Asp Arg Leu Leu Met Glu 100 105 110 Gln Leu Pro His Leu Leu Val Glu Gly Met Leu Ile Ser Ala Phe Ala 115 120 125 Leu Lys Ala Tyr Arg Gly Tyr Ile Phe Leu Arg Gly Glu Tyr Ile Glu 130 135 140 Ala Ala Glu Asn Leu Arg Arg Ala Ile Ala Glu Ala Thr Glu Ala Gly 145 150 155 Leu Leu Gly Lys Asn Ile Leu Gly Thr Gly Phe Asp Phe Glu Leu Phe 165 170 175 Val His Thr Gly Ala Gly Arg Tyr Ile Cys Gly Glu Glu Thr Ala Leu 180 185 190 Ile Asn Ser Leu Glu Gly Arg Arg Ala Asn Pro Arg Ser Lys Pro Pro 195 200 205 Phe Pro Ala Ser Ser Gly Val Trp Gly Lys Pro Thr Cys Val Asn Asn 210 215 220 Val Glu Thr Leu Cys Asn Val Pro Ala Ile Leu Ala Asn Gly Val Glu 230 235 Trp Tyr Gln Gly Ile Ser Ser Lys Asp Ala Gly Thr Lys Leu Met 245 250 255 Gly Phe Ser Gly Arg Val Lys Asn Pro Gly Val Trp Glu Leu Pro Phe 260 265 270 Gly Thr Thr Ala Arg Glu Ile Leu Glu Asp Tyr Ala Gly Gly Met Arg 275 280 285 Asp Gly Leu Lys Phe Lys Ala Trp Gln Pro Gly Gly Ala Gly Thr Asp 295 300 Phe Leu Thr Glu Ala His Leu Asp Leu Pro Met Glu Phe Glu Ser Ile 310 315 Gly Lys Ala Gly Ser Arg Leu Gly Thr Ala Leu Ala Met Ala Val Asp 325 330 His Glu Ile Gly Met Val Ser Leu Val Arg Asn Leu Glu Glu Phe Phe 340 345 350 Ala Arg Glu Ser Cys Gly Trp Cys Thr Pro Cys Arg Asp Gly Leu Pro 355 360 365 Trp Ser Val Lys Ile Leu Arg Ala Ile Glu Arg Gly Glu Gly Gln Pro 375 380 Gly Asp Ile Glu Thr Leu Glu Gln Leu Cys Arg Phe Leu Gly Pro Gly 390 395 Lys Thr Phe Cys Ala His Ala Pro Gly Ala Val Glu Pro Leu Gln Ser 405 410 Ala Ile Lys Tyr Phe Arg Asp Glu Phe Glu Ala Gly Ile Lys Gln Pro 420 425 Phe Ser Asn Thr His Ser Ile Asn Gly Ile Gln Pro Asn Leu Leu Lys 435 440

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<210> 9770
<211> 920
<212> PRT
<213> Enterobacter cloacae
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<400> 9770 Arg Ser Val Ser Ala Glu Pro Thr Gly Ser Met Leu Met Ala Thr Ile 10 His Val Asp Gly Lys Glu Tyr Glu Val Asn Gly Ala Asp Asn Leu Leu 20 25 Glu Ala Cys Leu Ser Leu Gly Leu Asp Ile Pro Tyr Phe Cys Trp His 35 4.0 Pro Ala Leu Gly Ser Val Gly Ala Cys Arg Gln Cys Ala Val Lys Gln 5.5 60 Tyr Gln Asn Ala Glu Asp Thr Arg Gly Arg Leu Val Met Ser Cys Met 70 7.5 Thr Pro Ala Ala Glu Gly Thr Phe Ile Ser Ile Asp Asp Glu Glu Ala 85 90 Lys Gln Phe Arg Glu Ser Val Val Glu Trp Leu Met Thr Asn His Pro 100 105 110 His Asp Cys Pro Val Cys Glu Glu Gly Gly Asn Cys His Leu Gln Asp 120 125 Met Thr Val Met Thr Gly His Ser Phe Arg Arg Tyr Arg Phe Thr Lys 135 140 Arg Thr His Arg Asn Gln Asp Leu Gly Pro Phe Ile Ser His Glu Met 150 155 Asn Arg Cys Ile Ala Cys Tyr Arg Cys Val Arg Tyr Tyr Lys Asp Tyr 165 170 175 Ala Asp Gly Gln Asp Leu Gly Val Tyr Gly Ala His Asp Asn Val Tyr 180 185 Phe Gly Arg Pro Glu Asp Gly Thr Leu Glu Ser Glu Phe Ser Gly Asn 195 200 205 Leu Val Glu Ile Cys Pro Thr Gly Val Phe Thr Asp Lys Thr His Ser 215 220 Glu Arg Tyr Asn Arg Lys Trp Asp Met Gln Phe Ala Pro Ser Ile Cys 230 235 240 Gln Gln Cys Ser Leu Gly Cys Asn Thr Ser Pro Gly Glu Arg Tyr Gly 245 250 Glu Leu Arg Arg Ile Glu Asn Arg Tyr Asn Gly Thr Val Asn His Tyr 260 265 Phe Leu Cys Asp Arg Gly Arg Phe Gly Tyr Gly Tyr Val Asn Leu Lys 275 280 285 Asp Arg Pro Arg Gln Pro Val Gln Arg Arg Gly Asp Asp Val Ile Thr 295 300 Leu Asn Ala Glu Gln Ala Met Gln Gly Ala Ala Asp Ile Leu Arg Gln 310 315 Ser Lys Lys Val Ile Gly Ile Gly Ser Pro Arg Ala Ser Ile Glu Ser 325 330 335 Asn Phe Ala Leu Arg Glu Leu Val Gly Ala Glu Asn Phe Tyr Thr Gly 340 345 350 Ile Ala Gln Gly Glu Gln Glu Arg Leu Gln Leu Val Leu Lys Val Leu 360 365 Arg Glu Gly Gly Val His Thr Pro Ala Leu Arg Glu Ile Glu Ser Tyr 370 375 380 Asp Ala Val Leu Val Leu Gly Glu Asp Leu Thr Gln Thr Gly Ala Arg 390 395 Ala Ala Leu Ala Val Arg Gln Ala Val Lys Gly Lys Ala Arg Glu Met 410 Ala Ala Ala Gln Lys Val Ala Asp Trp Gln Ile Ala Ala Ile Leu Asn

420 425 Ile Gly Gln Arg Ala Lys His Pro Leu Phe Val Thr Asn Val Asp Asn 440 445 Thr Arg Leu Asp Asp Ile Ala Ala Trp Thr Tyr Cys Ala Pro Val Glu 455 460 Asp Gln Ala Arg Leu Gly Phe Ala Ile Ala His Ala Leu Asp Asn Asn 470 475 Ser Pro Ala Val Glu Leu Asp Arg Asp Leu Gln Asn Lys Val Asp Val 485 490 495 Ile Val Gln Ala Leu Ala Gly Ala Lys Lys Pro Leu Ile Ile Ser Gly 500 505 510 Thr Asn Ala Gly Ser Ala Glu Ile Ile Gln Ala Ala Ala Asn Val Ala 515 520 525 Lys Ala Leu Lys Gly Arg Gly Ala Asp Val Gly Val Thr Met Ile Ala 530 535 540 Arg Ala Val Asn Ser Ile Gly Leu Gly Met Ile Gly Gly Gly Ser Leu 545 550 555 560 Glu Asp Ala Leu Ser Glu Leu Glu Ser Gly Ala Ala Asp Ala Val Val 565 570 575 Val Leu Glu Asn Asp Leu His Arg His Ala Ser Ala Ala Arg Val Asp 580 585 590 Ala Ala Leu Ser Arg Ala Pro Leu Val Met Val Ile Asp His Gln Arg 595 600 Thr Ala Ile Met Asp Lys Ala His Leu Val Leu Ser Ala Ala Ser Phe 610 615 620 Ala Glu Ser Asp Gly Thr Val Ile Asn Asn Glu Gly Arg Ala Gln Arg 625 630 635 640 Phe Phe Gln Val Tyr Asp Pro Ala Tyr Tyr Asp Ser Asn Thr Val Met 645 650 655 Leu Glu Ser Trp Arg Trp Leu His Ser Leu His Ser Thr Val Gln Ser 660 665 Arg Glu Val Asp Trp Thr Gln Leu Asp His Val Ile Asp Ala Val Val 675 680 685 Glu Lys Leu Pro Gln Leu Ala Gly Ile Lys Asp Ala Ala Pro Asp Ala 690 695 Ser Phe Arg Ile Arg Gly Gln Lys Leu Ala Arg Glu Pro His Arg Tyr 705 710 715 Ser Gly Arg Thr Ala Met Arg Ala Asn Ile Ser Val His Glu Pro Arg 725 730 Gln Pro Gln Asp Lys Asp Thr Met Phe Ala Pne Ser Met Glu Gly Asn 745 Asn Gln Pro Ser Ala Pro Arg Ser Gln Ile Pro Phe Ala Trp Ala Pro 760 765 Gly Trp Asn Ser Pro Gln Ala Trp Asn Lys Phe Gln Ala Glu Val Gly 775 780 Gly His Leu Arg His Gly Asp Pro Gly Val Arg Leu Ile Glu Ala Ser 785 790 795 Glu Thr Gly Leu Asp Phe Phe Thr Tar Val Pro Ala Ser Phe Gln Ala 805 810 Gln Glu Gly His Trp Arg Ile Ala Pro Tyr Tyr His Leu Phe Gly Ser 825 Asp Glu Met Ser Gln Arg Ser Pro Val Phe Pro Gln Arg Met Pro Gln 840 845 Pro Tyr Ile Lys Leu Asn Pro Ala Asp Ala Ala Lys Leu Gly Val Asn 850 855 860 Ala Gly Ala Asn Ile Ala Phe Ser Tyr Asp Gly Gln Thr Ile Ser Leu 870 875 Pro Leu Ile Ile Ser Glu Arg Leu Ser Ala Gly Gln Val Gly Leu Pro 890 885 895 Met Gly Met Pro Gly Ile Ala Pro Val Leu Ala Gly Ala His Leu Asp 905

Asn Leu Gln Glu Ala Lys Ala 915 92

<210> 9771

<211> 617 <212> PRT

<213> Enterobacter cloacae

Val Ala Trp Met Asn Met Leu Ala Leu Thr Ile Ile Phe Pro Leu Ile 1.0 Gly Phe Val Leu Leu Ala Phe Ser Arg Gly Arg Trp Ser Glu Asn Leu 20 25 3.0 Ser Ala Thr Val Gly Ile Gly Ser Ile Gly Leu Ala Ala Leu Val Thr 35 40 4.5 Ala Tyr Ala Gly Ile Asp Phe Phe Asn Asn Gly Arg Gln Ala Tyr Ser 50 55 60 Val Pro Leu Trp Asn Trp Met Ser Val Gly Asn Phe Asn Ile Gly Phe 70 75 Asn Leu Val Leu Asp Gly Leu Ser Leu Thr Met Leu Ser Val Val Thr 8.5 90 Gly Val Gly Phe Leu Ile His Met Phe Ala Ser Trp Tyr Met Arg Gly 100 105 Glu Glu Gly Tyr Ser Arg Phe Phe Ala Tyr Thr Asn Leu Phe Ile Ala 115 120 125 Ser Met Val Val Leu Val Leu Ala Asp Asn Leu Leu Leu Met Tyr Leu 130 135 140 Gly Trp Glu Gly Val Gly Leu Cys Ser Tyr Leu Leu Ile Gly Phe Tyr 145 150 155 Tyr Thr Asp Pro Lys Asn Gly Ala Ala Ala Met Lys Ala Phe Val Val 165 170 175 Thr Arg Val Gly Asp Val Phe Leu Ala Phe Ala Leu Phe Ile Leu Tyr 180 185 190 Asn Glu Leu Gly Thr Leu Asn Phe Arg Glu Met Val Glu Leu Ala Pro 195 200 205 Ala His Phe Glu Ala Gly Asn Asn Met Leu Trp Trp Ala Thr Leu Met 210 215 220 Leu Leu Gly Gly Ala Val Gly Lys Ser Ala Gln Leu Pro Leu Gln Thr 225 230 235 Trp Leu Ala Asp Ala Met Ala Gly Pro Thr Pro Val Ser Ala Leu Ile 245 250 His Ala Ala Thr Met Val Thr Ala Gly Val Tyr Leu Ile Ala Arg Thr 260 265 270 His Gly Leu Phe Leu Met Thr Pro Glu Ile Leu His Leu Val Gly Ile 275 280 285 Val Gly Ala Val Thr Leu Val Leu Ala Gly Phe Ala Ala Leu Val Gln 290 295 300 Thr Asp Ile Lys Arg Val Leu Ala Tyr Ser Thr Met Ser Gln Ile Gly 315 305 310 320 Tyr Met Phe Leu Ala Leu Gly Val Gln Ala Trp Asp Ala Ala Ile Phe 325 330 335 His Leu Met Thr His Ala Phe Phe Lys Ala Leu Leu Phe Leu Ser Ser 350 345 Gly Ser Val Ile Leu Ala Cys His His Glu Gln Asn Ile Phe Lys Met 355 360 365 Gly Gly Leu Arg Lys Ser Ile Pro Leu Val Tyr Val Cys Phe Leu Val 370 375 380 Gly Gly Ala Ala Leu Ala Ala Leu Pro Leu Ile Thr Ala Gly Phe Phe 385 390 395

Ser Lys Asp Glu Ile Leu Ala Gly Ala Met Ala Asn Gly His Ile Asn

410

<210> 9772 <211> 512 <212> PRT

<213> Enterobacter cloacae

195

210

```
Leu Met Val Ala Gly Leu Val Gly Ala Phe Met Thr Ser Leu Tyr Thr
             425
     420
                           430
Phe Arg Met Ile Phe Ile Val Phe His Gly Lys Glu Gln Ile His Ala
     435
                   440
                                 445
His Ala Gly Lys Gly Ile Thr His His Leu Pro Leu Ile Val Leu Leu
      455 460
Val Leu Ser Thr Phe Val Gly Ala Met Ile Val Pro Pro Leu Gln Gly
           470
                           475 480
Val Leu Pro Ala Thr Thr Glu Leu Glu His Gly Arg Val Leu Thr Leu
        485 490
                            4.95
Glu Ile Thr Ser Gly Val Val Ala Ile Ala Gly Ile Leu Ile Ala Ala
                    505 510
Trp Leu Trp Leu Gly Lys Arg Thr Leu Val Thr Ala Val Ala Asn Ser
  515 520 525
Ala Pro Gly Arg Leu Leu Gly Thr Trp Trp Tyr Asn Ala Trp Gly Phe
530 535 540
Asp Trp Leu Tyr Asp Met Ile Phe Val Lys Pro Phe Leu Gly Ile Ala
545 550 555
Trp Leu Leu Lys Arg Asp Pro Leu Asn Ser Leu Met Asn Ile Pro Ala
  565 570 575
Ile Leu Ser Arg Phe Ala Gly Lys Gly Leu Leu Phe Ser Glu Asn Gly
580 585 590
Tyr Leu Arg Trp Tyr Val Ala Ser Met Ser Ile Gly Ala Val Val
595 600 605
Leu Ala Leu Leu Met Val Leu Arg
610
```

<400> 9772 Ile Ala Met Leu Leu Pro Trp Leu Ile Leu Ile Pro Phe Ile Gly Gly 10 Phe Leu Cys Trp Gln Thr Glu Arg Phe Gly Val Lys Met Pro Arg Trp 20 25 Ile Ala Leu Ile Thr Met Gly Leu Thr Leu Ala Leu Gly Leu Gln Leu 35 40 45 Trp Leu Gln Gly Gly Tyr Ser Leu Thr Gln Ser Ala Gly Leu Pro Gln 55 Trp Gln Ser Glu Phe Ile Leu Pro Trp Ile Pro Arg Phe Gly Ile Thr 70 75 Ile His Leu Ala Ile Asp Gly Leu Ser Leu Leu Met Val Val Leu Thr 85 90 Gly Leu Leu Gly Val Leu Ala Val Leu Cys Ser Trp Arg Glu Ile Glu 100 105 110 Lys Tyr Gln Gly Phe Phe His Leu Asn Leu Met Trp Ile Leu Gly Gly 115 120 125 Val Ile Gly Val Phe Leu Ala Ile Asp Met Phe Leu Phe Phe Phe Phe 130 135 140 Trp Glu Met Met Leu Val Pro Met Tyr Phe Leu Ile Ala Leu Trp Gly 145 150 155 160 His Lys Ala Ser Asp Gly Lys Thr Arg Ile Thr Ala Ala Thr Lys Phe 165 170 175 Phe Ile Tyr Thr Gln Ala Ser Gly Leu Val Met Leu Ile Ala Ile Leu 190 180 185 Ala Leu Val Phe Val His Tyr Asn Ala Thr Gly Val Trp Thr Phe Asn

200

215

Tyr Glu Asp Leu Leu Lys Thr Pro Met Ser His Gly Val Glu Tyr Leu

```
Leu Met Leu Gly Phe Phe Ile Ala Phe Ala Val Lys Met Pro Val Val
             230
                            235
Pro Leu His Gly Trp Leu Pro Asp Ala His Ser Gln Ala Pro Thr Ala
           245
                         250
Gly Ser Val Asp Leu Ala Gly Ile Leu Leu Lys Thr Ala Ala Tyr Gly
                    265
        260
Leu Leu Arg Phe Ser Leu Pro Leu Phe Pro Asn Ala Ser Ala Glu Phe
     275
Ala Pro Ile Ala Met Trp Leu Gly Val Ile Gly Ile Phe Tyr Gly Ala
      295
                               300
Trp Met Ala Phe Thr Gln Tyr Asp Ile Lys Arg Leu Ile Ala Tyr Thr
305 310 315 320
Ser Val Ser His Met Gly Phe Val Leu Ile Ala Ile Tyr Thr Gly Ser
        325 330 335
Gln Leu Ala Tyr Gln Gly Ala Val Ile Gln Met Ile Ala His Gly Leu
                      345
        340
                                    350
Ser Ala Ala Gly Leu Phe Ile Leu Cys Gly Gln Leu Tyr Glu Arg Leu
  355 360
                        365
His Thr Arg Asp Met Arg Met Met Gly Gly Leu Trp Gly Lys Met Lys
 370 375 380
Trp Leu Pro Ala Leu Ser Met Phe Phe Ala Val Ala Thr Leu Gly Met
385 390 395
Pro Gly Thr Gly Asn Phe Val Gly Glu Phe Met Ile Leu Phe Gly Ser
          405 410 415
Phe Asn Val Val Pro Thr Ile Thr Val Ile Ser Thr Phe Glv Leu Val
 420 425 430
Phe Ala Ser Val Tyr Ser Leu Ala Met Leu His Arg Ala Tyr Phe Gly
435 440 445
Lys Ala Lys Ser Glu Ile Ala Ala Gln Glu Leu Pro Gly Met Ser Leu
450 455 460
Arg Glu Leu Phe Ile Ile Leu Leu Leu Val Val Leu Leu Val Leu Leu
465 470 475
Gly Phe Tyr Pro Gln Pro Ile Leu Asp Thr Ser His Ser Ala Met Gly
       485 490 495
Asn Ile Gln Gln Trp Phe Val Asn Ser Ala Ser Thr Thr Arg Pro
               505
```

<210> 9773 <211> 488 <212> PRT

130

<213> Enterobacter cloacae

<400> 9773 Phe Ala Met Thr Ile Thr Pro Gln Gln Leu Ile Ala Leu Leu Pro Leu 10 Leu Ile Val Gly Leu Thr Val Val Val Val Met Leu Ser Ile Ala Trp 2.0 25 30 Arg Arg Asn His Phe Leu Asn Ala Thr Leu Ser Val Leu Gly Leu Asn 40 45 Ala Ala Leu Val Ser Leu Trp Phe Val Gly Gln Ala Gly Ala Met Asp 55 Val Thr Pro Leu Met Arg Val Asp Gly Tyr Ala Met Leu Tyr Thr Gly 70 75 80 Leu Val Leu Leu Ala Ser Leu Ala Thr Cys Thr Phe Ala Tyr Pro Trp 85 90 Leu Glu Gly Tyr Asn Asp Asn Lys Glu Glu Phe Tyr Leu Leu Val Leu 100 105 Ile Ala Ala Leu Gly Gly Ile Leu Leu Ala Asn Ala Asn His Met Ala 115 120 Ala Leu Phe Leu Gly Ile Glu Leu Ile Ser Leu Pro Leu Phe Gly Leu

```
Ile Gly Tyr Ala Phe Arg Gln Lys Arg Ser Leu Glu Ala Ala Ile Lys
      150
                  155
Tyr Thr Ile Leu Ser Ala Ala Ala Ser Ser Phe Leu Leu Phe Gly Ile
           165
                        170
                                       175
Ala Leu Leu Tyr Ala Gln Thr Gly Asn Leu Ser Phe Leu Ala Ile Gly
        180 185
                                    190
Lys Ser Leu Gly Asp Gly Met Met His Glu Pro Leu Leu Leu Ala Gly
                   200 205
     195
Leu Gly Met Met Ile Val Gly Leu Gly Phe Lys Leu Ser Leu Val Pro
  210
             215 220
Phe His Leu Trp Thr Pro Asp Val Tyr Gln Gly Ala Pro Ala Pro Val
        230 235 240
Ser Thr Phe Leu Ala Thr Ala Ser Lys Ile Ala Ile Phe Gly Val Val
         245 250 255
Met Arg Leu Phe Leu Tyr Ala Pro Val Gly Asp Ser Glu Ala Val Arg
       260 265 270
Val Val Leu Gly Ile Ile Ala Phe Val Ser Ile Ile Phe Gly Asn Leu
    275 280 285
Met Ala Leu Ser Gln Thr Asn Ile Lys Arg Leu Leu Gly Tyr Ser Ser
290 295 300
Ile Ser His Leu Gly Tyr Leu Leu Val Ala Leu Ile Ala Leu Gln Ser
305 310 315
Gly Glu Met Ser Met Glu Thr Val Gly Val Tyr Leu Ala Gly Tyr Leu
    325 330 335
Phe Ser Ser Leu Gly Ala Phe Gly Val Val Ser Leu Met Ser Ser Pro
        340 345 350
Tyr Arg Gly Pro Asp Ala Asp Ser Leu Phe Ser Tyr Arg Gly Leu Phe
355 360
                                 365
Trp His Arg Pro Ile Leu Ser Ala Val Met Thr Val Met Met Leu Ser
370 375
                              380
Leu Ala Gly Ile Pro Met Thr Leu Gly Phe Ile Gly Lys Phe Tyr Val
385 390 395
Leu Ala Val Gly Val Gin Ala Gly Leu Trp Trp Leu Thr Ala Gly Val
    405 410 415
Val Ile Gly Ser Ala Ile Gly Leu Tyr Tyr Tyr Leu Arg Val Ala Val
       420 425
Ser Leu Tyr Leu Ser Ala Pro Gln Gln Leu Asn Arg Asp Ala Pro Ser
435 440 445
Asn Trp Gln Tyr Ser Ala Gly Gly Ile Val Val Leu Ile Ser Ala Leu
450 455 460
Leu Val Leu Ile Phe Gly Ile Tyr Pro Gln Pro Leu Ile Asp Ile Val
465 470
                          475
Gln Arg Ala Met Pro Leu Met
```

<210> 9774 <211> 113 <212> PRT

<213> Enterobacter cloacae

485

<400>9774 Leu Pro Asp Trp Cys Thr Asn Met Glu Lys Asn Met Ser Phe Gln Ser I 1 5 10 15 15 Trp Asp Thr Arg Val Asp Asp Asp Leu Thr Leu Leu Ser Glu Thr Leu 20 25 30 Glu Glu Val Leu Arg Ser Ser Gly Asp Pro Ala Asp Gln Lys Tyr Ile 35 40 Glu Leu Lys Ala Arg Ala Glu Gln Ala Leu His Asp Val Lys Asn Arg 50 55 60 Val Ser Asn Ala Ser Asp Asn Tyr Tyr Tyr Arg Ala Lys Gln Ala Val

7.5

Tyr Arg Ala Asp Asp Tyr Val His Glu Lys Pro Trp Gln Gly Ile Gly 85 90 95

Val Gly Ala Ala Val Gly Leu Val Leu Gly Leu Leu Leu Ala Arg Arg 100 105 110

<210> 9775 <211> 589 <212> PRT <213> Enterobacter cloacae <400> 9775 Gly Ile Asn Thr Asp Ser Cys Asn Pro Asp Ser Tyr Gln Asn Ser Asp 1.0 Phe Phe Tyr Tyr Leu Tyr Cys Val Ala Phe Leu Ile Leu Asp Asn Leu 25 20 30 Met Ser Val Ser Ser Phe Asn Arg Arg Trp Ala Ala Val Ile Leu Glu 35 40 4.5 Ala Leu Thr Arg His Gly Val Arg His Val Cys Ile Ala Pro Gly Ser 50 55 60 Arg Ser Thr Pro Leu Thr Leu Ala Ala Ala Glu Asn Arg Ala Phe Ile 70 75 His His Thr His Phe Asp Glu Arg Gly Leu Gly His Leu Ala Leu Gly 85 90 Leu Ala Lys Val Ser Lys Ala Pro Val Ala Val Ile Val Thr Ser Gly 100 105 110 Thr Ala Val Ala Asn Leu Tyr Pro Ala Leu Ile Glu Ala Gly Leu Thr 115 120 125 Gly Glu Lys Leu Ile Leu Leu Thr Ala Asp Arg Pro Pro Glu Leu Ile 130 135 140 Asp Cys Gly Ala Asn Gln Ala Ile Arg Gln Pro Gly Ile Phe Ala Ser 145 150 155 His Pro Ser Gln Thr Val Ser Leu Pro Arg Pro Thr Gln Asp Ile Pro 165 170 175 Ala Ser Trp Leu Val Ser Thr Leu Asp His Ala Met Asn Ala Leu Arg 180 185 190 Ser Gly Gly Leu His Ile Asn Cys Pro Phe Ala Glu Pro Leu Tyr Gly 195 200 205 Glu Met Asn Asp Thr Gly Leu Val Trp Gln Gln Gln Leu Gly Asp Trp 210 215 220 Trp Glu Ser Glu Lys Pro Trp Leu Arg Glu Gln Thr His Leu Glu Ser 225 230 235 240 Ala Lys Gln Arg Asp Trp Phe Phe Trp Arg Gln Lys Arg Gly Val Val 245 250 255 Ile Ala Gly Arg Met Ser Ala Ala Glu Gly Lys Leu Ala Ala Glu Trp 260 265 270 Ala Gln Thr Leu Gly Trp Pro Leu Ile Gly Asp Val Leu Ser Gln Thr 275 280 285 Gly Gln Pro Leu Pro Cys Ala Asp Leu Trp Leu Gly Asn Ala Lys Ala 295 300 Val Thr Glu Leu Ala Gln Ala Gln Ile Val Val Gln Leu Gly Ser Ser 305 310 315 Leu Thr Gly Lys Arg Leu Leu Gln Trp Gln Ala Thr Cys Thr Pro Glu 325 330 335 Glu Tyr Trp Leu Val Asp Pro Leu Glu Gly Arg Leu Asp Pro Ala His 340 345 350 His Arg Gly Arg Arg Leu Val Ser Asp Ile Asn Ser Trp Leu Glu Leu 360 365 His Pro Ala Glu Lys Arg Lys Pro Trp Ala Val Glu Ile Pro Ala Leu 375 380

```
Ser Arg Gln Ala Trp Glu Leu Thr Lys Ala Gln Cys Glu Ala Phe Ser
               390
                               395
Glu Ala Gly Leu Ala His Arg Ile Arg Lys Tyr Leu Pro Glu Gln Gly
            405
                           410
                                          415
Gln Leu Phe Val Gly Asn Ser Leu Val Val Arg Leu Ile Asp Ala Phe
       420
             425
                                        430
Ser Gln Leu Pro Ala Gly Tyr Pro Val Tyr Ser Asn Arg Gly Ala Ser
     435
          440
                          445
Gly Ile Asp Gly Leu Ile Ser Thr Ala Ala Gly Val Gln Arg Ala Ser
 450 455 460
Ala Lys Ser Thr Leu Ala Ile Val Gly Asp Leu Ser Ala Leu Tyr Asp
465 470 475 480
Leu Asn Ala Leu Ala Leu Leu Arg Gln Ala Ser Ala Pro Phe Val Leu
      485 490 495
Ile Ile Val Asn Asn Asn Gly Gly Gln Ile Phe Ser Leu Leu Pro Thr
        500 505 510
Pro Gln Ser Glu Arg Glu Arg Phe Tyr Leu Met Pro Gln Asn Val Gln
 515 520 525
Phe Glu His Ala Ala Ala Met Phe Ser Leu Lys Tyr His Arg Pro Glu
 530 535 540
Asn Trp Asp Ala Leu Glu Thr Ala Leu Asn Thr Ala Trp Arg Gln Pro
545 550 555
Gly Ala Thr Leu Ile Glu Leu Val Val Asn Asp Ala Asp Gly Ala Gln
565 570 575
Lys Leu Gln His Leu Leu Ala Gln Val Ser His Leu
        580
<210> 9776
<211> 356
<212> PRT
<213> Enterobacter cloacae
<400> 9776
Arg His His Ala Val Leu Tyr Asp Arg Gly Ser Gly Arg Ala Gln
Arg Val Gln Arg Lys Thr Pro Ala Arg Leu Gln Gln Ile Gln Thr Glu
                        25
                                        3.0
Pro Val Met Arg Arg Val Gln Val Tyr Arg Trp Gln Ile Pro Met Asp
                4.0
                                     45
Ala Gly Val Val Leu Arg Glu Arg Arg Leu Lys Thr Arg Asp Gly Phe
      55
Phe Val His Leu Arg Glu Gly Glu Arg Glu Gly Trp Gly Glu Ile Ala
                              75
Pro Leu Pro Gly Phe Ser Leu Glu Thr Leu Asp Glu Ala Gln Ala Ala
           85
                            90
Leu Met Ala Trp Thr His Ala Trp Arg Glu Gly Glu Asp Pro Ala Leu
      100
                        105
Pro Asp Val Pro Ser Val Ala Phe Gly Ile Ser Cys Ala Leu Ala Glu
    115
                     120
Leu Asp Gly Ser Leu Pro Glu Ala Ala Asn Tyr Arg Ala Ala Pro Leu
 130
       135
                                 140
Cys Thr Gly Asp Pro Asp Glu Leu Phe Ala Leu Leu Ser Ala Met Pro
145 150
                               155
Gly Glu Lys Val Ala Lys Ile Lys Val Gly Leu Tyr Glu Ala Val Arq
            165
               170 175
Asp Gly Met Val Val Asn Leu Leu Leu Glu Ala Ile Pro Asp Leu His
         180
             185 190
Leu Arg Leu Asp Ala Asn Arg Ala Trp Thr Pro Leu Arg Ala Gln Gln
     195
                     200
                                    205
Phe Ala Lys Tyr Val Asn Pro Ala Tyr Arg Ser Arg Ile Ala Phe Leu
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Glu Glu Pro Cys Lys Thr Arg Asp Asp Ser Arg Ala Phe Ala Arg Glu
                230
                                 235
Thr Gly Ile Ala Ile Ala Trp Asp Glu Ser Leu Arg Glu Ala Asp Phe
             245
                           250
                                               255
Ala Phe Ala Ala Glu Pro Gly Val Arg Ala Val Val Ile Lys Pro Thr
         260 265 270
Leu Thr Gly Ser Leu Asp Lys Val Arg Glu Gln Val Ala Ala Ala His
      275 280
                            285
Ala Ala Gly Leu Thr Ala Val Ile Ser Ser Ser Ile Glu Ser Ser Leu
 290 295 300
Gly Leu Thr Gln Leu Ala Arg Ile Ala Ala Trp Leu Thr Pro Asp Thr
305 310 315
Val Pro Gly Leu Asp Thr Leu Asn Leu Met Gln Ala Gln Leu Ile Arg
      325 330 335
Gln Trp Pro Gly Ser Thr Leu Pro Cys Leu Asp Val Gly Ala Leu Glu
         340
                 345
Pro Leu Arg
      355
<210> 9777
<211> 374
<212> PRT
<213> Enterobacter cloacae
<400> 9777
Pro Ala Ala Ala Cys Gly Ser Pro Pro Ser Gly Gly Trp Ala Thr Cys
                            10
Trp Ser Ala Ala Met Lys Trp Val Lys Pro Gln Ser Leu Tyr Leu Gln
                         25
Leu Leu Phe Leu Gly Leu Pro Leu Leu Leu Trp Gly Leu Ser
                     40
Ala Phe Asn Ser Tyr Val Ser Ala Leu Gln Ala Ala Thr Gln Ala Tyr
                 55
                                    60
Asp Arg Thr Leu Leu Ser Ser Ala Arg Thr Val Ser Glu Arg Leu Val
              70
                               7.5
Val His Asn Gly Lys Leu Gln Val Asn Val Pro Trp Val Val Leu Asp
             85
                             90
Ser Phe Glu Leu Asn Met Asn Asp Arg Leu Tyr Tyr Lys Val Val Asp
         100
                          105
                                            110
Pro Asp Gly Arg Thr Ile Ser Gly Tyr Asp Asp Leu Pro Asn Met Pro
      115
                       120
                                        125
Pro Ser Thr Ser Arg Thr Ser His Tyr Pro Ala Leu Ala Trp Phe Tyr
                 135
                                     140
His Thr Glu Tyr Arg Gly Gln Ala Ile Arg Val Ala Lys Leu Leu Gln
                150
                                 155 160
Pro Val Asn Glu Asp Ser Val Phe Gly Met Ala Glu Ile Tyr Val Ala
                              170
             165
                                               175
Glu Thr Leu Gln Ser Arg Arg Tyr Leu Ala Thr Gln Leu Leu Phe Ser
                               190
        180
                           185
Ser Leu Val Ser Gln Gly Leu Leu Val Leu Leu Thr Leu Val Leu Thr
      195
                       200
                                        205
Ala Trp Leu Leu Arg Arg Val Leu Arg Pro Met Arg Gln Leu Ser Ser
  210
                   215
                                     220
Leu Met Val Arg Arg Glu Pro Gly Leu Leu Ala Pro Leu Pro Glu Leu
225
                230
                                 235
Leu Pro Trp Ser Glu Thr Arg Leu Leu Ile Val Ala Phe Asn Arg Tyr
             245
                              250 255
Ile Asp Arg Leu Arg Gly Val Leu Ser Arg Gln Ala Arg Phe Asn Ala
          260
                           265
                                           270
Asp Ala Ser His Gln Leu Lys Thr Pro Leu Ala Val Leu Lys Thr Gln
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280

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Val Ser Val Ala Leu Thr Arg Asn Asp Pro Ala Leu Trp Gln Glu Ser
 290
                  295
Leu Arg Ala Met Asn Val Thr Leu Asp Asn Thr Ile Val Leu Thr Glu
305
          310
                      315
Arg Leu Leu Gln Leu Ser Ala Val Lys Arg Lys Glu Gln Gly Glu Arg
           325
                           330
                                           335
Gln Phe Ala Pro Val Asp Leu Val Gln Val Val Gln Asn Cys Cys Phe
        340 345 350
Ser Arg Leu Ala Gln Ala Arg Ser Lys Gly Ile Asp Leu Gly Tyr Asp
    355 360 365
Gly Val Ser Ser Arg
  370
<210> 9778
<211> 407
<212> PRT
<213> Enterobacter cloacae
<400> 9778
Pro Leu Lys Trp Glu Asn Thr Met Ile Asn Val Glu Met Leu Ser Thr
                           10
Gly Asp Glu Val Leu His Gly Gln Ile Ile Asp Thr Asn Ala Ala Trp
     20 25
Leu Ala Asp Leu Phe Phe Glu Gln Gly Leu Pro Leu Thr Arg Arg Asn
35
         40
Thr Val Gly Asp Asn Leu Glu Ser Leu Val Asn Val Leu Arg Glu Arg
50 55
Ser Glu Arg Cys Asp Val Leu Ile Val Asn Gly Gly Leu Gly Pro Thr
65 70
                              75
Ser Asp Asp Leu Ser Ala Leu Ala Ala Ala Thr Ala Lys Gly Glu Gly
           85
                           90
Leu Val Leu His Glu Ala Trp Leu Ala Gln Met Glu Arg Phe Phe Ser
       100 105 110
Glu Arg Gly Arg Val Met Ala Pro Ser Asn Arg Lys Gln Ala Glu Ile
    115 120
                                    125
Pro Ala Ser Ala Glu Leu Ile Asp Asn Pro Val Gly Thr Ala Cys Gly
 130 135 140
Phe Ala Val Gln Leu Asn Arg Cys Leu Met Phe Phe Thr Pro Gly Val
145 150 155 160
Pro Ser Glu Phe Lys Val Met Val Glu Gln Gln Ile Leu Pro Arg Leu
          165 170 175
Arg Ala Arg Phe Thr Leu Pro Glu Pro Pro Leu Cys Leu Arg Leu Thr
        180 185 190
Thr Phe Gly Arg Ser Glu Ser Asp Leu Ala Gln Ser Leu Asp His Leu
     195 200
                                    205
Gln Leu Pro Pro Gly Val Ser Met Gly Tyr Arg Ser Ser Met Pro Ile
 210
                  215
                                  220
Ile Glu Leu Lys Leu Thr Gly Pro Ala Ser Glu Lys Ala Ala Met Leu
225 230
                               235
                                              240
Ala Leu Trp Pro Glu Val Arg Arg Val Ala Gly Glu Ser Leu Ile Phe
           245
                           250
Glu Gly Thr Lys Gly Leu Pro Ala Gln Ile Ala Ala His Leu Gln Ser
         260
                        265
                                        270
Arg Gln Leu Ser Val Thr Leu Ser Glu Gln Phe Thr Gly Gly Leu Leu
     275
                     280
                                    285
Ala Leu Gln Leu Thr Arg Ala Gly Ala Pro Leu Leu Ala Ser Glu Val
                  295
                                 300
Val Pro Phe Gln Gln Glu Thr Leu Ala Gln Thr Ala Arg Trp Ala Ser
305
               310
                               315
Glu Arg Arg Val Lys His Phe Ala Gly Leu Ala Leu Phe Val Gly Gly
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Leu Asp Glu Glu His Leu Asn Phe Ala Leu Ala Thr Pro Glu Gly Thr 340 345 His Ala Leu Arg Val Arg Met Ser Ile Thr Arg His Ser Leu Ala Val 355 360 Arg Gln Glu Val Cys Ala Met Met Ala Leu Asn Met Leu Arg Arg Trp 375 380 Leu Asn Gly Lys Glu Val Ala Ser Glu His Gly Trp Ile Asn Val Val 390 395 Glu Ser Leu Phe Val Glu 405

<211> 879 <212> PRT

<210> 9779

<213> Enterobacter cloacae

<400> 9779 Met Ser Asp Leu Ala Arg Glu Ile Thr Pro Val Asn Ile Glu Glu Glu 1.0 Leu Lys Ser Ser Tyr Leu Asp Tyr Ala Met Ser Val Ile Val Gly Arg 20 25 Ala Leu Pro Asp Val Arg Asp Gly Leu Lys Pro Val His Arg Arg Val 35 40 45 Leu Tyr Ala Met Asn Val Leu Gly Asn Asp Trp Asn Lys Ala Tyr Lys 50 55 60 Lys Ser Ala Arg Val Val Gly Asp Val Ile Gly Lys Tyr His Pro His 65 70 75 Gly Asp Ile Ala Val Tyr Gly Thr Ile Val Arg Met Ala Gln Pro Phe 8.5 90 95 Ser Leu Arg Tyr Met Leu Val Asp Gly Gln Gly Asn Phe Gly Ser Ile 100 105 110 Asp Gly Asp Ser Ala Ala Ala Met Arg Tyr Thr Glu Ile Arg Leu Ala 115 120 125 Lys Ile Ala His Glu Leu Met Ala Asp Leu Glu Lys Glu Thr Val Asp 130 135 140 Phe Val Asp Asn Tyr Asp Gly Thr Glu Lys Ile Pro Asp Val Met Pro 145 150 155 Thr Lys Ile Pro Asn Leu Leu Val Asn Gly Ser Ser Gly Ile Ala Val 165 170 Gly Met Ala Thr Asn Ile Pro Pro His Asn Ile Thr Glu Val Ile Asn 180 185 1.90 Gly Cys Leu Ala Tyr Ile Asp Asp Glu Asp Ile Ser Ile Glu Gly Leu 195 200 205 Met Glu His Ile Pro Gly Pro Asp Phe Pro Thr Ala Ala Ile Ile Asn 210 215 220 Gly Arg Arg Gly Ile Glu Glu Ala Tyr Arg Thr Gly Arg Gly Lys Ile 230 235 Tyr Ile Arg Ala Arg Ala Glu Val Glu Ala Asp Ala Lys Thr Gly Arg 245 250 255 Glu Thr Ile Ile Val His Glu Ile Pro Tyr Gln Val Asn Lys Ala Arg 260 265 Leu Ile Glu Lys Ile Ala Glu Leu Val Lys Glu Lys Arg Val Glu Gly 275 280 285 Ile Ser Ala Leu Arg Asp Glu Ser Asp Lys Asp Gly Met Arg Ile Val 295 300 Ile Glu Ile Lys Arg Asp Ala Val Gly Glu Val Val Leu Asn Asn Leu 310 315 Tyr Ser Gln Thr Gln Leu Gln Val Ser Phe Gly Ile Asn Met Val Ala 325 330 335 Leu His His Gly Gln Pro Lys Ile Met Asn Leu Lys Glu Ile Leu Ser 340 345 350

Ala Phe Val Arg His Arg Arg Glu Val Val Thr Arg Arg Thr Ile Phe 355 360 Glu Leu Arg Lys Ala Arg Asp Arg Ala His Ile Leu Glu Ala Leu Ala 375 Val Ala Leu Ala Asn Ile Asp Pro Ile Ile Glu Leu Ile Arg Arg Ala 395 390 Pro Thr Pro Ala Glu Ala Lys Ala Ser Leu Val Ala Arg Ser Trp Asp 405 410 Leu Gly Asn Val Ala Ala Met Leu Glu Arg Ala Gly Asp Asp Ala Ala 425 430 420 Arg Pro Glu Trp Leu Glu Pro Glu Phe Gly Val Arg Asp Gly Gln Tyr 435 440 445 Tyr Leu Thr Glu Gln Gln Ala Gln Ala Ile Leu Asp Leu Arg Leu Gln 455 460 Lys Leu Thr Gly Leu Glu His Glu Lys Leu Leu Asp Glu Tyr Lys Glu 465 470 475 Leu Leu Glu Gln Ile Ala Glu Leu Leu His Ile Leu Gly Ser Ala Glu 485 490 495 Arg Leu Met Glu Val Ile Arg Glu Glu Leu Glu Leu Val Arg Asp Gln 500 505 510 Phe Gly Asp Glu Arg Arg Thr Glu Ile Thr Ala Asn Ser Ser Asp Ile 515 520 525 Asn Ile Glu Asp Leu Ile Asn Arg Glu Asp Val Val Val Thr Leu Ser 530 535 540 His Gln Gly Tyr Val Lys Tyr Gln Pro Leu Thr Asp Tyr Glu Ala Gln 545 550 555 Phe Ile Asp Arg Leu Leu Val Ala Asn Thr His Asp Thr Ile Leu Cys 580 585 590 Phe Ser Ser Arg Gly Arg Leu Tyr Trp Met Lys Val Tyr Gln Leu Pro 595 600 605 Glu Ala Ser Arg Gly Ala Arg Gly Arg Pro Ile Val Asn Leu Leu Pro 610 615 620 Leu Glu Ala Asn Glu Arg Ile Thr Ala Ile Leu Pro Val Arg Glu Tyr 625 630 635 Glu Glu Gly Val Asn Val Phe Met Ala Thr Ala Ser Gly Thr Val Lys 645 650 655 Lys Thr Ala Leu Thr Glu Pne Ser Arg Pro Arg Ser Ala Gly Ile Ile 660 665 Ala Val Asn Leu Asn Glu Gly Asp Glu Leu Ile Gly Val Asp Leu Thr 675 680 Ser Gly Ser Asp Glu Val Met Leu Phe Ser Ala Ala Gly Lys Val Val 695 Arg Phe Lys Glu Asn Ala Val Arg Ala Met Gly Arg Thr Ala Thr Gly 710 715 Val Arg Gly Ile Lys Leu Ala Gly Glu Asp Ser Val Val Ser Leu Ile 725 730 Val Pro Arg Gly Glu Gly Ala Ile Leu Thr Val Thr Gln Asn Gly Tyr 740 745 Gly Lys Arg Thr Ala Glu Ser Glu Tyr Pro Thr Lys Ser Arg Gly Thr 755 760 765 Gln Gly Val Ile Ser Ile Lys Val Thr Glu Arg Asn Gly Ser Val Val 770 775 780 Gly Ala Val Gln Val Asp Asp Ala Asp Gln Ile Met Met Ile Thr Asp 795 790 Ala Gly Thr Leu Val Arg Thr Arg Val Ser Glu Ile Ser Val Val Gly 805 810 815 Arg Asn Thr Gln Gly Val Ile Leu Ile Arg Thr Ala Glu Asp Glu Asn 830 820 825 Val Val Gly Leu Gln Arg Val Ala Glu Pro Val Asp Asp Glu Glu Leu

840 Asp Ser Ile Asp Gly Ser Val Ala Glu Gly Asp Asp Glu Ile Ala Pro 850 860 Glu Ala Asp Ile Asp Asp Glu Ala Ala Asp Asp Ala Asp Glu 870 <210> 9780 <211> 957 <212> PRT <213> Enterobacter cloacae <400> 9780 Pro Arg Arg Arg Ser Leu Ala Pro Leu Lys Tyr Leu Val Ser Phe Arg 10 Thr Thr Leu Lys Val Ser Arg Tyr Leu Phe Arg Ala Leu Ala Leu Leu 20 25 30 Leu Trp Leu Leu Val Ala Leu Leu Ser Val Phe Tyr Ile Val Asn Ala 35 40 45 Leu His Gln Lys Glu Ala Glu Ile Arg Gln Glu Phe Asn Leu Ser Ser 55 60 Asp Gln Ala Gln Arg Tyr Ile Gln Arg Thr Ser Asp Val Met Lys Glu 70 75 Leu Lys Tyr Ile Ala Glu Asn Arg Leu Thr Ala Glu Asn Gly Ile Leu 8.5 90 Ala Ile Arg Gly Arg Asp Glu Lys Thr Glu Val Pro Asp Phe Glu Pro 100 105 Leu Phe Pro Asp Ser Asp Cys Ser Ala Met Gly Lys Ala Trp Arg Gly 120 Ser Leu Glu Ser Leu Ser Trp Phe Met Arg Tyr Trp Arg Asp Asn Phe 130 135 140 Ser Ala Ala Tyr Asp Leu Asn Arg Val Tyr Leu Ile Ser Asn Glu Asn 145 150 155 Leu Cys Met Ala Asp Phe Gly Leu Arg Asp Met Pro Val Glu Arg Glu 165 170 175 Asp Ala Leu Lys Ser Leu His Glu Arg Ile Val Lys Tyr Arg Asn Ala 190 180 185 Pro Gln Glu Glu Arg Gly Asn Asn Ile Phe Trp Ile Ser Gln Gly Pro 200 205 Arg Met Gly Val Gly Tyr Phe Tyr Ala Leu Thr Pro Val Tyr Leu Gly 215 220 Asn Arg Leu Gln Ala Leu Leu Gly Ile Glu Gln Thr Ile Arg Met Glu 230 235 Asn Phe Phe Thr Pro Gly Ser Leu Pro Met Gly Val Thr Ile Leu Asp 245 250 255 Glu Asn Gly His Pro Leu Ile Ser Leu Thr Gly Pro Glu Asn Arg Leu 260 265 270 Lys Val Glu Pro Ser Trp Met Gln Glu Arg Ser Trp Phe Gly Tyr Thr 275 280 285 Ser Gly Phe Arg Glu Leu Val Leu Lys Lys Ser Leu Pro Pro Ser Ser 290 295 300 Leu Ser Ile Val Tyr Ser Leu Pro Val Asp Lys Val Leu Glu Arg Ile 310 315 320 Arg Ile Leu Ile Leu Asn Ala Ile Leu Leu Asn Ile Ala Val Gly Val 330 325 Ala Leu Phe Met Leu Ala Arg Met Tyr Glu Arg Arg Ile Phe Ile Pro 340 345 350 Ala Glu Ala Asp Ala Gln Arg Leu Glu Glu His Glu Gln Phe Asn Arg 355 360 365 Lys Ile Val Ala Ser Ala Pro Val Gly Ile Cys Ile Leu Arg Thr Gln 370 375

Asp Gly Thr Asn Ile Leu Ser Asn Glu Leu Ala His Asn Tyr Leu Asn

385 390 395 Met Leu Thr His Glu Asp Arg Gln Arg Leu Thr Gln Ile Ile Cys Gly 405 410 Gln Gln Val Asn Phe Val Asp Val Leu Thr Ser Thr His Thr Asn Leu 420 425 430 Gln Ile Ser Phe Val His Ser Arg Tyr Arg Asn Glu Asn Val Ala Ile 435 440 445 Cys Val Leu Val Asp Val Ser Ala Arg Val Lys Met Glu Glu Ser Leu 450 455 460 Gln Asp Met Ala Gln Ala Ala Glu Gln Ala Ser Gln Ser Lys Ser Met 465 470 475 480 Phe Leu Ala Thr Val Ser His Glu Leu Arg Thr Pro Leu Tyr Gly Ile 485 490 495 Ile Gly Asn Leu Asp Leu Leu Gln Thr Lys Glu Leu Pro Lys Gly Val 500 505 510 Asp Arg Leu Val Thr Ala Met Asn Asn Ser Ser Ser Leu Leu Leu Lys 515 520 525 Ile Ile Ser Asp Ile Leu Asp Phe Ser Lys Ile Glu Ser Glu Gln Leu 530 535 540 Lys Ile Glu Pro Arg Glu Phe Ser Pro Arg Glu Val Met Asn His Ile 545 550 555 Cys Ala Asn Tyr Leu Pro Leu Val Val Arg Lys Gln Leu Gly Leu Tyr 565 570 575 Cys Phe Ile Glu Pro Asp Val Pro Leu Thr Leu His Gly Asp Pro Met 580 585 590 Arg Leu Gln Gln Val Ile Ser Asn Leu Leu Ser Asn Ala Ile Lys Phe 595 600 605 Thr Asp Ile Gly Cys Ile Val Leu His Val Cys Arg Ala Gly Glu Tyr 610 615 620 Leu Thr Ile Arg Val Arg Asp Thr Gly Val Gly Ile Pro Ala Lys Glu 625 630 635 Val Val Arg Leu Phe Asp Pro Phe Phe Gln Val Gly Thr Gly Val Gln 645 650 655 Arg Asn Phe Gln Gly Thr Gly Leu Gly Leu Ala Ile Cys Glu Lys Leu 660 665 670 Ile Ser Met Met Asp Gly Asp Ile Ser Val Asp Thr Glu Pro Gly Met 675 680 685 Gly Ser Gln Phe Thr Ile Arg Ile Pro Leu Tyr Ser Ala His Tyr Pro 690 695 700 Ala Lys Thr Thr Val Asp Gly Leu Ser Asp Lys His Cys Trp Leu Ala 705 710 715 720 Val His Asn Ala Ser Leu His Asp Phe Leu Thr Ser Met Leu Thr Ser 725 730 735 Ser Gly Val Arg Val Ser Arg Tyr Glu Gly Gln Thr Pro Gly Ala Asp 745 Asp Met Leu Ile Thr Asp Val Glu Pro Glu Gln Ala Trp Ala Gly Arg 755 760 765 Gly Val Val Met Phe Cys Arg Arg His Ile Gly Ile Pro Leu Glu Arg 770 775 780 Ser Pro Gly Val Trp Val His Ser Val Ala Thr Pro His Glu Leu Leu 785 790 795 Gly Leu Leu Ala Arg Ile Tyr Ser Val Gln Leu Glu Asp Ser Asp Gly 805 810 815 Ala Thr Val Leu Ala Ser Pro Asp Glu Leu Ala Ser Val Asn Asp Asp 820 825 Met Met Ile Leu Val Val Asp Asp His Pro Ile Asn Arg Arg Leu Leu 840 845 835 Ala Asp Gln Leu Gly Ser Leu Gly Tyr Gln Cys Lys Thr Ala Asn Asp 860 850 855 Gly Val Asp Ala Leu Asn Val Leu Ser Lys Asn His Ile Asp Ile Val 870 875

5334 Leu Ser Asp Val Asn Met Pro Asn Met Asp Gly Tyr Arg Leu Thr Gln 885 890 Arg Ile Arg Gln Leu Gly Leu Thr Leu Pro Val Val Gly Val Thr Ala 900 905 910 Asn Ala Leu Ala Glu Glu Lys Gln Arg Cys Leu Glu Ser Gly Met Asp 915 920 925 Ser Cys Leu Ser Lys Pro Val Thr Leu Asp Val Leu Lys Gln Thr Leu 935 940 930 Ser Val Tyr Ala Glu Arg Val Arg Lys Ala Arg Gln 950 <210> 9781 <211> 179 <212> PRT <213> Enterobacter cloacae <400> 9781 Tyr Arg Phe Cys Tyr Val Arg Cys Gly Pro Leu Ile Met His Glu Asn 1.0 Gln Gln Pro Gln Thr Glu Ala Phe Glu Leu Ser Glu Ala Glu Arg Ala 20 25 Ala Ile Glu His Glu Met His His Tyr Glu Asp Pro Arg Ala Ala Ser 35 40 Ile Glu Ala Leu Lys Ile Val Gln Lys Gln Arg Gly Trp Val Pro Asp 5.5 Gly Ala Ile Tyr Ala Ile Ala Glu Val Leu Gly Ile Pro Ala Ser Asp 75 70 80 Val Glu Gly Val Ala Thr Phe Tyr Ser Gln Ile Phe Arg Gln Pro Val 90 Gly Arg His Val Ile Arg Tyr Cys Asp Ser Val Val Cys His Ile Thr 105 Gly Tyr Gln Gly Ile Gln Ala Ala Ile Glu Lys Lys Leu Asn Ile Lys 120 125 Pro Gly Gln Thr Thr Pne Asp Gly Arg Phe Thr Leu Leu Pro Thr Cys 135 140 Cys Leu Gly Asn Cys Asp Lys Gly Pro Thr Met Met Ile Asp Glu Asp 145 150 155 Thr His Ser His Leu Thr Pro Glu Ala Ile Pro Asp Leu Leu Glu Gln Tyr Lys

<210> 9782 <211> 141 <212> PRT <213> Enterobacter cloacae

<400> 9782 Cys Trp Lys Ala Gly Ala Gly Cys Thr Leu Cys Thr Ala Pro Cys Arg 10 Ala Val Lys Trp Thr Gly Arg Ser Ser Thr Thr Leu Ser Thr Arg Leu 20 25 Leu Arg Asn Cys Leu Ser Trp Arg Val Leu Lys Met Pro Arg Arg Thr 40 Gln Ala Ser Ala Phe Ala Ala Arg Asn Trp Arg Val Ser Arg Thr Ala 60 Thr Ala Val Val Pro Arg Cys Ala Pro Thr Ser Ala Cys Thr Asn Arg 70 75 Val Ser Arg Arg Ile Lys Thr Pro Cys Ser Pro Ser Arg Trp Lys Gly 8.5 90 Thr Thr Ser Arg Leu Arg Arg Val Arg Lys Ser Arg Leu His Gly His

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105
Arg Ala Gly Thr Pro Arg Arg His Gly Thr Asn Ser Arg Leu Lys Trp
  115 120
Ala Val Thr Cys Ala Thr Ala Ile Gln Ala Cys Val
   130
<210> 9783
<211> 217
<212> PRT
<213> Enterobacter cloacae
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Pro Gly Asn Val Leu Arg Leu Glu Ser Val Pro Ala Ala Asp Ala Arg
                       10
Gln Leu Val Gly Asn Gly Gly Cys His Ser Leu Ala Ala Ala Ile Arg
 20
                       25
                                          3.0
Gly Phe Glu Ile Met Thr Leu Lys Glu Leu Leu Val Gly Phe Gly Thr
 35
                40
Gln Val Arg Ser Ile Trp Met Ile Gly Leu His Ala Phe Ala Lys Arg
50 55
Glu Thr Arg Met Tyr Pro Glu Glu Pro Val Tyr Leu Pro Pro Arg Tyr
65 70 75
Arg Gly Arg Ile Val Leu Thr Arg Asp Pro Asp Gly Ser Glu Arg Cys
           85
                            90
Val Ala Cys Asn Leu Cys Ala Val Ala Cys Pro Val Gly Cys Ile Ser
        100 105
                                          110
Leu Gln Lys Ala Glu Thr Val Asp Gly Arg Trp Tyr Pro Glu Phe Phe
115 120
Arg Ile Asn Phe Ser Arg Cys Ile Phe Cys Gly Leu Cys Glu Glu Ala
                  135 140
Cys Pro Thr Thr Ala Ile Gln Leu Thr Pro Asp Phe Glu Leu Gly Glu
             150
                                155
Tyr Lys Arg Gln Asp Leu Val Tyr Glu Lys Glu Asp Leu Leu Ile Ser
            165
                            170 175
Ala Ile Asp Gly Lys Asp Lys Gly Glu Ala Glu Asn Glu Ala Lys Pro
    195 200
Ile Asp Val Lys Ser Leu Leu Pro
  210
<210> 9784
<211> 112
<212> PRT
<213> Enterobacter cloacae
<400> 9784
Arg Pro Arg Glu Lys Lys Asn Gly Gly Thr Arg Met Ile Pro Leu Thr
                            10
His Gly Leu Ile Leu Ala Ala Ile Leu Phe Val Leu Gly Leu Thr Gly
         20
Leu Val Ile Arg Arg Asn Leu Leu Phe Met Leu Ile Gly Leu Glu Ile
                      40
                                      4.5
Met Ile Asn Ala Ser Ala Leu Ala Phe Val Val Ala Gly Ser Tyr Trp
                55
 50
Gly Gln Thr Asp Gly Gln Val Met Tyr Ile Leu Ala Ile Ser Leu Ala
               70
                              75
Ala Ala Glu Ala Ser Ile Gly Leu Ala Leu Leu Leu Gln Leu His Arg
            8.5
                          90
Arg Arg Gln Asn Leu Asn Ile Asp Ser Val Ser Glu Leu Arg Gly
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110

<210> 9785

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<211> 166
<212> PRT
<213> Enterobacter cloacae
<400> 9785
Tyr Asn Val Met Asn Pro Arg Lys Glu Lys His Met Ile Gln Trp Gln
                                 1.0
Asp Leu His His Ser Glu Leu Thr Val Gln Ser Leu Tyr Ala Leu Leu
         20
                              25
                                                30
Lys Leu Arg Cys Glu Val Phe Val Val Glu Gln Thr Cys Pro Tyr Gln
                                            4.5
     35
                         4.0
Asp Ile Asp Gly Asp Asp Leu Val Gly Glu Asn Arg His Ile Leu Gly
                      55
                                       60
Trp Arg Asp Asn Glu Leu Val Ala Tyr Ala Arg Ile Leu Lys Ser Glu
               70
                                  7.5
Glu Glu Phe Asp Pro Val Val Ile Gly Arg Val Ile Ile Ser Gly Arg
              85
                                 90
Ala Arg Gly Glu Lys Leu Gly Tyr Gln Leu Met Glu Lys Thr Leu Asp
          100
                           105
Ala Cys Gln Lys Gln Trp Pro Asp Lys Ala Leu Tyr Leu Gly Ala Gln
                      120
Ala His Leu Gln Ser Phe Tyr Gly His Phe Gly Phe Thr Pro Val Thr
 130 135
Asp Ile Tyr Asp Glu Asp Gly Ile Pro His Ile Gly Met Ala Arg Glu
145 150
                                      155
Ala Lys Gln Ala Gln
               165
<210> 9786
<211> 69
<212> PRT
<213> Enterobacter cloacae
<400> 9786
Ala Ile Leu Thr Ala Gly Trp Asn Cys Ile Arg Arg Lys Asn Ala Asn
                                  1.0
Pro Gly Arg Trp Arg Ser Arg Arg Cys His Val Arg Arg Gly Asn Ser
                              25
Pro Lys Arg Ser Ala Arg Arg Ser Val Lys Pro Gly Trp Arg Thr Val
                       40
Ser Ala Asn Ile Phe Pro Ser Arg Asp Asn Phe Leu Ser Val Thr Ala
 50
                      55
Trp Trp Cys Ala
<210> 9787
<211> 323
<212> PRT
<213> Enterobacter cloacae
<400> 9787
Arg His Ala Ser Cys Tyr Pro Ser Arg Arg Thr Gln Arg Pro Pro Glv
Gln Pro Gly Ser Cys Cys Arg Glu Ser Gly Ser Asp Thr Ala Leu Ser
          20
                              25
Asn Lys Gly His Ala Met Ile Tyr Pro Asp Glu His Met Leu Tyr Ala
                          40
Pro Val Glu Trp Gln Asp Cys Ser Glu Gly Tyr Thr Asp Ile Arg Tyr
                      55
   50
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His Lys Ser Ala Asp Gly Ile Ala Lys Ile Thr Ile Asn Arg Pro Gln 70 Val Arg Asn Ala Phe Arg Pro Leu Thr Val Lys Glu Met Ile Gln Ala 85 90 Leu Ala Asp Ala Arg Tyr Asp Asp Thr Val Gly Val Ile Ile Leu Thr 100 105 110 Gly Glu Gly Glu Lys Ala Phe Cys Ser Gly Gly Asp Gln Lys Val Arg 115 120 125 Gly Asp Tyr Gly Gly Tyr Gln Asp Asp Ala Gly Thr His His Leu Asn 135 140 Val Leu Asp Phe Gln Arg Gln Ile Arg Thr Cys Pro Lys Pro Val Val 145 150 155 Ala Met Val Ala Gly Tyr Ser Ile Gly Gly Gly His Val Leu His Met 165 170 175 Met Cys Asp Leu Thr Ile Ala Ala Glu Asn Ala Ile Phe Gly Gln Thr 180 185 190 Gly Pro Lys Val Gly Ser Phe Asp Gly Gly Trp Gly Ala Ser Tyr Met 195 200 205 Ala Arg Ile Val Gly Gln Lys Lys Ala Arg Glu Ile Trp Phe Leu Cys 210 215 220 Arg Gln Tyr Asn Ala Gln Glu Ala Leu Asp Met Gly Leu Val Asn Thr 225 230 235 Val Val Pro Ile Ala Asp Leu Glu Lys Glu Thr Val Arg Trp Cys Arg 245 250 255 Glu Met Leu Gln Asn Ser Pro Met Ala Leu Arg Cys Leu Lys Ala Ala 260 265 270 Leu Asn Ala Asp Cys Asp Gly Gln Ala Gly Leu Gln Glu Leu Ala Gly 275 280 285 Asn Ala Thr Met Leu Phe Tyr Met Thr Glu Glu Gly Gln Glu Gly Arg 290 295 300 Asn Ala Phe Asn Glu Lys Arg Gln Pro Asp Phe Ser Lys Tyr Lys Arg 305 310 Asn Pro

<210> 9788 <211> 397 <212> PRT <213> Enterobacter cloacae

<400> 9788 Leu Leu Arg Leu Gly Arg Arg Leu Tyr Gly Asp Asp Arg Arg Gln Arg 10 Ala Gly Gly Ser Ala Ala Gly Cys Cys Asp Asp Arg Arg Glu Thr Ser 25 3.0 Pro Arg Gly Ser Ala Gly Ala Ser Ser Ile Arg Ser Ile Ala Met Lys 40 Leu Thr Pro Leu Thr Thr Gly Leu Leu Leu Ala Gly Leu Met Thr Gly 55 60 Ser Ala Leu Ala Ala Asp Lys Ile Val Ile Ala His Arg Gly Ala Ser 70 80 Gly Tyr Leu Pro Glu His Thr Leu Pro Ala Lys Ala Met Ala Tyr Ala 8.5 90 Gln Gly Ala Asp Tyr Leu Glu Gln Asp Leu Val Met Thr Lys Asp Asp 100 105 110 Gln Leu Val Val Leu His Asp His Tyr Leu Asp Arg Val Thr Asp Val 115 120 Ala Glu Arg Phe Pro Asp Arg Ala Arg Lys Asp Gly Arg Tyr Tyr Ala 1.35 140 Ile Asp Phe Thr Leu Asp Glu Ile Arg Ser Leu Lys Phe Thr Glu Gly 150 155

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Phe Glu Ile Glu Asn Gly Lys Lys Val Gln Val Tyr Pro Gly Arg Phe
            165
                   170
Pro Met Gly Lys Ser Asp Phe Arg Ile His Thr Phe Gln Glu Glu Ile
         180
                         185 190
Glu Phe Val Gln Gly Leu Asn His Ser Thr Gly Lys Asn Ile Gly Ile
    195
           200
Tyr Pro Glu Ile Lys Ala Pro Trp Phe His His Gln Glu Gly Lys Asp
       215
 210
                                   220
Ile Ala Ala Lys Thr Leu Glu Val Leu Lys Gln Tyr Gly Tyr Thr Ser
225 230 235
Lys Lys Asp Lys Val Tyr Leu Gln Cys Phe Asp Ala Ala Glu Leu Lys
      245 250 255
Arg Ile Lys Thr Glu Leu Glu Pro Lys Met Gly Met Asp Leu Asn Leu 260 \hspace{1.5cm} 265 \hspace{1.5cm} 270 \hspace{1.5cm}
Val Gln Leu Ile Ala Tyr Thr Asp Trp Asn Glu Thr Gln Glu Lys Gln
 275 280 285
Pro Asp Gly Lys Trp Val Asn Tyr Ser Tyr Asp Trp Met Phe Lys Pro 290 295 300
Gly Ala Met Lys Gln Ile Ala Gln Tyr Ala Asp Gly Ile Gly Pro Asp
305 310 315
Tyr His Met Leu Val Ala Glu Gly Ser Thr Pro Gly His Val Lys Leu
325 330 335
Thr Ala Met Val Lys Glu Ala His Ala Ser Lys Met Gln Val His Pro
340 345 350
Tyr Thr Val Arg Ala Asp Gln Leu Pro Pro Tyr Ala Thr Asp Val Asn
355 360 365
Gln Leu Tyr Glu Val Leu Tyr Lys Gln Ala Asp Val Asp Gly Leu Phe 370 375 380
Thr Asp Phe Pro Asp Lys Ala Val Thr Phe Leu Lys
              390
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<210> 9789 <211> 247 <212> PRT <213> Enterobacter cloacae

V2137 Enteropacter Croacae

<400> 9789 Phe Val Arg Lys Met Pro Leu Ala Leu Lys Asn Thr Ser Ala Thr Leu Thr Leu Thr Ser Arg Ala Cys Cys Ser Lys Val Ala Leu Tyr Met Asn 2.5 30 Asn Met Asn Val Ile Ile Ala Asp Asp His Pro Ile Val Leu Phe Gly 40 4.5 Ile Arg Lys Ser Leu Glu Gln Ile Glu Trp Val Asn Val Val Gly Glu 5.5 Phe Glu Asp Ser Thr Ala Leu Ile Asn Asn Leu Pro Lys Leu Asp Ala 7.0 7.5 His Val Leu Ile Thr Asp Leu Ser Met Pro Gly Asp Lys Tyr Gly Asp 8.5 90 Gly Ile Thr Leu Ile Lys Tyr Ile Lys Arg His Phe Pro Asp Ile Ser 100 105 Ile Ile Val Leu Thr Met Asn Asn Pro Ala Ile Leu Ser Ala Val 120 115 125 Leu Asp Leu Asp Ile Glu Gly Ile Val Leu Lys Gln Gly Ala Pro Thr 130 135 140 Asp Leu Pro Lys Ala Leu Ala Ala Leu Gln Lys Gly Lys Lys Phe Thr 145 150 155 Pro Glu Ser Val Ser Arg Leu Leu Glu Lys Ile Ser Ala Gly Gly Tyr 165 170 175 Gly Asp Lys Arg Leu Ser Pro Lys Glu Ser Glu Val Leu Arg Leu Phe 180 185 190

Ala Glu Gly Phe Leu Val Thr Glu Ile Ala Lys Lys Leu Asn Arg Ser
195 200 205

Ile Lys Thr Ile Ser Ser Gln Lys Lys Ser Ala Met Met Lys Leu Gly
210 215 220

Val Asp Asn Asp Ile Ala Leu Leu Asn Tyr Leu Ser Ser Val Thr Leu
225 230 235

Ser Ala Thr Asp Lys Asp
245

<210> 9790 <211> 776 <212> PRT <213> Enterobacter cloacae

<400> 9790 Gly Gly Gly Tyr Phe Leu Phe His Gly Gln Val Lys Thr His Met Asn 10 Gln Ser Leu Leu Val Thr Lys Arg Asp Gly Thr Thr Glu Arg Ile Asn 25 20 Leu Asp Lys Ile His Arg Val Leu Asp Trp Ala Ala Glu Gly Leu Asn 4.0 Asn Val Ser Ile Ser Gln Val Glu Leu Arg Ser His Ile Gln Phe Tyr 50 55 Asp Gly Ile Lys Thr Ser Asp Ile His Glu Thr Ile Ile Lys Ala Ala 70 Ala Asp Leu Ile Ser Arg Asp Ala Pro Asp Tyr Gln Tyr Leu Ala Ala 85 90 Arg Leu Ala Ile Phe His Leu Arg Lys Lys Ala Tyr Gly Gln Phe Glu 100 105 Pro Pro Lys Leu Tyr Asp His Val Val Lys Met Val Glu Leu Gly Lys 115 120 125 Tyr Asp Thr His Leu Leu Glu Asp Tyr Thr Glu Glu Glu Phe Glu Gln 130 135 140 Met Asn Gly Phe Ile Asp His Trp Arg Asp Met Asn Phe Ser Tyr Ala 150 155 Ala Val Lys Gln Leu Glu Gly Lys Tyr Leu Val Gln Asn Arg Val Thr 165 170 175 Gly Glu Ile Tyr Glu Ser Ala Gln Phe Leu Tyr Ile Leu Val Ala Ala 185 190 180 Cys Leu Phe Ser Asn Tyr Pro Arg Glu Thr Arg Leu Asp Tyr Val Lys 195 200 205 Arg Phe Tyr Asp Ala Val Ser Thr Phe Lys Ile Ser Leu Pro Thr Pro 215 220 Ile Met Ser Gly Val Arg Thr Pro Thr Arg Gln Phe Ser Ser Cys Val 230 235 240 Leu Ile Glu Cys Gly Asp Ser Leu Asp Ser Ile Asn Ala Thr Ser Ser 245 250 255 Ala Ile Val Lys Tyr Val Ser Gln Arg Ala Gly Ile Gly Ile Asn Ala 260 265 Gly Arg Ile Arg Ala Leu Gly Ser Pro Ile Arg Gly Gly Glu Ala Phe 280 285 His Thr Gly Cys Ile Pro Phe Tyr Lys His Phe Gln Thr Ala Val Lys 300 Ser Cys Ser Gln Gly Gly Val Arg Gly Gly Ala Ala Thr Leu Phe Tyr 310 315 Pro Met Trp His Leu Glu Val Glu Ser Leu Leu Val Leu Lys Asn Asn 325 330 Arg Gly Val Glu Gly Asn Arg Val Arg His Met Asp Tyr Gly Val Gln 340 345 Ile Asn Lys Leu Met Tyr Thr Arg Leu Leu Lys Gly Glu Asp Ile Thr 355 360

```
Leu Phe Ser Pro Ser Asp Val Pro Gly Leu Tyr Asp Ala Phe Phe Ala
               375
                                380
Asp Gln Asp Glu Phe Glu Arg Leu Tyr Thr Lys Tyr Glu Lys Asp Asp
385
              390
                             395
Ser Ile Arg Lys Gln Arg Val Lys Ala Val Asp Leu Phe Ser Leu Met
         405 410 415
Met Gln Glu Arg Ala Ser Thr Gly Arg Ile Tyr Ile Gln Asn Val Asp
        420
                       425
His Cys Asn Thr His Ser Pro Phe Asp Pro Val Val Ala Pro Val Arg
    435
                    440 445
Gln Ser Asn Leu Cys Leu Glu Ile Ala Leu Pro Thr Lys Pro Leu Asp
 450 455 460
Asp Val Asn Asp Glu Asn Gly Glu Ile Ala Leu Cys Thr Leu Ser Ala
465 470 475
Phe Asn Leu Gly Ala Ile Lys Ser Leu Asp Glu Leu Glu Glu Leu Ala
      485 490 495
Val Leu Ala Val Arg Ala Leu Asp Ala Leu Leu Asp Tyr Gln Asp Tyr
       500 505 510
Pro Ile Pro Ala Ala Lys Arg Gly Ala Met Gly Arg Arg Thr Leu Gly
 515 520 525
Ile Gly Val Ile Asn Phe Ala Tyr Trp Leu Ala Lys Asn Gly Lys Arg
530 535 540
Tyr Ser Asp Gly Ser Ala Asn Asn Leu Thr His Gln Thr Phe Glu Ala
545 550 555
Ile Gln Tyr Tyr Leu Met Lys Ala Ser Asn Glu Leu Ala Lys Glu Gln
         565 570
Gly Ala Cys Pro Trp Phe Asn Glu Thr Thr Tyr Ala Lys Gly Ile Leu
        580 585 590
Pro Ile Asp Thr Tyr Lys Lys Asp Leu Asp Ala Ile Val Ser Glu Pro
                    600
Leu His Leu Asp Trp Glu Gly Leu Arg Glu Ser Ile Lys Thr His Gly
 610 615
                                620
Leu Arg Asn Ser Thr Leu Ser Ala Leu Met Pro Ser Glu Thr Ser Ser
    630 635
Gln Ile Ser Asn Ala Thr Asn Gly Ile Glu Pro Pro Arg Gly His Val
          645
                          650 655
Ser Ile Lys Ala Ser Lys Asp Gly Val Leu Arg Gln Val Val Pro Asp
      660 665
Tyr Glu Thr Leu Gly Asp Asn Tyr Glu Leu Leu Trp Glu Met Pro Asn
     675 680
Asn Asp Gly Tyr Leu Gln Leu Val Gly Ile Met Gln Lys Phe Ile Asp
                                700
  690 695
Gln Ser Ile Ser Ala Asn Thr Asn Tyr Asp Pro Thr Arg Phe Pro Ser
              710
                             715
Gly Lys Val Pro Met Gln Gln Leu Leu Lys Asp Leu Leu Thr Ala Tyr
           725
                          730
                                         735
Lys Phe Gly Val Lys Thr Leu Tyr Tyr His Asn Thr Arg Asp Gly Ala
                     745
        740
                                      750
Glu Asp Ala Gln Asp Asp Leu Ala Pro Ser Ile Gln Asp Asp Gly Cys
 755 760
Glu Ser Gly Ala Cys Lys Ile
  770
<210> 9791
<211> 407
<212> PRT
<213> Enterobacter cloacae
<400> 9791
Pro Ser Pro Thr Gly Arg Gly Asn Ser Phe Pro Leu Ser Leu Trp Glu
                          1.0
                                         1.5
```

```
Arg Ala Gly Val Arg Gly Asn Asn Thr Thr Gly Leu Thr Ala Met Ala
        20
                       25
Tyr Thr Thr Phe Ser Gln Thr Lys Asn Asp Gln Leu Lys Glu Pro Met
Phe Phe Gly Gln Pro Val Asn Val Ala Arg Tyr Asp Gln Gln Lys Tyr
                 55
                               60
Asp Ile Phe Glu Lys Leu Ile Glu Lys Gln Leu Ser Phe Phe Trp Arg
             7.0
                            7.5
Pro Glu Glu Val Asp Val Ser Arg Asp Arg Ile Asp Phe Gln Ala Leu
                    90 95
           8.5
Pro Glu His Glu Lys His Ile Phe Leu Ser Asn Leu Lys Tyr Gln Thr
     100 105 110
Leu Leu Asp Ser Ile Gln Gly Arg Ser Pro Asn Val Ala Leu Leu Pro
   115
                   120 125
Leu Ile Ser Ile Pro Glu Leu Glu Thr Trp Val Glu Thr Trp Ala Phe
 130
      135 140
Ser Glu Thr Ile His Ser Arg Ser Tyr Thr His Ile Ile Arg Asn Ile
145 150 155
Val Asn Asp Pro Ala Val Val Phe Asp Asp Ile Val Thr Asn Glu Gln
  165 170 175
Ile Gln Lys Arg Ala Glu Gly Ile Ala His Tyr Tyr Asp Glu Leu Ile
 180 185 190
Glu Met Thr Ser Tyr Trp His Leu Leu Gly Glu Gly Thr His Asn Val
195 200 205
Asn Gly Lys Thr Val Thr Val Asn Leu Arg Ala Leu Lys Lys Gln Leu
210 215 220
Tyr Leu Cys Leu Met Ser Val Asn Ala Leu Glu Ala Ile Arg Phe Tyr
225 230 235 240
Val Ser Phe Ala Cys Ser Phe Ala Phe Ala Glu Arg Lys Leu Met Glu
  245 250 255
Gly Asn Ala Lys Ile Ile Arg Leu Ile Ala Arg Asp Glu Ala Leu His
       260 265 270
Leu Thr Gly Thr Gln His Met Leu Asn Leu Leu Arg Ser Gly Ala Asp
275 280 285
Asp Pro Glu Met Ala Glu Ile Ala Glu Glu Cys Lys Gln Glu Cys Tyr
 290 295
                              300
Asp Leu Phe Leu Gln Ala Ala Gln Gln Glu Lys Glu Trp Ala Asp Tyr
305 310
                           315
                                          320
Leu Phe Arg Asp Gly Ser Met Ile Gly Leu Asn Lys Asp Ile Leu Cys
          325
                         330 335
Gln Tyr Val Glu Tyr Ile Thr Asn Ile Arg Met Gln Ala Val Gly Leu
   340 345 350
Asp Leu Pro Phe Gln Thr Arg Ser Asn Pro Ile Pro Trp Ile Asn Thr
                   360 365
Trp Leu Val Ser Asp Asn Val Gln Val Ala Pro Gln Glu Val Glu Val
 370 375
                               380
Ser Ser Tyr Leu Val Gly Gln Ile Asp Ser Glu Val Asn Thr Asp Asp
385 390
                            395
Leu Ser Asp Phe Gln Leu
           405
```

<210> 9792 <211> 510 <212> PRT <213> Enterobacter cloacae

<400> 9792

Leu Thr Glu His Ala Met Asp Thr Trp Ile Tyr Leu Ser Gln Gly Phe 5 10 15 Ala Val Ala Met Thr Pro Glu Asn Leu Val Ile Ala Leu Ile Gly Cys 20 25 30

Phe Val Gly Thr Ile Val Gly Leu Leu Pro Gly Leu Gly Pro Ile Asn 35 40 Gly Val Ala Ile Leu Leu Pro Leu Ala Phe Ala Leu His Leu Pro Ala Glu Ser Ala Leu Ile Leu Leu Ala Thr Val Tyr Ile Gly Cys Glu Tyr 70 Gly Gly Arg Ile Ser Ser Ile Leu Leu Asn Val Pro Gly Asp Ala Ala Ala Ile Met Thr Ala Leu Asp Gly Tyr Pro Met Ala Gln Gln Gly Arg 100 105 110 Gly Gly Val Ala Leu Ser Ile Ser Ala Val Ser Ser Phe Phe Gly Ser 115 120 125 Leu Ile Ala Ile Gly Gly Ile Ile Leu Phe Ala Pro Ala Leu Ala Gln 140 130 135 Trp Ser Leu Ala Phe Gly Pro Ala Glu Tyr Phe Ala Leu Met Val Phe 145 150 155 160 Ala Ile Ala Cys Leu Gly Ser Met Met Ala Gln Asn Pro Leu Lys Ser 165 170 175 Phe Leu Ser Ala Leu Ile Gly Leu Ser Leu Ala Thr Val Gly Val Asp 180 185 190 Ala Asn Thr Gly Val Tyr Arg Phe Thr Phe Asp Ser Val His Leu Ser 195 200 205 Asp Gly Val Gln Phe Ile Val Val Val Ile Gly Leu Phe Ser Val Ser 210 215 220 Glu Ile Leu Leu Met Leu Glu His Thr Ser Ser Gly Gln Thr Leu Val 225 230 235 Arg Lys Thr Gly Arg Met Leu Phe Asn Ala Lys Glu Gly Ala Gln Cys 245 250 255 Val Gly Ala Thr Leu Arg Ser Ser Val Ile Gly Phe Phe Val Gly Ile 260 265 270 Leu Pro Gly Ala Gly Ala Thr Ile Ala Ser Ala Ile Thr Tyr Met Thr 275 280 285 Glu Lys Lys Leu Ser Gly Asn Ser Asp Ser Phe Gly Lys Gly Asp Ile 290 295 300 Arg Gly Val Ala Ala Pro Glu Ala Ala Asn Asn Ala Ser Ala Cys Gly 305 310 315 Ser Phe Ile Pro Met Leu Thr Leu Gly Val Pro Gly Ser Gly Thr Thr 325 330 335 Ala Val Met Met Gly Ala Leu Thr Leu Tyr Asn Ile Thr Pro Gly Pro 340 345 Ala Met Phe Thr Glu Gln Pro Asp Ile Val Trp Gly Leu Ile Ala Ala 355 360 365 Leu Leu Ile Ala Asn Val Met Leu Leu Val Met Asn Ile Pro Leu Ile 370 375 380 Gly Leu Phe Thr Arg Met Leu Tnr Ile Pro Leu Trp Phe Leu Val Pro 390 395 Ala Ile Ala Ala Val Ser Ala Val Gly Val Tyr Ala Val His Ser Thr 405 410 415 Thr Phe Asp Leu Val Leu Met Val Leu Leu Gly Val Leu Gly Tyr Ile 420 425 Leu Arg Lys Met His Phe Pro Met Ser Pro Leu Ile Leu Gly Phe Val 435 440 445 Leu Gly Glu Met Leu Glu Gln Asn Leu Arg Arg Ala Leu Ser Ile Ser 450 455 460 Asn Gly Asn Met Gly Ile Leu Trp Glu Ser Ser Val Thr Lys Ile Leu 470 475 Leu Ala Met Ala Ile Met Val Ile Val Val Pro Pro Val Leu Arg Trp 485 490 Ile Arg Arg Gln His Lys Pro Gln Pro Asp Ile Gly 500 505

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<210> 9793
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 9793
Ala Gly Arg Arg Val Thr Ala Arg Ser Val Arg Cys Gly Val Asp Leu
                            10
Ala Thr Gly Ser Cys Val Ser Pro Ser Trp Gly Ser Ser Arg Tyr Thr
                         25
                                          30
Lys Pro Leu Pro Ile Arg Gln Arg Ala Asp Cys Val Met Glu Leu Ile
 35
                    40
Phe Leu Gly Thr Ser Ala Gly Val Pro Thr Arg Ser Arg Asn Val Thr
50
                5.5
                                   60
Ala Ile Leu Leu Asp Leu Lys His Pro Thr Arg Gly Gly Leu Trp Leu
                                75
                7.0
Phe Asp Cys Gly Glu Gly Thr Gln His Gln Met Leu His Thr Ser Tyr
           85
                            90
His Pro Gly Lys Val Asp Lys Ile Phe Ile Thr His Leu His Gly Asp
        100 105
His Leu Phe Gly Leu Pro Gly Leu Leu Cys Ser Arg Ser Met Ala Gly
115 120
                                      125
Asn Ala Asn Pro Leu Thr Ile Tyr Gly Pro Ala Gly Ile Gln Glu Phe
130 135
                                   140
Val Glu Thr Thr Leu Arg Leu Ser Gly Ser Trp Thr Asp Tyr Pro Leu
145 150 155
Glu Val Val Glu Ile Gly Glu Gly Leu Val Phe Asp Asp Gly Asp Tyr
            165 170 175
Gln Val Arg Ala Tyr Pro Leu Asn His Pro Val Glu Cys Tyr Gly Tyr
         180
             185 190
Arg Val Glu Glu His Asp Lys Pro Gly Ala Leu Asn Ala Ala Ala Leu
                      200 205
Gln Ala Asp Gly Val Lys Pro Gly Pro Leu Phe Gln Arg Leu Lys His
                   215 220
Gly Glu Thr Val Thr Leu Glu Asp Gly Arg Val Ile Asn Gly Gln Asp
               230 235
Tyr Leu Ala Pro Pro Gln Pro Gly Lys Lys Leu Ala Ile Phe Gly Asp
            245
                            250 255
Thr Ala Pro Cys Pro Ser Ala Leu Arg Leu Ala Gly Gly Val Asp Val
         260
                         265
Met Val His Glu Ala Thr Leu Glu Ala Ala Met Glu Glu Lys Ala Asn
                      280
                                       285
Ser Arg Gly His Ser Ser Thr Arg Gln Ala Ala Gln Leu Ala Arg Glu
                   295
                                   300
Ala Gly Val Arg Lys Leu Ile Val Thr His Val Ser Ser Arg Tyr Asp
                310
                                315
Val Arg Gly Ala Glu Ser Leu Leu Ala Glu Cys Arg Glu Val Phe Pro
            325
                             330
Ala Cys Glu Leu Ala Glu Asp Phe Ala Gln Val Ser Val
         340
                          345
<210> 9794
<211> 248
<212> PRT
<213> Enterobacter cloacae
<400> 9794
Gly Val Lys Ala Pro Met Asn Ala Glu Lys Ser Pro Val Ala His Asn
1
         5
                            10
Val Asp His Glu Glu Ile Ala Lys Phe Glu Ala Val Ala Ser Arg Trp
```

```
Trp Asp Leu Glu Gly Glu Phe Lys Pro Leu His Arg Ile Asn Pro Leu
       35
                       40
Arg Leu Gly Tyr Ile Ala Glu Arg Ser Gly Gly Leu Phe Gly Lys Lys
Val Leu Asp Val Gly Cys Gly Gly Gly Ile Leu Ala Glu Ser Met Ala
Arg Glu Gly Ala Thr Val Thr Gly Leu Asp Met Gly Phe Glu Pro Leu
                              90
             8.5
Gln Val Ala Arg Leu His Ala Leu Glu Ser Gly Ile Gln Val Glu Tyr
          100
              105
                                 110
Val Gln Glu Thr Val Glu Glu His Ala Ala Lys His Ala His Gln Tyr
  115 120
                            125
Asp Val Val Thr Cys Met Glu Met Leu Glu His Val Pro Asp Pro Gln
        135 140
 130
Ser Val Val Ser Ala Cys Ala Asn Leu Val Lys Pro Gly Gly Gln Val
145 150 155
Phe Phe Ser Thr Ile Asn Arg Asn Gly Lys Ala Trp Leu Met Ala Val
       165 170 175
Val Gly Ala Glu Tyr Val Leu Arg Met Val Pro Lys Gly Thr His Asp
    180
              185 190
Val Lys Lys Phe Ile Lys Pro Ala Glu Leu Leu Gly Trp Val Asp Gln
195 200 205
Thr Trp Leu Lys Glu Gln His Met Thr Gly Leu His Tyr Asn Pro Leu
 210 215 220
Thr Asp Lys Phe Lys Leu Ala Pro Gly Val Asp Val Asn Tyr Met Leu
225 230
                                  235
His Thr Thr Ala Lys Asn Asp
              245
<210> 9795
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 9795
Lys Pro Leu Thr Ser Trp Arg Lys Ser Lys Ala Arg Ala Arg Gly Ser
                              10
Thr Lys Pro Leu Thr Arg Lys Ala Phe Cys Arg Ser Thr Pro Ile Lys
          20
                                             30
Lys Thr Trp Met Arg Ser Ser Ala Ser Arg Cys Thr Ser Thr Gly Lys
                     40
                                         4.5
Ala Cys Ala Ser Pro Leu Lys Leu Thr Ala Cys Val Thr Pro Arg Ser
 50
                    55
Leu Pro
65
<210> 9796
<211> 96
<212> PRT
<213> Enterobacter cloacae
<400> 9796
Cys Arg Pro Arg Pro Leu Arg Arg Ser Pro Thr Pro Leu Thr Val Leu
                               10
                                                15
Ser His Arg Ala Gly Thr Ser Ala Leu Lys Arg Arg Lys Thr Ala Cys
                           25
         20
                                            30
Cys Val Arg Trp Tyr Arg Ile Thr Lys Arg Trp Val Thr Thr Thr Ser
      35
                       40
Cys Cys Gly Lys Cys Gln Thr Thr Thr Ala Thr Ser Asn Trp Trp Val
                    55
```

Ser Cys Arg Ser Leu Ser Thr Ser Arg Ser Leu Pro Ile Leu Thr Thr

5345 Thr Arg Arg Ala Ser Arg Pro Ala Arg Tyr Arg Cys Ser Ser Cys <210> 9797 <211> 553 <212> PRT <213> Enterobacter cloacae <400> 9797 Met Leu Lys Asn Glu His Arg Gly Lys Ala Met Thr Ile His Asp Pro 1.0 Arg Tyr Ser Asp Val Ile Ile Ile Gly Gly Gly Ala Thr Gly Ala Gly 20 25 Ile Ala Arg Asp Cys Ala Leu Arg Gly Leu Ser Val Thr Leu Leu Glu 35 40 4.5 Arg His Asp Ile Ala Thr Gly Ala Thr Gly Arg Asn His Gly Leu Leu 50 55 60 His Ser Gly Ala Arg Tyr Ala Val Thr Asp Gly Glu Ser Ala Arg Glu 70 75 Cys Ile Ala Glu Asn Gln Ile Leu Lys Arg Ile Ala Arg His Cys Ile 85 90 Glu Pro Thr Asp Gly Leu Phe Ile Thr Leu Pro Glu Asp Asp Leu Ala 100 105 110 Phe Gln Ser Thr Phe Ile Thr Ala Cys Thr Ala Ala Gly Ile Gln Ala 115 120 125 Glu Ala Met Asp Pro Ala Leu Ala Arg Arg Leu Glu Pro Ser Val Asn 130 135 140 Pro Thr Leu Ile Gly Ala Val Lys Val Pro Asp Gly Thr Val Asp Pro 145 150 155 Phe Arg Leu Thr Ala Ala Asn Met Leu Asp Ala Arg Glu His Gly Ala 165 170 175 Gln Ile Leu Thr Gly His His Val Thr Gly Leu Ile Arg Glu Gly Asn 180 185 Thr Val Arg Gly Val Arg Val Phe Asp Ala Gln Tyr Asn Glu His Arg 195 200 205 Glu Leu Tyr Ala Ala Val Val Asn Ala Ala Gly Ile Trp Gly Gln 210 215 220 Arg Ile Ala Glu Tyr Ala Asp Leu Ser Val Arg Met Phe Pro Ala Lys 230 235 Gly Ser Leu Leu Ile Leu Asp His Arg Ile Asn Asn His Val Ile Asn 245 250 Arg Cys Arg Lys Pro Ser Asp Ala Asp Ile Leu Val Pro Gly Asp Thr 260 265 270 Ile Ser Leu Ile Gly Thr Thr Ser Met His Val Asp Tyr Ser Glu Ile 280 285 Asp Tyr Asn Arg Val Thr Ala Glu Glu Val Asp Ile Leu Leu Arg Glu 295 300 Gly Glu Lys Leu Ala Pro Val Met Ala Gln Thr Arg Ile Leu Arg Ala 310 315 320 Tyr Ala Gly Val Arg Pro Leu Val Ala Ser Asp Asn Asp Pro Ser Gly 325 330 335 Arg Asn Val Ser Arg Gly Ile Val Leu Leu Asp His Ala Glu Arg Asp 340 345 Gly Met Asp Gly Phe Ile Thr Ile Thr Gly Gly Lys Leu Met Thr Tyr 360 365 Arg Leu Met Ala Gln Trp Ala Thr Asp Ala Val Cys Arg Lys Leu Gly 375 380 Asn Thr Ala Pro Cys Val Thr Ala Glu Gln Ala Leu Pro Gly Ser Gln 390 395

Glm Ser Thr Glu Lys Thr Leu His Lys Ile Ile Ser Leu Pro Ala Pro

```
405
                             410
Leu Arg Gly Ser Ala Ile Tyr Arg His Gly Asp Arg Thr Pro Thr Trp
         420
                         425
Leu Gly Glu Gly Arg Leu Ser Arg Ser Leu Val Cys Glu Cys Glu Ala
      4.35
                      440
Val Thr Ala Gly Glu Val Gln Tyr Ala Val Glu Asn Leu Thr Val Asn
                   455
Asn Leu Leu Asp Leu Arg Arg Thr Arg Val Gly Met Gly Thr Cys
      470
                       475
Gln Gly Glu Leu Cys Ala Cys Arg Ala Ala Gly Leu Leu Gln Arg Phe
            485 490
His Ala Thr Thr Ser Thr Gln Ser Leu Ala Gln Leu Ser Asp Phe Leu
        500 505 510
Asn Glu Arg Trp Lys Gly Ile Gln Pro Val Ala Trp Gly Asp Ala Leu
    515
          520
                            525
Arg Glu Ser Glu Phe Thr Arg Trp Val Tyr Gln Gly Leu Cys Gly Leu
 530 535
Glu Lys Glu His Asn His Glu Ile
<210> 9798
<211> 440
<212> PRT
<213> Enterobacter cloacae
<400> 9798
Lys Ser Leu Arg His Arg Leu Gly Ser Gly Arg Val Arg Ser Arg Gly
                    10
Ala Gly Leu Arg Trp Arg Arg Leu Arg Arg His Arg Ala Ala Cys Arg
 20
                      25
Gly Ala Asp Tyr Pro Ala Gln Gly Glu Ser Thr Met Asn Asp Thr Arg
35
           40
Phe Glu Ser Cys Ile Lys Cys Thr Val Cys Thr Thr Val Cys Pro Val
50 55
                                   60
Ser Gly Val Asp Pro Arg Tyr Pro Gly Pro Lys Gln Ala Gly Pro Asp
      70
                    75
Gly Glu Arg Leu Arg Leu Lys Asp Gly Ala Leu Tyr Asp Glu Ala Leu
          85 90
Lys Tyr Cys Ile Asn Cys Lys Arg Cys Glu Val Ala Cys Pro Ser Asp
        100 105
                                          110
Val Lys Ile Gly Asp Ile Ile Gln Arg Ala Arg Ala Arg Tyr Ser Thr
      115 120
Gln Lys Pro Thr Leu Arg Asp Ala Ile Leu Ser His Thr Asp Leu Met
                  135
                                   140
Gly Ser Leu Ser Thr Pro Phe Ala Pro Val Val Asn Ala Ala Thr Ala
145
               150
                               155
Leu Lys Pro Val Arg Arg Leu Leu Asp Ala Thr Leu Lys Ile Asp His
            165
                            170 175
His Arg Ser Leu Pro Lys Tyr Ser His Gly Thr Phe Arg Arg Trp Tyr
         180
                         185
                                         190
Lys Ser Val Ala Ala Glu Gln Ala Gln Phe Ala Glu Gln Val Ala Phe
                      200
Phe His Gly Cys Tyr Val Asn Tyr Asn His Pro Gln Leu Gly Lys Asp
                  215
Leu Leu Lys Val Leu Asn Ala Met Gly Thr Gly Val Gln Leu Leu Ser
               230
                                235
Lys Glu Lys Cys Cys Gly Val Pro Leu Ile Ala Asn Gly Phe Ile Asp
            245
                            250
Lys Ala Arg Lys Gln Ala Ser Ser Asn Val Thr Ser Leu Arg Glu Ala
```

Ile Val Asp Lys Gly Ile Pro Val Leu Ala Thr Ser Ser Thr Cys Thr

```
280
                                      285
Phe Thr Leu Arg Asp Glu Tyr Pro His Leu Leu Asp Val Asp Asn Thr
  290
                 295
                           300
Gly Leu Arg Glu His Ile Glu Leu Ala Thr Arg Phe Leu Trp Arg Lys
                310
                     315
Leu Asp Ser Gly Gln Thr Leu Pro Leu Gly Lys Leu Pro Leu Lys Val
            325 330 335
Val Tyr His Thr Pro Cys His Met Glu Lys Met Gly Trp Ser Ile Tyr
         340 345 350
Thr Leu Glu Leu Leu Arg Leu Ile Pro Gly Leu Glu Leu Thr Val Leu
   355 360 365
Asp Ser Arg Cys Cys Gly Ile Ala Gly Thr Tyr Gly Phe Lys Arg Glu
 370 375 380
Asn Tyr Pro Thr Ser Gln Ala Ile Gly Ala Pro Leu Phe Arg Gln Ile
    390 395
Glu Glu Ser Gly Ala Asp Ile Val Val Thr Asp Cys Glu Thr Cys Lys
       405 410 415
Trp Gln Ile Glu Met Ser Thr Ser Lys Arg Cys Glu His Pro Ile Thr
       420 425
Leu Leu Ala Lys Ala Leu Ala
     435
<210> 9799
<211> 344
<212> PRT
<213> Enterobacter cloacae
<400> 9799
Lys Ala Ser Ile Ser Leu Glu Gly Arg Met Asp Asn Phe Gln Lys Asp
                            1.0
Ile Asp Asp Arg Ala Asn Leu Thr Leu Ser Asn Arg Phe Glu Leu Leu
                         25
                                       3.0
Leu Phe Arg Leu Gly Thr Ser Leu Asn Glu Asn Lys Ser Glu Leu Phe
                    40
                                      45
Gly Ile Asn Val Phe Lys Leu Arg Glu Ile Val Pro Met Pro Thr Phe
50 55
                                  60
Thr Lys Pro Ala Gly Met Lys Ser Pro Leu Met Gly Met Val Asn Ile
                               75
              70
Arg Asp Gln Val Ile Pro Val Ile Asp Leu Ala Ala Val Ala Gly Cys
           85
                             90
Lys Pro Ala Thr Gly Leu Asn Ile Leu Leu Ile Thr Glu Tyr Ala Arg
                         105
                                         110
Ser Val Gln Ala Phe Ala Val Glu Ser Val Glu Asn Ile Met Arg Leu
     115 120
Asp Trp Lys Gln Val His Ala Ala Glu Thr Ala Val Ser Gly Arg Tyr
                   135
                                   140
Ile Thr Ser Ile Ala Cys Leu Asp Glu Lys Thr Asp Thr Asn Asp Leu
               150
                                155
Ala Met Val Leu Asp Val Glu Gln Ile Leu Tyr Asp Ile Thr Pro Ala
            165
                            170
Asn His Asp Leu His Ala Thr His Leu Glu Thr Thr Lys Phe Asn Ile
        180
                         185
                                        190
Lys Pro Gly Ser Val Ala Ile Val Ala Glu Asp Ser Lys Val Ala Arg
 195
                      200 205
Ser Met Leu Glu Lys Gly Leu Gln Ala Met Glu Ile Pro Ala Gln Leu
                  215
His Ile Thr Gly Lys Asp Ala Trp Glu Lys Ile Thr Gln Leu Ala Ala
              230
                               235
Gln Ala Gln Ala Glu Gly Val Pro Val Thr Asp Lys Ile Ala Leu Val
            245
                            250
Leu Thr Asp Leu Glu Met Pro Glu Met Asp Gly Phe Thr Leu Thr Arg
```

```
265
Lys Ile Lys Thr Asp Pro Val Leu Lys Asp Ile Pro Val Val Ile His
                         280
                                           285
Ser Ser Leu Ser Gly Asn Ala Asn Glu Asp His Ile Arg Lys Val Lys
                                        300
                     295
Ala Asp Gly Tyr Val Ala Lys Phe Glu Leu Asn Glu Leu Ser Ser Val
305 310
                                  315
Ile Glu Glu Val Leu Asp Arg Ser Met Lys Lys Ile Glu Gly Pro Leu
          325
                                 330
Ile Ser Arg Lys Gln Leu Ala
          340
<210> 9800
<211> 182
<212> PRT
<213> Enterobacter cloacae
<400> 9800
Tyr Val Ser Trp Asn Asn Trp Gly Ala Ser Cys Ile Thr Pro Asp Glu
                                10
                                                15
Arg Phe Ala Ser Gln Glu Phe Asp Leu Phe Leu Thr Asp Asn Pro Ser
 20
                            25
Asn Leu Thr Ala Ser Gly Leu Leu Leu Ser Asp Asp Glu Pro Gly Val
                         40
                                         4.5
Arg Lys Ile Gly Pro Gly Gln Leu Arg Val Asn Phe Asn Met Ser Asn
              5.5
Ala Met Gln Glu Ala Val Leu Gln Leu Ile Glu Glu Asn Leu Ala Gln
                 7.0
                                    75
Glu Glu Ile Leu Glu Ser Pro Leu Gly Gly Asp Glu Asn Ala Glu Leu
              8.5
                                 90
His Ala Ser Gly Tyr Tyr Ser Leu Phe Val Asp Thr Val Pro Asp Asp
          100
                   105
                                               110
Val Lys Arg Leu Tyr Thr Glu Ser Ala Ala Gln Asp Phe Ala Ala Leu
                         120 125
 115
Ala Gln Thr Ala His Arg Leu Lys Gly Val Phe Ala Met Leu Asn Leu
 130
                     135
                                     140
Val Pro Gly Lys Gln Leu Cys Glu Thr Leu Glu His Leu Ile Arg Glu
                  150
                                    1.55
145
Lys Asp Ala Ser Gly Ile Glu Lys Tyr Ile Ser Asp Ile Asp Ala Tyr
              165
                                 170
Val Lys Ser Leu Leu
           180
<210> 9801
<211> 351
<212> PRT
<213> Enterobacter cloacae
<400> 9801
Leu Gly Trp Val Phe Thr Phe Arg Arg Thr Phe Thr Val Ala Val Leu
Gly Asp Gly Gln Asp Cys Ala Phe Ala Thr Arg Asn Asp Gln Gly Asn
                             25
           20
Asn Gly Val Phe Thr Arg Gln Leu Asp Thr Thr His Ala Gly Arg Arg
Thr Thr His Cys Ala His Gly Val Leu Phe Lys Ala His His Phe Thr
                   55
Gly Gly Arg Glu Glu His His Phe Ile Arg Thr Gly Arg Gln Ile His
                 7.0
                                     75
```

Ala Asp Gln Phe Val Ala Phe Val Gln Val His Arg Asp Asn Pro Gly 90

Arg Thr Trp Thr Ala Glu Leu Gly Gln Cys Gly Phe Leu His Gly Thr 105 100 Ala Arg Gly Arg His Lys Asp Val His Ala Leu Phe Val Leu Ala Tyr 115 120 Arg Gln Tyr Gly Gly Asp Thr Phe Val Arg Phe Gln Arg Gln Gln Val 135 140 Asp Asp Trp Thr Ser Thr Arg Ala Thr Ala Cys Phe Arg Gln Leu Ile 145 150 155 Asp Phe His Pro Val Gln Thr Ala Pro Ala Gly Glu Ala Glu Asp Arg 165 170 175 Val Met Gly Val Arg His Gln Gln Thr Ile Asn Glu Val Phe Phe Phe 180 185 190 Asn Thr Arg Arg Arg Phe Ala Phe Thr Ala Pro Thr Leu Ser Phe Val 195 200 205 Val Gly Gln Arg Leu Ile Leu His Val Ala Leu Val Arg Gln Arg His 210 215 220 Tyr His Val Phe Ala Val Asp Gln Ile Phe Asn Val Asp Ile Arg Ala 225 230 235 Val Gly Arg Asp Phe Gly Ala Thr Leu Ile Ala Glu Leu Ile Ala Asn 245 250 255 Gln Leu Gln Leu Phe Thr Asp His Phe His Gln Ala Leu Cys Ala Thr 260 265 270 Gln Asp Met Gln Gln Leu Gly Asn Leu Leu Gln Gln Leu Phe Val Leu 275 280 Val Glu Gln Phe Phe Met Leu Lys Ala Gly Gln Phe Leu Gln Thr Gln 290 295 Ile Gln Asn Arg Leu Gly Leu Leu Phe Ser Gln Val Val Leu Thr Val 310 315 320 Thr His Ala Glu Phe Arg Leu Gln Pro Leu Arg Thr Arg Ser Val Ile 325 330 335 Ala Gly Thr Phe Gln His Arg Arg His Val Ala Gln Ile Pro 345

<210> 9802 <211> 365 <212> PRT

<213> Enterobacter cloacae

<400> 9802

Thr Arg Asn Gln Arg Arg Leu Arg Phe Cys Trp Arg Arg Arg Thr Ala 1.0 Asp Gln Leu Asp Asp Arg Val Asp Val Arg Gln Arg Asn Gly Gln Cys 20 25 Phe Lys Asp Met Gly Thr Val Ala Arg Phe Ala Gln Phe Glu Asp Gly 4.0 Thr Ala Ser His His Phe Thr Ala Val Thr His Glu Arg Ala Gln Asp 50 55 Leu Phe Gln Val His Asp Leu Arg Leu Ala Met Val Gln Arg Asn His 7.0 75 Val Asp Thr Glu Gly Asp Leu Lys Leu Ser Leu Gly Val Lys Val Val 85 90 Gln His Asn Phe Thr His Arg Val Ala Leu Asp Phe Asn His Asp Ala 105 110 His Thr Val Phe Val Arg Leu Val Thr Gln Arg Ala Asp Ala Phe Asn 125 120 115 Ala Phe Phe Phe Tyr Gln Leu Gly Asp Phe Phe Asn Gln Ser Arg Phe 135 140 Val His Leu Ile Arg Asp Leu Val Asn Asn Asn Gly Phe Thr Ala Gly 160 150 155 Phe Gly Val Arg Phe His Phe Gly Ala Gly Thr Asp Val Asn Leu Ala 165 170

```
Ala Thr Gly Thr Val Arg Phe Phe Asn Thr Ala Thr Ala Ile Asp Asp
         180
                         185
Cys Arg Arg Arg Glu Val Arg Ala Arg Asp Val Phe His Gln Pro Phe
      195
                      200
Asn Ala Asp Val Phe Ile Val Asn Val Gly Gln Ala Ala Val Asp His
                  215
Phe Arg Asp Ile Val Arg Arg Asn Val Gly Cys His Thr Asp Gly Asp
               230
                               235
Thr Gly Arg Thr Val His Gln Gln Val Trp Asp Leu Arg Trp His Asp
            245
                            250
Val Arg Asn Phe Phe Arg Ala Val Val Ile Asn Glu Ile Asn Arg
      260 265
Leu Phe Phe Gln Val Ser His Gln Leu Met Gly Asn Leu Arg Gln Thr
     275 280
                           285
Asp Phe Arg Ile Thr His Cys Arg Gly Gly Val Ala Val Asp Arg Thr
 290 295
                                   300
Lys Val Thr Leu Thr Ile Tyr Gln His Val Thr Gln Arg Glu Gly Leu
               310
                               315
Arg His Thr Asp Asn Gly Ala Val His Arg Asp Ile Thr Met Arg Met
           325 330 335
Val Phe Thr Asp Tyr Val Thr Asn Asp Thr Gly Arg Phe Phe Val Gly
 340 345
Phe Ile Pro Val Ile Ala Gln Tyr Val His Gly Val
                      360
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<210> 9803 <211> 97 <212> PRT

<213> Enterobacter cloacae

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<210> 9804
<211> 443
<212> PRT
<213> Enterobacter cloacae
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Ser Leu Asp Leu Leu Gly Ala Leu Ser Phe Ala Asp Leu Pro Pro Glu
          8.5
                           90
His Pro Tyr Arg Leu Thr Gly Ala Glu Asn Met Ala Arg Phe Ala Cys
         100
                      105
Glu Thr Glu His Leu Leu Thr Ala Cys Gly Ala Arg Met Gln Gly Asp
      115
             120
Ala Glu Gln Asn His Gln Arg Val Thr Pro Leu Gly Thr Leu Arg Ala
 130 135 140
Ala Trp Leu Ser Pro Glu Glu Val Pro Val Ala Pro Ile Ala Ala Glu
    150 155
Arg Val Arg Val Val Gly Ile Ser Gly Phe Leu Asp Phe Gln Pro His
         165 170 175
Leu Ala Ala Ser Leu Arg Gin Gln Gly Val Gln Val Asp Thr Ala
      180 185 190
Glu Ile Asp Leu Pro Glu Leu Asp Val Leu Arg Glu Asn Pro Ser Glu
 195 200 205
Phe Arg Ala Val Asn Ile Ala Arg Leu Leu Asp Asn Glu Ser Tyr Trp
 210 215 220
Pro Gln Leu Tyr Ala Ala Leu Gln Pro Leu Gly Glu Thr Cys Asp Ala
225 230 235
Leu Phe Met Pro Ala Cys Phe Gly Leu Thr Asp Asn Arg Leu Trp Arg 245 250 255
Trp Leu Ser Ala Arg Leu Pro Cys Thr Leu Gly Leu Leu Pro Thr Leu
 260 265 270
Pro Pro Ser Val Pro Gly Ile Arg Leu His Thr Gln Leu Gln Arg Gln
 275 280 285
Phe Val Ala Gln Gly Gly Val Trp Met Ala Gly Asp Glu Val Lys Lys
 290 295
                                 300
Ile Thr Leu Val Glu Gly Ala Val Ser Asp Ile Trp Thr Arg Asn His
305 310
                              315
Gly Asp Ile Pro Leu Arg Ala Arg Tyr Thr Val Leu Ala Ser Gly Ser
            325
                          330
                                          335
Phe Phe Ser Asn Gly Leu Leu Ser Ser Arg Asp Gly Val Arg Glu Ala
        340
               345
                                       350
Ile Leu Gly Leu Asp Val Arg Gln Ser Ala Ser Arg Ala Asp Trp Tyr
     355 360
                                    365
Gln Ser Asp Phe Phe Thr Pro Gln Pro Trp Gln Gln Phe Gly Val Ile
 370 375
                                 380
Val Asp Ser Gln Leu Arg Pro Arg Leu Gly Gly Glu Pro Val Glu Asn
                             395
385 390
Leu Tyr Ala Ile Gly Ser Val Leu Gly Gly Tyr Asp Pro Val Ala Gln
           405 410
Gly Cys Gly Gly Val Cys Ala Val Thr Ala Leu His Val Ala Glu
            425
        420
                                       430
Gln Ile Ile Gln Arg Arg Glu Arg Ala Gln
                     440
<210> 9805
<211> 328
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<212> PRT

<213> Enterobacter cloacae

<400> 9805

Thr Met Lys Lys Gln Leu Leu Ser Tnr Leu Ala Ala Ser Val Leu Leu 1 5 10 15 Leu Ser Ala Ser Val Val Gln Ala Gln Asp Ala Pro Ser Arg Thr Glu 25 30 25 30 25 40 Leu Fro Ala Lys Pro Gly Gly Gly Phe Asp Leu Thr Cys Lys 35 40 Leu Ile Gln Val Ser Leu Leu Glu Thr Lys Ala Ile Glu Lys Pro Met

Arg Val Thr Tyr Met Pro Gly Gly Val Gly Ala Val Ala Tyr Asn Ala 70 Ile Val Ala Gln Arg Pro Ala Glu Ala Gly Thr Val Val Ala Phe Ser 85 90 Gly Gly Ser Leu Leu Asn Leu Ser Gln Gly Lys Phe Gly Arg Tyr Asp 100 105 110 Val Asn Asp Val Arg Trp Leu Ala Thr Val Gly Thr Asp Tyr Gly Met 115 120 Ile Ala Val Arg Ala Asp Ser Pro Trp Lys Ser Leu Lys Asp Leu Leu 135 140 Thr Ala Met Glu Lys Asp Pro Asn Ser Val Val Ile Gly Ala Gly Ala 145 150 155 Ser Ile Gly Ser Gln Asp Trp Met Lys Ala Ala Leu Leu Ala Gln Gln 165 170 175 Ala Lys Val Asp Pro His Lys Met Arg Tyr Val Ala Phe Glu Gly Gly 180 185 190 Gly Glu Pro Val Thr Ala Leu Met Gly Asn His Val Gln Ala Val Ser 195 200 Gly Asp Leu Ser Glu Met Val Pro Tyr Leu Ser Gly Asp Lys Ile Arg 210 215 220 Val Leu Ala Val Phe Ser Glu Asn Arg Leu Pro Gly Gln Leu Ala Asp 225 230 235 Val Pro Thr Ala Lys Glu Gln Gly Tyr Asn Leu Val Trp Pro Ile Ile 245 250 Arg Gly Phe Phe Val Gly Pro Lys Val Thr Asp Ala Glu Tyr Gln Trp 260 265 270 Trp Val Asp Thr Phe Ala Lys Leu Gln Gln Thr Glu Glu Phe Lys Lys 275 280 Gln Arg Asp Leu Arg Gly Leu Phe Glu Phe Asn Leu Asn Gly Lys Gln 295 300 Leu Asp Glu Tyr Val Lys Lys Gln Val Asn Asp Tyr Arg Val Gln Ala 305 310 315 Lys Ala Phe Gly Leu Ala Lys

<210> 9806 <211> 256 <212> PRT

<213> Enterobacter cloacae

325

<400> 9806 Arg Tyr Gln Asp Ser Arg Gln Arg Arg Lys Gly Arg Val Lys Lys Val Ser Glu Val Leu His Trp Thr Pro Asp His Ala Glu His Lys Gly Lys 20 Met Met Lys Ser Asp Tyr Ala Lys Gln Ile Glu Leu Ile Ser Gly Pro 35 40 Leu Glu Ala Ala Met Glu Ala Leu Ala Gly Thr Leu Ser Ala Asn Gln 55 Glu Ile Val Leu His Asn Leu Thr Thr Pro Glu Gln Ser Val Val Lys 70 Ile Ile Asn Gly His Val Ser Gly Arg Lys Ala Gly Asp Asn Leu Leu 90 Ser Gly Pro Glu Lys Asp Lys Gly Phe Ala Leu Leu Leu Lys Asn Asn 100 105 Lys Asp Ser Thr Pro Val Thr Val Lys Asn Tyr Lys Thr Thr Thr Ala 115 120 Ser Gly Arg Ile Leu Asn Ser Ala Ser Thr Ile Tyr Tyr Ser Glu Glu 135

Gly Val Pro Leu Met Ala Phe Cys Ile Asn Ile Asp Thr Ser Pro Tyr

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150
Glu Gln Met Arg Lys Cys Leu Asp Ala Ile Thr Gly Ser Pro Leu Ala
              165
                                170
Asp Ser Asp Pro Gln Asp Met Asn Leu Gly Gly Ile Ile Glu Gln Ser
          180
                          185
Ile Gln Glu Ile Ile Asp Lys His Ser Val Pro Gly Lys Lys Val Gln
       195
            200
                                  205
Lys Ala Gln Arg Leu Lys Ile Val Ala Glu Met His Ala Lys Gly Ile
 210 215
                              220
Phe Lys Met Arg Gly Gly Val Gln His Ala Ala Gln Ala Leu Gly Val
225 230 235
Thr Arg Tyr Thr Val Tyr Asn Asp Leu Glu Val Met Gly Glu Lys
                                250
               245
<210> 9807
<211> 116
<212> PRT
<213> Enterobacter cloacae
<400> 9807
Asp Leu Leu Met Thr Leu Thr Lys Ser Phe Ala Ala Leu Met Val Ala
                                 10
Val Ser Ile Glu Val Ile Ala Thr Thr Leu Leu Ser Leu Ser Asn Ser
 20
                             25
Phe Gln Arg Pro Val Val Gly Leu Ser Ala Ile Ile Ser Tyr Gly Leu
                         40
Ser Tyr Tyr Phe Leu Ser Ile Ala Leu Arg Arg Ile His Leu Gly Val
                     5.5
                                        60
Ala Tyr Ala Ile Trp Ser Ala Val Gly Leu Phe Ser Met Thr Val Ile
                  7.0
                                    75
Gln Thr Arg Phe Phe Asp Tyr Ile Val Ser Gln Arg Ala Trp Met Gly
            8.5
                             90
Leu Gly Met Val Ile Ala Gly Thr Ile Thr Leu Asn Leu Ala Ile Lys
Gln Asn Lys
      115
<210> 9808
<211> 821
<212> PRT
<213> Enterobacter cloacae
<400> 9808
Lys Ala Ala Phe Trp Lys Arg Ser Glu Leu Ala Ala Ser Ser Pro Gly
                                10
Trp Arg Ser Ser Pro Phe Asn Arg Arg Asn Gly Met Thr Thr Glu Met
          20
                             25
Leu Ser Leu Arg Val Val Gln Leu Arg Glu Ala Tyr Leu Gln Ala Lys
   35
                         4.0
Pro Phe Val Ser Ala His Arg Ala Val Ser Val Thr Gln Val Tyr Lys
                     55
Asp Asn Pro Gly Met Asn Asn Ser Leu Leu Arg Ala Leu Ala Phe Arg
                  7.0
65
                                     75
Arg Ala Cys Glu Thr Ala Pro Leu His Val Ala Gln Asn Glu Leu Ile
              85
Val Ser His Pro Ala Gly Gly Ala Arg Gly Gly Glu Val Ser Pro Glu
          100
Ile Ser Trp Arg Trp Leu Ala Asp Glu Leu Glu Thr Leu Pro Ala Arg
       115
                         120
                                            125
Ala Gln Asp Pro Tyr Gln Ile Asp Glu Glu Thr Lys Arg Leu Leu Arg
   130
                      135
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Glu Glu Val Phe Pro Tyr Trp Gln Gly Arg Ser Leu Asp Glu Met Ala 145 150 155 Gln Thr Gln Leu Lys Thr His Gly Leu Trp His Trp Cys His Asp Asp 165 170 Gly Ile Cys Asp Val Thr Ile Lys Thr Gln Asn Gly Gly Gly Asp Ser 180 185 Cys Pro Gly Tyr Asp Asn Ile Leu Leu Thr Lys Gly Ile Lys Gly Ile 200 205 195 Arg Glu Glu Ala Ala Ala Leu Leu Leu Ala Leu Asp Pro Ala Thr Pro 210 215 220 Glu Gly Cys Asp Ala Phe Asn Phe Tyr Thr Ala Met Leu His Thr Cys 230 235 240 Asp Gly Val Val Thr Tyr Ala Arg Arg Tyr Ala His Tyr Leu Asn Ala 245 250 255 Leu Ala Glu Lys Glu Gly Asp Pro Leu Arg Arg Asp Glu Leu Leu Gln 260 265 270 Leu Ser Gly Ile Cys Ser Arg Val Pro Glu Gln Pro Pro Gln His Phe 275 280 285 His Asp Ala Leu Gln Ala Ile Trp Phe Val His Ser Leu Phe Met Leu 290 295 300 Glu Glu Asn Gln Thr Gly Ile Ser Leu Gly Arg Val Asp Gln Tyr Leu 305 310 315 Trp Pro Leu Leu Glu Arg Asp Leu His Asp Gly Thr Leu Asn Leu Gln 325 330 335 Gln Ala Glu Glu Leu Leu Cys Cys Trp Leu Ile Lys Met Ala Glu Thr 340 345 Leu Trp Ile Cys Ser Glu Ser Thr Ala Met Tyr Phe Ala Gly Tyr Gln 355 360 365 Pro Phe Ile Asn Leu Val Val Gly Gly Gln Lys Arg Glu Gly Gly Asp 370 375 380 Ala Thr Asn Pro Leu Thr Leu Met Ile Met Asp Cys Ser Ala Arg Leu 390 395 Lys Ile Tyr Gln Pro Gly Leu Ala Val Arg Ile His Asn Gln Ser Pro 405 410 415 Gln Pro Phe Met Arg Lys Val Val Asp Val Val Arg Ser Gly Met Gly 425 430 Phe Pro Ala Cys His Phe Asp Asp Ala His Ile Arg Met Met Leu His 435 440 445 Lys Gly Phe Ser Tyr Glu Asp Ala Arg Asp Tyr Cys Leu Met Gly Cys 450 455 460 Val Glu Pro Gln Lys Ser Gly Lys Met Tyr Gln Trp Thr Ser Val Gly 465 470 475 Tyr Thr Thr Phe Thr Ala Ala Ile Glu Leu Ala Leu His Asn Gly Arg 485 490 495 Thr Gln Asn Gly Lys Gln Cys Gly Pro Ala Thr Gly Asp Val Ser Gln 500 505 510 Phe Ser Arg Tyr Glu Glu Val Glu Ser Ala Val Arg Thr Gln Leu Ser 515 520 Ala Ile Val Arg Lys Ala Ala Glu Ala Thr Leu Ile Val Gln Lys Leu 535 540 His Ala Glu His Ala Arg Lys Pro Leu Met Ser Cys Leu Ile Glu Gly 550 555 Cys Ile Ala Thr Ala Lys Asp Val Thr Gln Gly Gly Ala Arg Leu Asn 565 570 Ala Gly Pro Gly Leu Ile Trp Thr Gly Leu Ala Asp Cys Val Asn Ser 580 585 590 Leu Met Ala Ile Arg Thr Leu Val Phe Asp Thr Ala Arg Phe Thr Leu 595 600 605 Arg Gln Leu Val Glu Ala Leu Glu His Asn Phe Val Gly Tyr Gln Glu 615 Ile Leu Thr Ala Cys Gln Arg Ala Pro Lys Tyr Gly Asn Asp Ile Arg

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630
Glu Val Asp Asp Ile Ala Arg Glu Leu Val Arg Phe Leu Glu Gln Glu
            645
                       650
His Arg Gln Tyr Arg Met Leu Tyr Ala Pro Phe Ala Phe Gly Thr Leu
        660
                       665
                                 670
Ser Ile Ser Asn Asn Thr Pro Phe Gly Leu Ile Thr Gly Ala Leu Pro
      675
          680
                           685
Ser Gly Arg Leu Ala Gly Lys Pro Leu Ala Asp Gly Ile Ser Pro Ala
       695 700
Gln Gln Thr Asp Tyr Leu Gly Pro Thr Ala Ile Ile Asn Ser Val Ser
705 710 715
Arg Ile Asn Val Glu Glu Met Asp Ile Gly Met Val His Asn Ile Lys
         725 730 735
Leu Met Phe Gly Met Leu Glu Thr Pro Glu Gly Gln Asn Ser Leu Ile
       740 745 750
His Leu Leu Arg Thr Ala Ser Ile Leu Gly Asn Ala Gln Leu Gln Phe
 755 760 765
Ser Tyr Val Asp Asp Glu Thr Leu Arg Lys Ala Gln Lys His Pro Ala
 770 775
Asp Tyr Arg Asn Leu Met Ile Arg Val Ala Gly Tyr Ser Ala Phe Phe
785 790 795
Val Glu Leu Ser Lys Glu Val Gln Asp Glu Ile Ile Ser Arg Thr Thr
Gln Arg His Phe
<210> 9809
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 9809
Gly Ile Gly Ile Lys Met Lys Lys Leu Val Ala Val Ile Ser Leu Ala
                           10
Phe Val Thr Leu Thr Val Ala Gly Cys Ser Ser Asp Tyr Val Leu Gln
20
                                          30
Lys Lys Asn Gly Glu Met Ile Ile Thr His Gly Lys Pro Glu Val Asp
                      4.0
                                     4.5
Asp Asp Asn Gly Leu Ile Thr Tyr Glu Asp Val Ala Gly Asn Glu His
 50 55
Ala Ile Asn Arg Asp Gln Ile Ile Gln Met Ile Glu Lys
<210> 9810
<211> 383
<212> PRT
<213> Enterobacter cloacae
<400> 9810
Arg Glu Gly Val Ser Ala Gly Ala Glu Arg Gly Tyr Gly Leu Val Arg
                            10
Ser Arg Tyr Glu Val Ala Phe Pro Pro Ser Pro Ser Pro Val Gly Glu
         20
                                         30
Gly Val Val Arg Ala Tyr Phe Gln Asp Asn Asp Phe Pro Met Pro His
     35
                     4 0
Leu Ser Thr Arg Val Leu Gln Gly Leu Leu Thr Leu Leu Leu Thr Leu
                55
Phe Gly Leu Leu Val Thr Phe Ala Leu Ser Ala Phe Ser Pro Val
             70
                          75
```

Asp Arg Val Leu Gln Ile Val Gly Asp His Ala Ser Gln Ser Thr Tyr

3.0

95

<210> 9811 <211> 322

```
Asp Gln Val Arg His Gln Leu Gly Leu Asp Arg Pro Leu Pro Val Gln
            105
        100
Phe Trp His Tyr Leu Gln Asn Leu Ala His Gly Asp Leu Gly Thr Ala
                     120
Ser Ala Thr Gly Gln Pro Val Leu Gln Asp Leu Leu His Ala Phe Pro
           135
                                 140
Ala Thr Leu Glu Leu Ala Thr Leu Ala Leu Ile Ile Gly Thr Val Leu
              150
                             155
Gly Val Ile Ala Gly Val Leu Cys Ala Arg Tyr Ala Gly Ser Pro Leu
           165 170
                                         175
Asp Leu Ala Ile Arg Thr Leu Thr Leu Leu Gly Asn Ser Val Pro Ile
     180 185 190
Phe Trp Leu Gly Leu Leu Met Leu Ala Leu Phe Tyr Ala Lys Leu Gln
 195 200 205
Trp Ser Ala Gly Pro Gly Arg Leu Asp Asp Ile Trp Gln Phe Thr Val
 210 215 220
Glu Pro Arg Thr Gly Phe Ala Leu Val Asp Thr Trp Leu Ser Gly Asp 225 230 235 240
Arg Glu Ala Phe Arg Asn Ala Ile Ser His Leu Val Leu Pro Val Leu
      245 250 255
Leu Leu Ala Tyr Tyr Ser Leu Ala Ser Ile Thr Arg Leu Thr Arg Ser
 260 265 270
Ala Cys Leu Ser Glu Met Asn Lys Glu Tyr Ile Leu Leu Ala Arg Ala
275 280 285
Lys Gly Ala Gly Glu Met Thr Ile Leu Leu Arg His Val Leu Pro Asn
290 295 300
Ile Arg Ser Thr Leu Leu Thr Val Ile Ala Leu Ala Tyr Thr Ser Met
305 310
                             315
Leu Glu Gly Ala Val Leu Thr Glu Thr Val Phe Ser Trp Pro Gly Ile
           325 330 335
Gly Arg Tyr Leu Thr Thr Ala Leu Phe Ala Gly Asp Thr Thr Ala Val
        340
                       345
                                      350
Met Gly Gly Thr Leu Leu Ile Gly Val Cys Phe Val Leu Ile Asn Asn
355 360 365
Leu Thr Asp Leu Leu Val Arg Ala Thr Asp Pro Arg Val Arg
```

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<212> PRT
<213> Enterobacter cloacae
<400> 9811
Leu Pro Thr Ala Cys Arg Ser Phe Leu Thr Ser Gly Gly Leu Pro Pro
                                10
Phe Gln Ala Gly Arg Phe Cys Leu Pro Ala Trp Pro Leu Thr Cys Trp
                          25
Ala Met Ala Cys Ala Thr Tyr Trp Ser His Ser Met Thr Glu His Arg
35
                              4.5
                      40
Val Ile Val Asp Ala Leu Asn Ile Asp Tyr Pro Ala Ala Arg Val Val
                   5.5
Asn Asn Leu Ser Phe Thr Leu Gly Lys Glu Arg Leu Ala Leu Val Gly
                                   75
               70
Glu Ser Gly Ser Gly Lys Ser Met Ser Ala Arg Ala Leu Met Gly Leu
            85
                                 90
Val Arg Lys Pro Gly Ile Val Ser Ala Lys Arg Leu Asn Val Leu Gly
```

105 Asn Asp Leu Leu Thr Leu Asn Ser Arg Arg Trp Gln Ala Leu Arg Gly 120

Asn Gly Ile Ala Met Val Leu Gln Asp Pro Arg Tyr Ala Leu Asn Pro

135

125

140

100

130

Val Lys Thr Val Ala Ala Gln Leu Asp Glu Ala Leu Thr Leu His Gln 145 150 155 Arg Leu Pro Arg Ala Glu Arg Leu Ala Arg Ile His Asp Ile Ile Arg 170 165 Ala Val Gly Leu Asn Glu His Val Leu Gln Arg Tyr Pro Gly Glu Leu 180 185 190 Ser Gly Gly Met Gly Gln Arg Val Met Ile Ala Ile Ala Leu Val Asn 200 205 Asn Pro Gln Val Leu Ile Ala Asp Glu Pro Thr Ser Ala Leu Asp Ala 210 215 220 Arg Leu Arg Asn Gln Ile Leu Glu Leu Leu Val Gln Gln Cys Glu Ala 225 230 235 240 Arg Gln Met Ala Met Leu Leu Ile Ser His Asp Leu Pro Leu Val Ala 245 250 255 Glu His Cys Asp Arg Val Leu Val Met Tyr Gln Gly Glu Asn Val Asp 260 265 270 Glu Met Ala Ala Ser Gln Leu Pro Gln Ala Thr His Pro Tyr Thr Arg 275 280 285 Thr Leu Trp Thr Cys Arg Pro Asn Ala Gly Thr Phe Gly Lys Met Leu 290 295 300 Pro Thr Leu Asp Arg Ser Gln Pro Trp Lys Glu Asp Asp Asn Gly Thr 310 315 Arg

<210> 9812 <211> 298 <212> PRT

<213> Enterobacter cloacae

<400> 9812 Asp Val Phe Asp Met Glu Leu Arg Tyr Leu Arg Tyr Phe Val Ala Val Ala Arg Glu Arg His Phe Thr Arg Ala Ala Lys Ala Leu Gly Ile Ser 25 Gln Pro Pro Leu Ser Gln Gln Ile Lys Arg Leu Glu Glu Glu Val Gly 40 4.5 Thr Pro Leu Phe Arg Arg Leu Thr Arg Gly Val Glu Leu Thr Glu Ala Gly Glu Ala Phe Tyr Glu Asp Ala Cys Lys Ile Leu Ala Leu Ser Asp 70 7.5 Ala Ala Leu Glu Lys Ala Arg Gly Ile Ala Arg Gly Leu Asn Gly Ser 85 90 Leu Ser Ile Gly Ile Thr Ser Ser Asp Ala Phe His Pro Lys Ile Phe 100 105 110 Ala Leu Ile Arg Gln Phe Gln Val Gln Asn Met Ala Val Gln Val His 115 120 125 Gln Val Glu Ala Asn Met Ser Ser Leu Thr Thr Met Leu Ala Glu Gly 130 135 140 Glu Leu Asp Ile Ala Phe Val Arg Leu Pro Cys Glu Ser Ser Lys Val 155 150 160 Phe Glu Leu Lys Ile Leu Asp Arg Glu Pro Met Met Val Ala Leu His 170 175 165 Arg Asp His Pro Leu Ala Ala Cys Gly Asp Leu Ala Leu Glu Glu Leu 180 190 185 Arg Asp Thr Pro Val Val Leu Phe Pro Gln Glu Val Ala Pro Gly Leu 195 200 Tyr Asp Arg Val Tyr Gly Ser Cys Glu Arg Ala Gly Ile Asp Met Gln 215 220 His Thr Leu Gln Ser Ser Gln Leu Ser Ser Ser Leu Ser Met Val Ser 230 235 240

```
Ala Gly Gly Gly Phe Ala Leu Val Pro Lys Ser Met Ala Ala Ile Ser
                            250
              245
Pro Pro Asn Val Thr Tyr His Ala Leu Arg Ser Pro Glu Leu Tyr Thr
                           265
Asp Ile Ala Leu Cys Trp Arg Arg Phe Glu Arg Ser Arg Thr Val Lys
             280
Arg Phe Leu Ala Met Met Ser Glu Gly
<210> 9813
<211> 165
<212> PRT
<213> Enterobacter cloacae
<400> 9813
Ala Ser Ala Ser Ser Leu Ile Ser Ser Arg Leu Asn Ile Pro Ala Arg
                        10
Arg Leu Ala Ser Thr Ile Ser Pro Ala Thr Ala Phe Cys Ser Ser Leu
                  25
                                     30
Arg Gln Ala Thr Val Gly Lys Ser Ser Glu Ser Ser Thr Ala Gln Arg
 35
                      40
                                 4.5
Val Ser Arg Ser Ala Ser Thr Thr Arg Cys Ala Cys Gly Thr Ser Gly
                55
Ser Val Arg Arg Gly Leu Ala Arg Ser Gln Thr Glu Ala Ser Gly Ser
65 70
                           75
Arg Trp Ala Gly Asn Gln Thr Thr Glu Gly Ser Thr Val Ala Pro Leu
                         90
Thr Lys Gly Ala Ser Trp Ala Phe Cys Ser Thr Pro Phe Cys Ser Ala
         100 105 110
Gln Thr Thr Val Phe Ser Ser His Arg Ala Arg Ser His Pro Ala Leu
 115 120 125
Ser Ala Phe Cys Val Val Leu Thr Ala Lys Lys Thr Arg Ser Thr Gly
 130 135
Arg Val Met Thr Leu Gly Ser Val Ser Thr Gly Pro Gly Thr Thr Ile
                 150
Ser Pro Ser Ser
              165
<210> 9814
<211> 269
<212> PRT
<213> Enterobacter cloacae
<400> 9814
Trp Val Lys Asn Asn Ser Ser Arg Arg Ile Pro Phe Tyr Gln Val Asp
Ala Phe Ser Asp Gly Pro Phe Thr Gly Asn Pro Ala Ala Val Cys Leu
                            25
                                             30
Leu Asp Ala Trp Pro Glu Gln Lys Val Leu Gln Arg Ile Ala Thr Glu
      35
                       4.0
Asn Asn Leu Ser Glu Thr Ala Phe Val Val Gln Gln Asp Gly Gly Phe
 50
                    55
                                      60
Ala Leu Arg Trp Phe Thr Pro Ala Val Glu Val Asp Leu Cys Gly His
                70
                                  75
Ala Thr Leu Ala Ala Ala Ser Val Leu Leu Ser Arg Asp Asp Ala Cys
             85
                               90
Glu Ser Val His Phe Phe Thr Arg Ser Gly Glu Leu Thr Val Thr Ser
          100
                           105
```

His Gly Glu Gln Tyr Thr Leu Asp Phe Pro Gln Ala Ile Pro Ser Arg 115 Ile Thr Ala Pro Glu Gly Leu Phe Lys Ala Leu Gly Leu Glu Glu Asn

135 Ala Gly Glu Thr Trp Gln Ala Ser Asp Leu Ile Val Val Ile Asp Asp 150 155 Glu Asp Lys Leu Asp Ala Leu Lys Pro Asp Phe Thr Ala Leu Glu Arg 165 170 175 Phe Asn Thr Arg Gly Val Val Val Thr Ala Ser Ser Arg Thr Phe Asp 180 185 190 Phe Arg Ser Arg Trp Phe Gly Pro Gln Val Gly Val Asn Glu Asp Pro 195 200 205 Val Thr Gly Ser Ala His Thr Phe Leu Ala Pro Leu Trp Ser Gln Lys 210 215 220 Leu Ser Lys Lys Arg Leu His Ala Gln Gln Gly Gly Ser Arg Lys Gly 225 230 235 240 Glu Leu Ile Cys Leu Ile Lys Asp Asn Gly Arg Ile Glu Leu Leu Gly 245 250 Lys Ala Ser Leu Met Ile Glu Gly Val Phe Ile Leu

<210> 9815 <211> 325 <212> PRT <213> Enterobacter cloacae

<400> 9815 Ala Lys Arg Cys Arg Met Arg Leu Ser Ala Glu Arg Arg Ser Gly Ile 10 Ser Glu Gln Ala Tyr Gly Trp Ile Ser Asn Ile Gln Arg Phe Ser Leu 25 20 His Asp Gly Pro Gly Ile Arg Ser Ile Ile Phe Phe Lys Gly Cys Gln 35 40 Met Arg Cys Ala Trp Cys Ala Asn Pro Glu Gly Gln Thr Ala Glu Arg 55 60 Asp Val Phe Phe His Ala Asp Arg Cys Leu His Cys Gly Asn Cys Ala 70 7.5 Asp Leu Cys Pro Thr Gly Leu His Ser Met Asn His Asn Val His Val 85 90 Leu Glu Arg Asp Arg Lys Cys Val Gly Cys Gln Leu Cys Glu Glu Arg 100 105 110 Cys Pro Ala Ala Ala Leu Asn Ile Val Gly Glu His Val Ser Ala Gln 115 120 125 Asn Ala Phe Glu Arg Val Met Ala Asp Glu Ile Trp Phe Arg Gln Ser 130 135 140 Gly Gly Gly Val Thr Leu Ser Gly Gly Glu Val Ala Met Gln Pro Glu 145 150 155 160 Phe Ala Arg Val Leu Ile Glu Gln Leu Lys Ala Glu Asp Ile His Thr 165 170 Ala Ile Glu Thr Ala Gly Tyr Ala Ser Trp His Ala Ile His Gln Ala 185 180 190 Thr Ala Gly Cys Asp Leu Ile Leu Tyr Asp Leu Lys Ser Ala Glu Asp 200 195 205 Val Leu His Thr Arg Phe Thr Gly Val Ser Asn Lys Arg Ile Val Arg 215 220 Asn Leu Ala Arg Leu Leu Gln Gly Gly Gln Gln Ile Ile Ile Arg Ile 225 230 235 Pro Val Ile Pro His Phe Asn Asp Ala Pro Asp Gln Ala Asp Lys Leu 250 245 Leu Ala Leu Ile Ser Ala Leu Thr Gln Gly Lys Lys Asn Phe Gln Gly 265

Val Glu Leu Leu Pro Tyr His Leu Phe Gly Thr Gly Lys Tyr Lys Leu 275 Leu Asn Met Glu Tyr Asp Trp Asn Arg Gly Ser Ala Asn Val Asp Asn

```
295
Phe Leu Ser Met Ala His His Tyr Arg Leu Pro Leu Lys Val Ser Gly
             310
                         315
305
Thr Leu Ala Glv
<210> 9816
<211> 534
<212> PRT
<213> Enterobacter cloacae
<400> 9816
Asn Asn His Asn Ile Phe Ser Ser Gly Ile Ala Met Thr Lys Lys Leu
                       10
Leu Pro Leu Leu Val Leu Ala Ala Leu Ser Ser Ala Ala His Ala Ala
 20
                       2.5
                                          30
Thr Pro Pro Asn Thr Leu Val Val Ala Gln Gly Leu Asp Asp Ile Val
                    4.0
                           45
Ser Leu Asp Pro Ala Glu Ala Asn Glu Leu Ser Ser Ile Gln Thr Val
         55
Pro Ser Leu Tyr Gln Arg Leu Val Gln Pro Asp Arg Asp Asn Pro Glu
                    75 80
65 70
Lys Ile Thr Pro Val Leu Ala Glu Ser Trp Asp Ala Asp Ala Ala Ala
            8.5
                             90
Lys Thr Leu Thr Ile Lys Leu Lys Pro Asp Ala Lys Phe Ser Ser Gly
Asn Pro Leu Arg Pro Glu Asp Val Ile Phe Ser Tyr Thr Arg Ala Val
115 120
                                       125
Thr Leu Asn Lys Ser Pro Ala Phe Ile Leu Asn Val Leu Gly Trp Asp
130 135
                                    140
Ala Ser Asn Ile Ala Ser Gln Leu Lys Lys Val Asp Asp His Thr Leu
                150 155
Thr Leu His Trp Thr Ala Asp Val Ser Pro Ser Val Ala Leu Asn Ile
            165
                             170 175
Leu Ser Thr Pro Ile Ala Ser Ile Val Asp Glu Lys Gln Val Ala Ala
         180
                          185
Asn Val Lys Asp Asp Asp Phe Gly Asn Ala Trp Leu Lys Met His Ser
    195 200 205
Ala Gly Ser Gly Ala Phe Lys Met Arg Val Tyr Gln Pro His Gln Ala
210 215 220
Ile Val Leu Glu Ala Asn Glu Ser Ala Pro Gly Gly Ala Pro Lys Leu
                230
                                235
Lys Ser Ile Ile Ile Lys Asn Val Pro Asp Pro Ala Ser Arg Arg Leu
             245
                             250 255
Leu Ile Gln Gln Gly Asp Ala Asp Val Ala Arg Asp Leu Gly Ala Asp
         260
                          265 270
Gin Ile Ser Ala Leu Ser Gly Lys Pro Gly Val Lys Val Leu Ser Ile
      275
                       280
                             285
Pro Ser Ala Glu Gln Asn Tyr Leu Val Phe Asn Thr Gly Asn Ser Ala
  290
       295
                                    300
Asn Pro Leu Leu Asn Asn Pro Ala Phe Trp Glu Ala Ser Arg Trp Leu
               310
                                 315
Val Asp Tyr Glu Gly Ile Thr Lys Asp Leu Leu Lys Gly Gln Tyr Phe
325 330 335
Val His Gln Ser Phe Leu Pro Val Gly Leu Pro Gly Ala Leu Glu Asp
          340
                          345
                                           350
Asn Pro Phe Thr Phe Asp Pro Ala Lys Ala Lys Ala Ile Leu Ala Lys
                       360
Ala Gly Ile Lys Asp Ala His Phe Thr Leu Asp Val Glu Asn Lys Pro
                   375
                                    380
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Pro Phe Ile Thr Ile Ala Gln Ser Met Gln Ala Ser Phe Ala Gln Gly

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395
                390
Gly Val Lys Val Asp Leu Leu Pro Ala Ala Gly Ser Gln Val Tyr Ala
405 410 415
Arg Val Arg Ala Lys Gln His Gln Ala Ala Ile Arg Leu Trp Ile Pro
         420
                 425
Asp Tyr Phe Asp Ala His Ser Asn Ala Ser Ala Phe Ala Trp Asn Asp
     435
             440
                              445
Gly Lys Ser Ser Thr Val Ala Gly Leu Asn Gly Trp Lys Ile Pro Glu
  450 455
                           460
Leu Asn Lys Ala Thr Leu Ala Ala Val Ala Glu Pro Asp Pro Ala Lys
    470 475
Arg Leu Asp Leu Tyr Lys Lys Met Gln Glu Gln Leu Gln His Asn Ser
          485 490
Pro Tyr Val Phe Val Asp Gln Gly Lys Thr Gln Ile Val Val Arg Asp
       500 505 510
Asn Val Lys Gly Tyr Gln Gln Gly Leu Asn Ala Asp Met Val Trp Tyr
                     520 525
Asp Arg Val Met Lys
  530
<210> 9817
<211> 288
<212> PRT
<213> Enterobacter cloacae
<400> 9817
Cys Ile Arg Val Arg Thr Leu Met Lys Trp Arg Arg Ala Ser Cys Arg
                            10
Arg Gln Pro Ile Pro Thr Arg Ala Arg Ser Gly Pro Ala Ala Arg Thr
20
                       2.5
Pro Gly Arg Leu Ala Arg Cys Cys Arg Arg Ser Thr Val Arg Asn Arg
                     40
Gly Arg Arg Thr Thr Met Ala Leu Val Glu Val Asn Gln Leu Arg Val
                55
                                   60
Ser Phe Gly Glu Lys Thr Ala Val Ser Ala Ala Ser Phe Ala Ile Glu
              70
                                75
Lys Gly Glu Thr Phe Ser Leu Ile Gly Glu Ser Gly Cys Gly Lys Ser
            85
                            90 95
Thr Leu Leu Arg Val Leu Ala Gly Leu Leu Pro Glu Trp Asn Gly His
         100 105 110
Ile Ser Val Leu Gly Glu Asn Leu Arg Pro Gly Arg Arg Phe Glu Gly
      115
                     120
Ala Leu Arg Arg Asn Val Gln Met Val Phe Gln Asp Pro Trp Ala Ser
 130
                   135
                                   140
Leu His Pro Asn His Thr Ile Ala Arg Thr Leu Ser Glu Pro Leu Asn
                150
                                155
Ile His Gly Glu Ser Gln Val Ala Glu Lys Val Ala Asp Ala Leu Gln
            165
                             170
Gln Val Gly Leu Ala Ala Asp Ala Gly Arg Arg Tyr Pro His Gln Leu
         180 185 190
Ser Gly Gly Gln Arg Gln Arg Val Ala Ile Ala Arg Ala Leu Leu Leu
                      200
                                       205
      195
Arg Pro Gln Leu Leu Leu Asp Glu Pro Thr Ser Ala Leu Asp Met
  210 215
Ser Val Gln Ala Glu Ile Leu Asn Leu Leu Asn Arg Leu Lys Ala Gln
               230
225
                                235
His Gly Met Thr Tyr Leu Leu Val Ser His Asp Ala Asp Val Ile Ala
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245

260

His Met Ser Asp Arg Ala Ala Phe Met Ala His Gly Glu Ile Gln Arg 265

Val Phe Asp Arg Glu Ala Met Leu Arg Gly Glu His Arg Met Gly

250

275 280 285

<210> 9818 <211> 91

<212> PRT

<213> Enterobacter cloacae

<400> 9818

Arg Ser Asp Arg Ile Asp Ser Ile Lys Asp Leu His Trp Asp Ile Arg 1 10 15 15

Pro Ser Pro His Ile Ser Thr Met Gln Val Arg Ser Thr Asp Lys Pro 20 25 Leu Thr Leu Asn Asn Ala Ile Asn Ile Ala Trp Leu Ile Gln Ala Thr

35 40 45 Ser His Trp Leu Leu Thr Thr Arg Pro Tyr Lys His Gln Glu Arg Asp

50 55 60 Phe Leu Arg Tyr Leu Phe Tar Val Phe Arg Cys Val Ala Thr Asp Arg

65 70 75 80
Trp Ile Phe Arg Arg Ala Val Met Arg Phe

Orp Ile Phe Arg Arg Ala Val Met Arg Phe 85 90

<210> 9819 <211> 179 <212> PRT

<213> Enterobacter cloacae

<400> 9819

Ala Ile Pro Ala Tyr Leu Trp Leu Lys Asp Asp Gly Gly Ala Asp Ile 20 25 30 Lys Gly Ser Val Asp Ile Tyr Gly Arg Glu Gly Ser Ile Glu Ile Ile

35 40 45
Ala Leu Ash His Gly Ile Met Gln Pro Thr Asp Lys His Ash Gly Lys

50 55 60
Ala Thr Ser Leu Arq Ile His Ser Pro Tyr Ser Phe Asp Lys Glu Ile

65 70 75 80 Asp Ala Ser Ser Pro Tyr Leu Tyr Lys Ala Val Ser Thr Gly Gln Lys

85 90 95 Leu Lys Ser Ala Glu Ile Lys Phe Tyr Arg Ile Asn Asp Ala Gly Gln

100 105 110

Glu Val Glu Tyr Phe Ser Thr Leu Leu Glu Gly Val Lys Ile Ala Ser 115 120 125

Val Cys Pro Met Met Leu Asp Ile Lys Asp Pro Asp Tyr Glu Lys His 130 135 140

Asn His Leu Glu Leu Val Glu Leu Leu Tyr Glu Lys Ile Thr Trp Arg 145 150 155 160

Tyr Val Asp Gly Asn Ile Met His Ser Asp Ser Trp Asn Asp Arg Lys 165 170 175

Thr Ala

<210> 9820

<211> 251 <212> PRT

<213> Enterobacter cloacae

<400> 9820

Gln Val Ser Ala Val Met Met Ala Phe Thr Val Ile Ser Phe Met Val 1 5 10 15 Arg Val Pro Val Leu Ser Glu Gln Fhr Thr Val Ile Ala Pro Arg Val

Ser Thr Val Gly Ser Leu Arg Ile Ile Ala Arg Leu Arg Ala Ile Ala 35 4.0 Cys Thr Pro Arg Glu Arg Met Met Glu Ile Ile Ala Gly Arg Pro Ser 55 Gly Thr Glu Ala Thr Ala Arg Leu Ile Arg Glu Ser Ser Ser Pro 70 75 Ile Gly Ile Ser Arg Asn Thr Arg Leu Lys Thr Asn Ser Ala Ala Ile 8.5 90 Ile Ala Arg Met Met Ala Lys Ile Ala Leu Pro Ser Leu Ser Ile Cys 100 105 Thr Ser Ser Gly Val Arg Cys Phe Ser Met Pro Ala Ile Ile Trp Leu 115 120 Met Trp Pro Ser Ser Val Ser Trp Pro Val Ala Met Thr Thr Pro Thr 130 135 140 Pro Pro Pro Ala Leu Thr Val Val Pro Glu Lys Thr Arg Phe Val Arg 155 150 Ser Pro Ser Gly Asn Ser Pro Leu Ser Gly Phe Val Cys Leu Ser Thr 165 170 Thr Val Asp Ser Pro Val Arg Ile Ala Ser Ser Thr Arg Lys Leu Cys 180 185 190 Ala Ser Ile Lys Arg Ile Ser Ala Gly Ile Arg Ser Pro Ala Arg Asn 195 200 205 Thr Ile Ile Ser Pro Gly Thr Ile Ser Val Val Gly Ile Val Ser Trp 210 215 220 Leu Pro Leu Arg Ile Thr Arg Ala Ser Leu Glu Ser Ile Leu Arg Ile 225 230 235 Leu Phe Arg Asp Phe Ser Ala Leu Leu Ser 245 <210> 9821

<211> 221 <212> PRT

<213> Enterobacter cloacae

<400> 9821

His Ser Ala Leu Gln Arg Ile Lys Ala Arg Val Ser Ile Arg Ala Phe 10 Thr Ile Asp Gly Arg Lys Asr. Leu Val Ala Arg Pro Lys Ser Glu Asp 25 Lys Lys Gln Ala Leu Leu Glu Ala Ala Thr Ala Ala Phe Ala Gln Ser 40 Gly Ile Ala Ala Ser Thr Ala Leu Ile Ala Arg Asn Ala Gly Val Ala 55 60 Glu Gly Thr Leu Phe Arg Tyr Phe Ala Thr Lys Asp Asp Leu Leu Asn 7.0 7.5 Ala Leu Tyr Leu His Leu Lys Gln Asp Leu Cys Gln Thr Met Leu Ala 8.5 90 Asn Leu Asp Arg Thr Ile Thr Glu Pro Lys Glu His Thr Arg Asn Ile 100 105 Trp Asn Ser Tyr Val Asp Trp Gly Ile Arg Asn Pro Leu Ala His Ala 115 125 Pro Ile Arg Gln Ile Gly Val Ser Glu Lys Leu Asn Ala Glu Thr Glu 135 130 140 Gln Ala Val Lys Asp Met Phe Pro Glu Leu His Glu Leu Cys Arg Arg 150 155 160 Ser Ile Arg Pro Val Phe Met Ser Asp Glu Phe Lys Thr Phe Gly Asp 165 170 175 Ala Met Phe Leu Ser Leu Ala Glu Thr Thr Met Glu Phe Ala Ala Arg 185 180 Asp Pro Ser Arg Ala Val Asp Phe Lys Ala Leu Gly Phe Glu Ala Met

200 Trp Arg Gly Leu Ala Glu Glu Asp Asn His Gly Gln 215 210

<210> 9822 <211> 484 <212> PRT

<213> Enterobacter cloacae

<400> 9822

Arg Asn Gly Val Thr Met Asn Thr Ser Val Val Ser Pro Gly Arg Ala 10 Gly Leu Ile Leu Leu Thr Gly Gln Met Leu Pro Leu Ile Asp Thr 20 25 Ser Ile Thr Asn Val Ala Leu Asp Ser Ile Thr His Ser Leu His Ala 35 4.0 Thr Ala Thr Glu Leu Glu Leu Ile Val Ala Leu Tyr Gly Val Ala Phe 50 55 Ala Val Cys Leu Ala Pro Gly Ser Lys Leu Gly Asp Asn Leu Gly Arg 65 70 75 Arg Arg Leu Phe Met Trp Gly Val Ala Cys Phe Gly Leu Ala Ser Leu 85 90 Leu Cys Gly Met Ala Gly Asn Ile Glu Gln Leu Leu Gly Ala Arg Ile 100 105 Ile Gln Gly Ala Gly Ala Ala Leu Ile Met Pro Gln Ile Leu Ala Thr 115 120 125 Leu His Val Thr Leu Lys Gly Thr Ala His Ala Lys Ala Ile Ser Leu 130 135 140 Phe Gly Gly Ile Gly Gly Ile Ala Phe Ile Val Gly Gln Met Gly Gly 145 150 155 160 Gly Trp Leu Val Ser Ala Asp Ile Ala Gly Leu Gly Trp Arg Asn Ala 165 170 175 Phe Phe Ile Asn Val Pro Ile Cys Leu Val Val Leu Ala Leu Ser Arg 180 185 190 Arg Tyr Val Pro Glu Thr Arg Arg Asp Thr Pro Ser Arg Ile Asp Trp
195 200 205 Thr Gly Thr Val Leu Leu Thr Ala Ile Leu Cys Cys Leu Leu Phe Pro 210 215 220 Met Ala Leu Gly Pro Gln Trp His Trp Ser Trp Pro Leu Lys Ala Ala 230 235 Leu Leu Ala Ile Val Pro Leu Val Cys Val Met Val Leu Asn Ala Arg 245 250 255 Lys Lys Glu Arg Glu Asn Ala His Pro Leu Ile Ala Pro Arg Leu Leu 265 270 260 Gin Leu Arg Ser Ile Arg Phe Gly Val Leu Ile Gly Ile Leu Phe Phe 275 280 285 Ser Val Trp Ser Gly Phe Met Phe Cys Met Ala Leu Thr Met Gln Ser 295 300 Gly Leu Gly Met Ala Pro Trp Gln Ser Gly Asn Ser Phe Ile Ala Leu 310 315 305 Gly Val Thr Tyr Phe Ile Ser Ala Trp Phe Ala Pro Arg Leu Ile Ala 325 330 335 Arg Tyr Ser Thr Ser Ala Ile Leu Leu Thr Gly Leu Ala Ile Gln Leu 345 350 340 Val Gly Leu Val Ala Leu Ile Ala Thr Phe Arg His Trp Gly Met Gln 360 365 355 Asn Thr Ala Leu Thr Leu Ala Pro Ala Thr Gly Leu Val Gly Tyr Gly 380 375

Gln Ala Leu Ile Val Asn Ser Phe Tyr Arg Ile Gly Met Arg Asp Ile

Gln Pro Asp Asp Ala Gly Ala Ala Ser Ala Ile Leu Ser Thr Leu Gln

390

410 Gln Ala Ala Leu Gly Leu Gly Pro Ala Ile Phe Gly Ala Ile Leu Leu 425 430 420 His Gly Leu Gln Asn His His Gly Asp Tyr Thr Gln Ala Val Asn Val 435 440 445 Phe Leu Met Val Glu Thr Ala Met Met Val Val Leu Ala Leu Ala Thr 450 455 460 Leu Arg Met Arg His Arg Leu Cys Leu Pro Val Val Lys Ala Cys Pro 465 470 475 Ala Thr Lvs

<210> 9823 <211> 143 <212> PRT <213> Enterobacter cloacae

<400> 9823 Leu Tyr Cys Ile Ala Glu Ser Met Asp Gly Ser Gly Asn Gly Tyr Arg 10 Trp Asn Asn Tyr Ala Gln Ser Gly Asp Gln Ala Lys Gln Ile Thr Pro 25 20 Lys Leu Asn Met Tyr Ile Ile Leu Asn Cys Leu Phe Trp Leu Ile Ile 35 40 4.5 Ser Val Thr Met Glu Val Thr Gly Thr Leu Leu Leu Pro Glu Thr Arg 5.5 Asn Phe Lys Asn Ile Pro Leu Thr Ile His Cys Leu Thr Cys Tyr Val 75 7.0 Ile Ser Phe Tyr Ser Leu Ser Met Leu Met Gly Tyr Ile Ser Pro Val 8.5 90 Met Ala Tyr Ser Ile Trp Ala Gly Leu Gly Ile Val Leu Ile Thr Val 100 105 Met Ser Ser Leu Phe Tyr Arg Leu Lys Ser Ser Ile Leu Glu Lys Ile 120

Gly Ile Gly Cys Ile Val Thr Gly Leu Ala Ile Ile Ala Phe 130 <210> 9824

<211> 293 <212> PRT <213> Enterobacter cloacae

115

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140

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Ala Phe Val Ala Met Leu Gly Pro Gly Leu Val Asn Gly Ala Leu Ala
              150 155 160
Leu Ala Leu Thr Thr Trp Pro Ala Tyr Ala Arg Gln Ala Arg Ser Glu
                          170
         165
Ile Gln Arg Leu Arg His Ser Asp Tyr Leu Ala Ala Ala Glu Met Met
                      185
                           190
     180
Gly Ile Arg Gly Pro Arg Leu Leu Val Gly His Ile Leu Pro Leu Cys
   195 200
                                   205
Leu Pro Ser Ala Ile Val Arg Leu Ala Leu Asp Leu Ala Gly Ile Ile
                215
Leu Ala Ala Ala Gly Leu Gly Phe Leu Gly Leu Gly Ala Arg Pro Pro
225 230 235
Met Ala Glu Trp Gly Ala Met Ile Ala Asp Gly Met Gln Val Ile Phe
      245 250
                                         255
Asp Gln Trp Trp Ile Ala Ala Ile Pro Gly Gly Ala Ile Leu Phe Ala
       260 265
                           270
Ser Leu Ala Phe Asn Leu Leu Gly Asp Gly Leu Arg Asp Val Leu Glu
 275 280
Pro Gln His Asp
  290
<210> 9825
<211> 380
<212> PRT
<213> Enterobacter cloacae
<400> 9825
Gln Thr Thr Glu Cys Ala Met Pro Leu Pro Asp Phe Lys Ser Ser Glu
1 5
                          1.0
Pro Tyr Thr Leu Gly Ile Glu Leu Glu Leu Gln Val Val Asn Pro Pro
      20
               25
                                      3.0
Gly Tyr Asp Leu Ser Gln Asp Ser Ser Ala Leu Ile Ala Ala Val Lys
 35 40 45
Asp Asp Ile Lys Gly Gly Glu Val Lys His Asp Ile Thr Glu Ser Met
           55 60
Leu Glu Ile Ala Thr Gly Val Cys Gln Thr Ile Asp Gln Ala Ala Ala
            7.0
                             75 80
Gln Phe Ser Val Met Gln Gln Ser Ile Leu Arg Ala Ala Ala Glu His
           85 90 95
His Ile Gln Ile Cys Gly Gly Gly Thr His Pro Phe Gln Lys Trp Gln
        100 105 110
Arg Gln Glu Val Cys Asp Asp Glu Arg Tyr Asn Val Thr Leu Glu Arg
    115 120 125
Phe Gly Tyr Leu Ile Leu Gln Ala Thr Val Phe Gly Gln His Val His
 130 135 140
Val Gly Cys Arg Thr Gly Asp Asp Ala Ile Tyr Leu Leu His Gly Leu
      150 155 160
145
Ser Arg Phe Val Pro His Phe Ile Ala Leu Ala Ala Ala Ser Pro Tyr
           165 170 175
Met Gln Gly Thr Asp Thr Lys Phe Ala Ser Ser Arg Leu Asn Ile Phe
            185 190
         180
Ser Gly Phe Pro Asp Asn Gly Gln Met Pro Trp Val Asn Ser Trp Gln
      195
                    200 205
Glu Phe Glu Gly Leu Phe Arg Arg Leu Ser Ser Thr Ser Met Ile Asp
               215 220
Ser Ile Lys Asp Leu His Trp Asp Ile Arg Pro Ser Pro His Phe Gly
            230
                             235 240
Thr Val Glu Val Arg Val Met Asp Thr Pro Leu Thr Leu Gly His Ala
                          250 255
            245
Ile Asn Ile Ala Gly Leu Ile Gln Ala Thr Ser His Trp Leu Leu Thr
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265

Ala Arg Pro Tyr Lys His Gln Glu Arg Asp Phe Leu Leu Tyr Arg Phe 280 275 Asn Arg Phe Gln Ala Cys Arg Tyr Gly Leu Glu Gly Ile Leu Thr Asp 295 300 Val His Thr Gly Glu His Lys Thr Val Ala Glu Asp Ile Ala Trp Leu 305 310 315 Leu Glu Gln Val Ala Pro Ser Ala Glu Lys Leu Gly Ala Thr Ser Ala 325 330 Ile Lys Glu Ile Ala Leu Leu Leu Lys Gln Gly Lys Ser Glu Ala Gln 345 Arg Met Arg Asp Phe Ile Ala Asp Gly Gly Ser Leu Ile Ser Leu Val 355 360 Gln Lys His Cys Glu Leu Trp Ala Thr Ser Pro 370 375

<210> 9826 <211> 89

<212> PRT <213> Enterobacter cloacae

<400> 9826

Arg Arg Trp Phe Ser Leu Ala Ser 85

<210> 9827 <211> 727 <212> PRT

<213> Enterobacter cloacae

<400> 9827

Phe Tyr Gly Asp Ser Asn Gln Gly Arg Ser Ile Lys Met Phe Lys Asn 15 10 Asn Lys Ile Met Arg Leu Trp Leu Leu Ser Leu Ala Thr Thr Ser Val 20 25 Ala Ala Gln Ala Glu Thr Lys Glu Glu Thr Ile Thr Val Thr Gln Gly 40 35 Val Ser Glu Glu Pro Thr Ala Pro Val Lys Gly Ile Val Ala Thr Lys 55 60 Thr Leu Ser Ala Thr Lys Thr Ser Ala Glu Ile Val Lys Thr Pro Gln 75 70 Ser Val Ser Val Ile Thr Arg Asp Gln Met Asn Met Gln Asp Val Thr 90 Ser Val Ser Gln Ala Leu Arg Tyr Ser Ala Gly Val Phe Thr Glu Tyr 110 100 Arg Gly Ser Ser Asn Arg Asn Asp Glu Val Phe Val Arg Gly Phe Ser 120 115 Tyr Val Pro Lys Phe Leu Asp Gly Leu Ser Phe Gly Ala Thr Ala Ser 140 135 Ser Gln Thr Gly Thr Val Asp Pro Trp Leu Leu Glu Arg Val Glu Leu 155 150 Val Arg Gly Pro Ala Ser Val Leu Phe Gly Gln Val Asn Pro Gly Gly Leu Ile Ser Met Thr Ser Lys Arg Pro Thr Ala Glu Ala Ile His Asn 190 180 185 Val Gln Phe Arg Thr Gly Asn Asn Asp Leu Ala Glu Gly Ala Phe Asp 195 200 205 Phe Gly Gly Arg Leu Ser Asp Asp Gly Arg Val Leu Tyr Arg Val Asn 210 215 Gly Ile Ala Arg Thr Gln His Asn Gln Val Asp Asp Tyr Lys Glu Thr 225 230 235 Arg Met Ala Ile Ala Pro Ala Ile Thr Trp Tyr Pro Asn Asp Gln Thr 245 250 255 Arg Phe Thr Leu Leu Thr Ser Tyr Gln Lys Asp Pro Asp Ala Gly Tyr 260 265 270 Arg Asn Phe Leu Pro Ala Tyr Gly Thr Val Lys Ser Ala Asp Gly Lys 275 280 285 Tyr Ile Pro Arg Asp Phe Asn Val Ser Asp Pro Asn Tyr Asn Gln Ser 290 295 300 Trp Arg Glu Gln Thr Met Ile Gly Tyr Glu Leu Glu His Gln Phe Ala 305 310 315 320 Asp Asn Leu Thr Phe Arg Gln Asn Ala Arg Tyr Ala Thr Ile Lys Gln 325 330 335 Lys Tyr Arg Tyr Leu Val Tyr Ala Asn Ser Ala Ala Asn Ser Thr Val 340 345 350 Leu Thr Arg Arg Ala Gln Arg Glu Ala Arg Thr Thr Asn Glu Phe Gly 355 360 365 Leu Asp Asn Gln Leu Glu Tyr Gln Leu Glu Thr Gly Ser Val Ser His 370 375 380 Thr Leu Leu Gly Gly Phe Asp Tyr Lys Thr Ser Lys Asp Lys Gln Leu 385 390 395 400 Leu Ala Arg Gly Ser Gly Ser Gln Tyr Asp Leu Asp Trp Thr Asn Pro 405 410 415 Val Tyr Gly Val Asn Val Asp Glu Ser Thr Phe Lys Thr Ala Ser Asp 420 425 430 Glu Gln Gln Asn Leu Asp Gln Met Gly Leu Tyr Leu Gln Asp Gln Met 435 440 445 Ser Trp Asn Asn Trp Glu Trp Leu Val Ser Gly Arg Tyr Asp Trp Ser 450 455 460 Glu Val Arg Thr Ser Asp Phe Thr Asp Asn Ser Val Thr Gln Gln Asn 465 470 475 480 Asp Ser Lys Phe Thr Trp Arg Thr Gly Leu Leu Tyr Ala Phe Asp Ser 490 495 485 Gly Leu Ser Pro Tyr Ile Ser Tyr Ser Thr Ser Phe Glu Pro Asn Leu 505 510 500 Gln Thr Asn Arg Ala Pro Gly Val Ala Pro Phe Arg Pro Thr Thr Gly 520 525 515 Glu Gln Thr Glu Ile Gly Val Lys Tyr Gln Pro Val Asp Thr Thr Leu 535 540 Met Thr Leu Ala Leu Tyr Asp Leu Thr Gln Asn Asn Val Ala Thr Tyr 555 560 550 Asn Ser Ala Glu Gly Trp Phe Glu Asn Ala Gly Lys Val Arg Ser Lys 570 575 565 Gly Ala Glu Ala Glu Ile His Ala Thr Leu Met Asp Asn Ile Asn Leu 585 Ile Gly Ser Tyr Thr Tyr Thr Asp Ala Lys Thr Glu Ser Thr Thr Val 600 605 Ala Gly Thr Glu Gly Lys Thr Pro Ala Arg Ile Pro Ala His Met Ala 615 620 Ser Ala Phe Ala Ser Tyr Thr Val Pro Gly Gly Ala Leu Lys Ser Leu 635 640 630 Thr Ala Gly Val Gly Met Arg Tyr Ile Gly Thr Ser Tyr Gly Asp Ala 645 650

5369 Lys Asn Thr Phe Lys Val Pro Ser Val Asp Leu Tyr Asp Ala Met Leu 670 665 660 Arg Tyr Asp Leu Gly Glu Met Asn Arg Ser Leu Lys Gly Ala Ser Val 680 685 Gln Phe Asn Val Asn Asn Val Ala Asp Thr Lys Tyr Val Ala Ser Cys 690 695 Ala Ser Asp Thr Ala Cys Phe Tyr Gly Ile Gly Arg Thr Val Thr Ala 705 710 715 Thr Val Asn Tyr Ser Trp <210> 9828 <211> 193 <212> PRT <213> Enterobacter cloacae <400> 9828 Lys Thr Cys Ser Arg Asn Cys Met Asn Cys Val Val Arg Ser Ala 10 Arg Cys Leu Cys Leu Thr Ser Leu Arg Pro Ser Val Met Gln Cys Ser 25 2.0 Tyr Arg Trp Leu Lys Pro Pro Trp Ser Leu Pro Pro Ala Ile Arg Pro 4.5 40 35 Val Pro Ser Ile Leu Lys Arg Trp Ala Leu Lys Pro Cys Gly Ala Gly

5.5 60 Leu Leu Arg Lys Ile Thr Met Asp Ser Lys Ser Leu Gln Glu His Ala 7.5 70 Arg Arg Val Ala Leu Glu Met Pro Phe Thr Glu His Cys Trp Pro Phe 95 85 90 Gly Pro Glu Tyr Asp Val Phe Lys Val Gly Gly Lys Ile Phe Met Leu 110 105 100 Met Ala Thr Ala His Gly Arg Ala His Val Ser Leu Lys Ser Asp Pro 120 125 115 Glu Lys Ser Leu Leu Asn Gln Gln Ile Tyr Arg Gly Val Glu Pro Gly 135 140 130 Tyr His Leu Asn Lys Lys His Trp Ile Ser Leu Tyr Gly Thr Asp Asp 155 150 145 Ile Thr Pro Glu Leu Val Thr Asp Leu Ile Thr Asp Ser Trp Asn Leu 170 175 165 Val Val Asp Lys Leu Pro Lys Lys Asp Gln Lys Trp Ile Arg Pro Ala 185 180

<210> 9829
<211> 258
<212> PRT
<213> Enterobacter cloacae
<400> 9829

Leu Phe Val Ser Asp Glu Gln Asn Lys Arg Ser Asn Arg Thr Tyr Leu 10 Phe Pro Leu Arg Ala Val Ile Cys Phe Pro Phe Thr Pro Ala Arg Gly 25 20 Arg Ile Ser Ser Pro Gly Val Val Met Asp Ile Ile Ser Val Ala Leu 40 45 35 Lys Arg His Ser Thr Lys Ala Phe Asp Pro Ala Lys Lys Leu Thr Ala 60 55 5.0 Glu Glu Ala Glu Lys Ile Lys Tnr Leu Leu Gln Tyr Ser Pro Ser Ser 75 70 Thr Asn Ser Gln Pro Trp His Phe Ile Val Ala Ser Thr Glu Glu Gly

Lys Ala Arg Val Ala Lys Ser Ala Ala Gly Thr Tyr Val Phe Asn Glu 105 Arg Lys Met Leu Asp Ala Ser His Val Val Val Phe Cys Ala Lys Thr 115 120 125 Ala Met Asp Asp Ala Trp Leu Glu Arg Val Val Asp Gln Glu Glu Ala 135 140 Asp Gly Arg Phe Ala Thr Pro Glu Ala Lys Ala Ala Asn His Lys Gly 150 155 Arg Cys Tyr Phe Ala Asp Met His Arg Val Asp Leu Lys Asp Asp Asp 165 170 175 Gln Trp Met Ala Lys Gln Val Tyr Leu Asn Val Gly Asn Phe Leu Leu 180 185 190 Gly Val Ala Ala Met Gly Leu Asp Ala Val Pro Ile Glu Gly Phe Asp 200 205 Ala Ala Ile Leu Asp Glu Glu Phe Gly Leu Lys Glu Lys Gly Phe Thr 210 215 220 Ser Leu Val Val Val Pro Val Gly His His Ser Val Glu Asp Phe Asn 225 230 235 Ala Thr Leu Pro Lys Ser Arg Leu Pro Leu Cys Thr Ile Val Thr Glu 250 <210> 9830 <211> 434 <212> PRT <213> Enterobacter cloacae <400> 9830 Ile Cys Ile Ile Asp Pro Gln Pro Pro Leu Trp Gly Cys Ile Asn Thr Gly Asp Val Met Gln Glu Leu Ile Ala Gln Val Glu Glu Leu Gly Ile 20 25 Glu Ile Asn His Thr Thr Ser Leu Val Ile Ile Phe Gly Ile Ile Phe 35 4 0 Leu Thr Ala Ile Ile Val His Phe Ile Leu His Lys Val Val Leu Arg 55 60 Ala Phe Glu Lys Arg Ala Gln Ala Ser Ser His Leu Trp Leu Gln Ile 75 70 Ile Thr Gln Asn Lys Leu Phe His Arg Leu Ala Phe Thr Leu Gln Gly 85 90 Ile Ile Val Asn Val Gln Ala Val Leu Trp Leu Gln Lys Gly Ser Glu 100 105 110 Ala Ala Glu Leu Leu Thr Thr Cys Ala Lys Leu Trp Val Met Val Tyr 120 125 Ala Leu Leu Ser Phe Phe Ser Leu Leu Asp Val Ile Phe Asn Leu Ser 130 135 140 Gln Lys Met Ala Thr Ala Ser Gln Leu Pro Leu Lys Gly Ile Phe Gln 145 150 155 Gly Ile Lys Leu Val Ser Ala Ile Leu Val Gly Ile Leu Ile Ile Ser 165 170 Leu Leu Ile Gly Gln Ser Pro Ala Ile Leu Ile Ser Gly Leu Gly Ala 185 190

Met Ala Ala Val Leu Met Leu Val Phe Lys Asp Pro Ile Leu Gly Leu 200

Val Ala Gly Ile Gln Leu Ser Ala Asn Asp Met Leu Lys Leu Gly Asp 215

Trp Leu Glu Met Pro Lys Tyr Gly Ala Asn Gly Thr Val Thr Asp Ile

Gly Leu Thr Thr Val Lys Val Arg Asn Phe Asp Asn Thr Ile Thr Thr

230

205

220

250 Ile Pro Thr Trp Ala Leu Val Ser Asp Ala Phe Ile Asn Trp Ser Gly 260 265 270 Met Ser Ala Ser Gly Gly Arg Arg Ile Lys Arg Ser Leu Asn Ile Asp 275 280 285 Thr Thr Ser Ile His Phe Leu Asp Glu Gln Glu Gln Gln Lys Leu Ile 295 300 Gln Ala Lys Leu Leu Lys Pro Tyr Leu Ala Ala Arg His Glu Glu Ile 310 315 Asn Leu Trp Asn Gln Gln Asn Gly Glu Gly Glu Ser Val Leu Asn Leu 325 330 335 Arg Lys Met Thr Asn Ile Gly Thr Phe Arg Ala Tyr Leu Asn Glu Tyr 340 345 Leu Arg Asn His Pro Arg Ile Arg Lys Asp Met Thr Leu Met Val Arg 355 360 Gln Leu Ala Pro Asp Ala Asn Gly Leu Pro Ile Glu Ile Tyr Ala Phe 370 375 380 Thr Asn Thr Val Ile Trp Ala Glu Tyr Glu Asp Ile Gln Ala Asp Ile 390 395 Phe Asp His Ile Phe Ala Val Val Asp Glu Phe Gly Leu Arg Ile His 405 410 Gln Ser Pro Thr Gly Asn Asp Ile Arg Ser Leu Ala Gly Val Ile Ala 420 425 Gln

<210> 9831 <211> 262 <212> PRT

<213> Enterobacter cloacae

<400> 9831 Arg Leu Leu Phe Ser Cys Leu Leu His Leu His Thr Val Leu Arg Tyr 1.0 Pro Gly Arg Leu Glu Ala Gly Ser Glu Gln Asp Asp Gly Val Thr Ala 20 25 Pro Glu Gln Thr Gly Phe Pro Ser Cys Val Gln His Ile Ser His Asp 35 40 Ile Thr Gly Ile Lys Leu Glu Pro Ile Val Ala Leu Ser Ser Ser Arg 50 55 60 Ala Val Gly Ala Glu Val Leu Ser Val Leu Ser Pro His Gln Gln Ser 70 Glu Ser Phe Phe Gln Asp Trp Ser Ala Thr Arg Ala Leu Val Leu Leu 90 Glu Ala Gln Ile Ala Ala Leu Lys Asn Pro Phe Pro Cys Asp Asn Leu 100 105 110 Phe Ile Asn Leu Pro Ile Thr Val Leu Thr Ile Pro Glu Met Phe Gln 115 120 125 Arg Leu Leu Gln Leu Asn Ser Pro Pro Leu Asn Ile Glu Leu Val Glu 135 140 Pro Ala Ser Phe Phe Ser Leu Ser Asp Pro Val Arg Gln Arg Val Ser 150 155 Cys Ala Leu Gln Gln Leu Thr Ala Arg Gly His Arg Ile Trp Leu Asp 170 1.65 Asp Ile Asp Glu Ala Ser Gly Gln Ala Phe Leu Ser Cys Arg Leu Pro 180 185 Leu Cys Gly Ile Lys Ile Asp Lys Ile Ala Phe Trp Arg Leu Arg Glu 200 195 205 Thr Pro Ala Leu Thr Gln Leu Val Thr Leu Cys Ser Lys Ile Ala Ala 220 215 Asn Val Leu Ile Glu Gly Ile Glu Thr Glu Arg Asp Arg Thr Cys Ala

230 235 Leu His Ala Gly Ala Arg Phe Gly Gln Gly Tyr Tyr Trp Pro Ser Trp 245 Arg Trp Gln Glu Asp 260

<210> 9832

<211> 99 <212> PRT

<213> Enterobacter cloacae

<400> 9832

Leu Ile Ser Arg Lys Lys Val Met Lys Lys Thr Thr Ala Ile Leu Met 10 Gly Ala Ala Phe Leu Phe Thr Thr Asn Thr Phe Ala Ala Glu Leu Leu 25 Thr Lys Asn Glu Phe Glu Lys Val Glu Ser Gln Tyr Glu Lys Ile Gly 40 Thr Val Ser Thr Ala Asn Glu Val Ser Val Asp Asp Ala Lys Lys Glu 55 60 Leu Val Glu Lys Ala Asp Lys Glu Gly Ala Asp Val Leu Val Leu Thr 7.0

75 Ser Gly Asn Thr Asn Asn Lys Ile His Gly Thr Ala Asp Ile Tyr Lys 85 90

Lys Lys

<210> 9833

<211> 662 <212> PRT

<213> Enterobacter cloacae

<400> 9833

210

Gln Glu Ala Ala Met Gly Arg Pro Leu Lys Ser Val Phe Lys Lys Glu 10 His Arg Asp Asp Ile Ser Asn Arg Ser Ala Asn Pro Val Phe Ser Glu 25 20 30 Val Ala Glu Val Phe Leu Ser Arg Arg Phe Leu Gln Met Gly Ala 40 Val Ala Gly Ala Ala Val Ser Phe Pro Tyr Leu Ile Thr Pro Glu Asn 55 Ala Ile Ala Ala Val Ser Lys Pro Ser Ala Leu Ala Lys Ala Val Ser 70 75 Leu Gly Phe Thr Ser Ile Asp Val Ser Thr Glu Asp Thr Val Arg Val 85 Pro Glu Gly Tyr Ile Ala Arg Pro Phe Tyr Arg Trp Gly Asp Pro Thr 105 100 Gly Ile Lys Asp Asn Met Pro Ala Phe Lys Pro Asp Ala Ser Asn Thr 115 120 125 Thr Asp Glu Gln Ala Val Gln Ala Gly Met His His Asp Gly Met Ala 130 135 140 Trp Phe Ser Leu Pro Gln Gly Ala Gln Asn Pro Glu His Gly Leu Leu 145 150 155 Ala Leu Asn His Glu Tyr Ile Asp Asn Gly Met Leu Phe Thr Asp Gly 170 165 Thr Ala Asn Trp Ser Leu Asp Lys Ala Arg Lys Gly Gln Asn Ala Met 180 185 Gly Val Ser Val Val Glu Val Lys Lys Thr Gly Ser Gly Trp Glu Val 195 200 205 Val Arg Pro Ser Ser Phe Ala Arg Arg Ile Thr Val Asn Thr Pro Met

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Gln Leu Thr Gly Pro Ala Arg His Gln Asp Leu Met Lys Thr Ala Ala
               230
                     235 240
Asp Pro Gln Gly Glu Arg Val Leu Gly Thr Met Gln Asn Cys Ala Asn
            245 250 255
Gly His Thr Pro Trp Gly Thr Tyr Leu Thr Cys Glu Glu Asn Trp Ser
        260
             265 270
Asp Ile Phe Val Lys Lys Ala Asp Leu Asn Pro Leu Glu Lys Arg Tyr
   275 280 285
Gly Ile Ser Asp Ser Asp Glu Ser Tyr Arg Trp Asn Glu Val Asp Glu
 290 295 300
Arg Phe Ser Val Asp Lys Thr Pro Asn Glu Pro Asn Arg Phe Gly Trp
305 310 315 320
Val Val Glu Ile Asp Pro Tyr Asn Pro Thr Ser Thr Pro Arg Lys His
            325 330 335
Thr Ala Leu Gly Arg Phe Lys His Glu Gly Ala Ala Val Thr Leu Ala
        340 345
Ala Asp Asn Arg Val Val Val Tyr Met Gly Asp Asp Gln Lys Phe Glu
                     360
                         365
Tyr Ile Tyr Lys Phe Val Ser Asp Lys Lys Tyr Asp Pro Ala Asn Arg
 370
                  375
                                 380
Glu Ala Asn Met Gln Leu Leu Thr Ser Gly Thr Leu Tyr Val Ala Arg
               390
                              395
Phe Asn Glu Asp Gly Ser Gly Asp Trp Leu Pro Leu Ile Phe Gly Gln
           405
                           410 415
Asn Gly Leu Asp Lys Ser Asn Gly Phe Ala Ser Gln Gly Asp Leu Leu
        420
                        425
                                       430
Ile Lys Thr Arq Leu Ala Ala Asp Val Val Gly Ala Thr Lys Met Asp
     435
                     440
                                     445
Arg Pro Glu Trp Ile Ala Val Asp Pro His Ala Ser Gly Ser Val Tyr
 450
                 455
                                 460
Cys Thr Leu Thr Asn Asn Ser Asp Arg Gly Lys Glu Gly Lys Ala Pro
               470
465
                              475
Val Asp Ala Ala Asn Pro Arg Ala Asn Asn Val Phe Gly His Ile Met
            485 490
His Trp His Glu Glu Gly Ala Asp Pro Ala Ala Ala Arg Phe Lys Trp
         500
                       505
Asp Ile Leu Val Met Ala Gly Arg Thr Asp Gly Asp Asp Pro Lys Ala
                     520
                                    525
Lys Gly Ser Met Gln Gly Ala Ala Phe Gly Ser Pro Asp Gly Leu Ser
  530
                  535
                                 540
Phe Asp His Gln Gly Val Leu Trp Ile Gln Thr Asp Val Ser Ser Ser
545
               550
                              555
Thr Ile Asn Lys Lys Ala Tyr Glu Gly Met Gly Asn Asn Gln Met Val
           565
                           570
Ala Thr Ile Pro Gly Thr Asn Glu Tyr Arg Arg Phe Leu Thr Gly Pro
                             590
         580
                        585
Arg Gly Cys Glu Ile Thr Gly Ile Ala Phe Thr Pro Asp Asn Arg Thr
     595
                     600
Leu Phe Ile Asn Ile Gln His Pro Gly Glu Gly Gly Asp Asp Ile Thr
                 615
                                 620
Asp Pro Ala Asn Pro Arg Ala Val Ser Asn Trp Pro Asp Ala Ser Pro
625 630
                   635 640
Asn Gly Arg Pro Arg Ser Ser Thr Val Val Ile Thr Lys Ala Asp Gly
           645
                          650
Glv Ile Ile Gly Ser
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<210> 9834 <211> 464

<211> 464 <212> PRT

<213> Enterobacter cloacae

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Ser Ser Asp Gln Asn Pro Thr Leu Gln Arg Gly Leu Gln Asn Arg His
             25
Ile Gln Leu Ile Ala Leu Gly Gly Ala Ile Gly Thr Gly Leu Phe Leu
                     40
Gly Ile Gly Pro Ala Ile Gln Met Ala Gly Pro Ala Val Leu Leu Gly
                  55
                       - 60
Tyr Gly Ile Ala Gly Ile Ile Ala Phe Leu Ile Met Arg Gln Leu Gly
       70
                              7.5
Glu Met Val Val Glu Glu Pro Val Ser Gly Ser Phe Ala His Phe Ala
            85
                            90
Tyr Lys Tyr Trp Gly Pro Phe Ala Gly Phe Leu Ser Gly Trp Asn Tyr
         100
              105
                                          110
Trp Val Met Phe Val Leu Val Gly Met Ala Glu Leu Thr Ala Ala Gly
      115
                      120
                                       125
Ile Tyr Met Gln Tyr Trp Leu Pro Asp Val Pro Thr Trp Ile Trp Ala
  130
                  135
                                   140
Ala Ala Phe Phe Ile Ile Ile Asn Ala Val Asn Leu Val Asn Val Arg
145
               150
                                155
Leu Tyr Gly Glu Thr Glu Phe Trp Phe Ala Leu Ile Lys Val Leu Ala
             165 170
Ile Ile Gly Met Ile Gly Phe Gly Leu Trp Leu Leu Phe Ser Gly His
         180
                          185
Gly Gly Glu Arg Ala Thr Ile Asp Asn Leu Trp Gln His Gly Gly Phe
      195
                      200
Leu Ala Thr Gly Trp Lys Gly Leu Ile Leu Ser Leu Ala Val Ile Met
 210
                  215
                                   220
Phe Ser Phe Gly Gly Leu Glu Leu Ile Gly Ile Thr Ala Ala Glu Ala
225
                230
                                235
Arg Asp Pro His Lys Ser Ile Pro Lys Ala Val Asn Gln Val Val Tyr
             245
                            250
Arg Ile Leu Leu Phe Tyr Ile Gly Ser Leu Val Val Leu Leu Ala Leu
                         265
                                         270
Tyr Pro Trp Val Glu Val Lys Ser Asp Ser Ser Pro Phe Val Met Ile
      275 280
Phe His Asp Leu Asn Ser Asn Val Val Ala Ser Ala Leu Asn Phe Val
   290
                   295
                                   300
Ile Leu Val Ala Ser Leu Ser Val Tyr Asn Ser Gly Val Tyr Ser Asn
               310
                                315
Ser Arg Met Leu Phe Gly Leu Ser Val Gln Gly Asn Ala Pro Lys Phe
             325
                             330
Leu Thr Arg Val Ser Arg Arg Gly Val Pro Val Asn Ser Leu Phe Leu
                         345
                                         350
Ser Gly Ala Ile Thr Ser Leu Val Val Leu Ile Asn Tyr Leu Leu Pro
                   360
                            365
Lys Glu Ala Phe Gly Leu Leu Met Ala Leu Val Val Ala Thr Leu Leu
                   375
                                   380
Leu Asn Trp Ile Met Ile Cys Leu Ala His Leu Arg Phe Arg Ala Ala
               390
                               395
Met Arg Arg Lys Gly Arg Glu Thr Gln Phe Lys Ala Leu Leu Tyr Pro
           405
                            410 415
Ala Gly Asn Tyr Leu Cys Ile Ala Phe Leu Gly Leu Ile Leu Val Leu
      420
                         425 430
Met Cys Thr Met Asp Glu Met Arg Leu Ser Ala Met Leu Leu Pro Val
    435 440 445
Trp Val Val Phe Leu Phe Ile Ala Phe Lys Leu Ser Arg Lys Lys
  450
                  455
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<212> PRT
<213> Enterobacter cloacae
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Arg Ser Gly Gly Gly Met Arg Thr Met Lys Gly Pro Gly Ile Phe Leu
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Ser Gln Phe Ile Gly Ala Glu Ala Pro Phe Asn Ser Leu Asp Gly Leu
 20
                          2.5
                                           3.0
Ala Glu Trp Ala Ala Gly Lys Gly Tyr Lys Ala Val Gln Ile Pro Cys
 35
                40
Asn His Pro His Ile Phe Asp Val Glu Lys Ala Ala Glu Ser Gln Ala
             55
                                    60
Tyr Cys Asp Asp Ile Thr Ala Arg Leu Ala Ala His Gly Leu Val Ile
                70
                                75
Ser Glu Leu Ser Thr His Leu Glu Gly Gln Leu Val Ala Val Asn Pro
            85
                             90
Val Tyr Ser Glu Ala Phe Asp His Phe Ala Pro Ala Ala Val Arg Gly
         100 105
Asn Glu Ala Ala Arg Arg Ala Trp Ala Thr Glu Lys Leu Lys Gln Ala
115
                      120 125
Ala Val Ala Ser Ala Arg Leu Gly Leu Lys Ala His Ala Thr Phe Ser
       135
                                    140
Gly Ser Leu Ala Trp Pro Phe Phe Tyr Pro Trp Pro Pro His Asn Gln
                150
                              155
Gln Arg Phe Gln Glu Ala Phe Glu Glu Leu Ala Thr Arg Trp Arg Pro
            165
                             170
                                              175
Ile Leu Asp Thr Phe Asp Glu Gln Gly Val Asp Val Cys Phe Glu Leu
                         185
         180
                                           190
His Pro Gly Glu Asp Leu His Asp Gly Val Thr Phe Glu Arg Phe Leu
      195
                       200
                                        205
Ala Leu Val Asp Asn His Pro Arg Cys Asn Ile Leu Tyr Asp Pro Ser
210
                   215
                                     220
His Met Leu Leu Gln Gln Met Asp Tyr Leu Ala Phe Ile Asp Ile Phe
225
                230
                                 235
His Ala Arg Ile Lys Ala Phe His Val Lys Asp Ala Glu Phe Arg Pro
             245
                              250
Ser Gly Arg Ser Gly Val Tyr Gly Gly Tyr Gln Pro Trp Ile Asn Arg
         260
                          265
                                           270
Ala Gly Arg Phe Arg Ser Pro Gly Asp Gly Gln Ile Asp Phe Lys Gly
      275
                       280
                                        285
Ile Phe Ser Lys Leu Thr Gln Tyr Asp Tyr Asp Gly Trp Ala Val Leu
   290
                    295
                                    300
Glu Trp Glu Cys Cys Leu Lys Asp Gly Asp Thr Gly Ala Ser Glu Gly
                310
                                315
Ser Glu Phe Ile Arg Arg His Ile Ile Pro Val Ser Gly Arg Ala Phe
                             330
             325
Asp Asp Phe Ala Ala Gly Gly Cys His Asp
         340
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<212> PRT
<213> Enterobacter cloacae
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Tyr His Ala Thr Ile Ser Arg Val Val Gly Ile Met Phe Lys Arg Glu
                             10
Ala Glu Gly Glu Ser Ser Met Thr Ile Ser Ala Gln Val Ile Asp Thr
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Ile Val Glu Trp Ile Asp Asp Asn Leu His Gln Pro Leu Arg Ile Glu 35 40 Glu Ile Ala Arg His Ala Gly Tyr Ser Lys Trp His Leu Gln Arg Leu 55 60 Phe Met Gln Tyr Lys Gly Glu Ser Leu Gly Arg Tyr Ile Arg Glu Arg 70 7.5 Lys Leu Leu Met Ala Ala Arg Asp Leu Arg Glu Ser Asp Glu Arg Val 85 90 Tyr Asp Ile Cys Leu Arg Tyr Gly Phe Asp Ser Gln Gln Thr Phe Thr 100 105 110 Arg Ile Phe Thr Arg Ile Phe Thr Arg Thr Phe Asn Gln Pro Pro Gly 115 120 Ala Tyr Arg Lys Glu Asn His Gly Arg Ala His 135

<210> 9838 <211> 907 <212> PRT

<213> Enterobacter cloacae

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Lys Arg Ala Ile Ile Arg Lys Leu Pro Thr Val Glu Thr Leu Gly Ala Met Thr Val Val Cys Ser Asp Lys Thr Gly Thr Leu Thr Met Asn Glu 345 350 Met Thr Val Lys Ala Ile Ile Thr Ala Asp Thr Cys Tyr Arg Val Asp 355 360 365 Gly Asn Ser Tyr Glu Pro Val Gly Asn Ile Tyr Leu Glu Gly Ser Asp 375 380 Glu Pro Val Gln Ile Gln Pro Gly Thr Val Leu Glu Gln Tyr Leu Arg Leu Trp Gly Ile Thr Gly Gly Pro Thr Glu Gly Ala Leu Lys Val Leu 420 425 430 Ala Ala Lys Ala His Leu Glu Pro Val Val Thr Thr Leu Val Asn Lys 435 440 Ile Pro Phe Asp Ser Gln Tyr Lys Tyr Met Ser Thr His Tyr Gln Ile 450 455 Gly Gly Glu Glu Gln Ile Leu Ile Thr Gly Ala Pro Asp Val Ile Phe Ala Leu Cys Glu Gln Gln Gln Thr Arg Asn Gly Ala Gln Ala Phe Asp Arg Ala Tyr Trp Glu Thr Glu Met Glu Arg Tyr Ala Arg Gln Gly Leu Arg Met Val Ala Ala Ala Phe Lys Pro Ala Asn Gly Glu Gln Ala Leu Thr His Asp Asp Leu Ser His Gly Leu Ile Phe Leu Gly Ile Ala Gly Met Met Asp Pro Pro Arg Pro Glu Ala Ile Glu Ala Ile Asn Ala Cys Gln Gln Ala Gly Ile Arg Val Lys Met Ile Thr Gly Asp His Pro Gln Thr Ala Met Ser Ile Gly Gln Met Leu Gly Ile Thr Asn Ser Glu Gln Ala Val Thr Gly Tyr Gln Leu Glu Lys Met Asp Asp Ala Glu Leu Ala Glu Ala Ala Val Lys Tyr Asp Ile Phe Ala Arg Thr Ser Pro Glu His Lys Leu Arg Leu Val Lys Ala Leu Gln Asp Lys Gly Glu Ile Val Gly 630 635 Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ala Leu Arg Gln Ala Asp Val Gly Ile Ala Met Gly Ile Lys Gly Thr Glu Val Thr Lys Glu Ala Ala Asp Met Val Leu Thr Asp Asp Asn Phe Ala Thr Ile Ala Ser Ala Val Lys Glu Gly Arg Arg Val Tyr A'sp Asn Leu Lys Lys Thr Ile Leu Phe Ile Met Pro Thr Asn Leu Ala Gln Gly Leu Leu Ile Val Ile Ala Leu Leu Ala Gly Asn Ile Ile Pro Leu Thr Pro Val Leu Ile Leu Trp Met Asn Met Ala Thr Ser Ala Thr Leu Ser Phe Gly Leu Ala Phe Glu Ala Ala Glu Arg Asn Ile Met Arg Arg Pro Pro Arg Gln Thr Gly Gln His Val Met Asp Ala Tyr Ala Val Trp Arg Val Ala Phe Val Gly Thr Met Ile Ala Ile Ala Ala Phe Ala Leu Glu Ala Trp Leu Ala Pro Arg Gly His Ser Ala Glu Phe Ile Arg Thr Val Leu Leu Gln Met Leu Val

5379 805 810 Cys Ala Gln Trp Val Tyr Met Ile Asn Cys Arg Asn Thr Glu Gly Phe 820 825 Ser Leu Asn Arg Gly Leu Leu Ala Asn Lys Gly Ile Trp Leu Val Thr 840 845 Gly Val Leu Phe Leu Leu Gln Ala Ala Ile Ile Tyr Leu Pro Phe Met 850 855 860 Gln Met Leu Phe Gly Thr Glu Ala Leu Pro Leu Arg Tyr Trp Phe Val 870 875 Thr Leu Ala Val Ala Gly Val Met Phe Phe Val Val Glu Ile Glu Lys 885 890 Arg Leu Thr Arg Arg Phe Arg Lys Ala Ala 900 <210> 9839 <211> 364 <212> PRT <213> Enterobacter cloacae <400> 9839 Gly Lys Thr Thr Pro Arg Tyr Phe Leu Met Lys Leu Pro Leu Leu Phe 1.0 Ala Leu Leu Ala Cys Thr Leu Gln Pro Ala Phe Ala Ala Val Ile Pro 25 Val Arg Val Ala Thr Val Glu Gln Thr Ala His Ala Ala Glu Arg Gln 35 4.0 Ile Pro Gly Arg Ile Glu Ala Ile His Thr Val Glu Leu Arg Ala Arg 55 50 60 Thr Glu Gly Val Ile Thr Arg Ile His Phe Arg Asp Gly Gln Tyr Val 7.0 75 Lys Lys Gly Asp Val Leu Phe Glu Leu Asp Asp Ala Glu Pro Arg Ala 90 8.5 Ala Leu Arg Leu Ala Gln Ala Glu Val Arg Ser Ala Glu Ala Thr Leu 100 105 110 Arg Gln Ala Gln Gln Leu Ser Arg Phe Glu Ser Leu Gly Ser Ser 115 120 Asn Ala Ile Ser Arg His Asp Val Asp Asn Ala Arg Met Gln Arg Asp 135 140 Val Ala Ser Ala Ala Leu Glu Gln Ala Lys Ala Arg Leu Asp Thr Arg 150 155 160 Ser Val Thr Leu Asp Tyr Thr Arg Ile Ile Ser Pro Ile Asp Gly Arg 165 170 Val Gly His Ser Asn Phe His Val Gly Ser Leu Val Asn Pro Ala Ser 180 185 Gly Val Leu Val Glu Val Val Gln Leu Asp Pro Ile Arg Ile Ala Phe 195 200 205 Ala Leu Glu Glu Gly Ala Phe Ala Thr Lys Ala Gly Gln His Ala Asp 210 215 220

Ile Ser Ala Met Lys Gln Ala Trp Gln Ala Leu Ile Asp Ser Asn Gly 225 230 230 235 240 Gln Arg Ile Ser Gly Glu Leu Thr Ser Val Asp Asn Arg Ile Asp Pro 245 250 Arg Thr Ala Ser Val Met Leu Arg Ala Glu Phe Ala Asn Pro Arg His 260 270 Gln Leu Pro Gly Gly Asn Val Asn Val Tyr Leu Arg Pro Ala Ser

275 280 285 Glu Leu Pro Val Leu Thr Leu Pro Ala Ala Ala Val Gln Gln Asn Gly 290 295 300

Asp Gly Phe Phe Ala Trp Val Ile Asn Ala Glu Asp Lys Ala Glu Met 305 310 Arg Pro Leu Lys Val Ala Gly Gln Ile Gly Gln Gln Phe Gln Ile Ala

325 330 Ser Gly Val Lys Pro Gly Glu Arg Ala Ile Thr Asp Gly Ala Gln Arg 340 345 Val Gln Pro Gly Val Ala Val Gln Ile Leu Asn <210> 9840 <211> 1055 <212> PRT <213> Enterobacter cloacae <400> 9840 Gly Ala Ile Met Leu Thr Phe Phe Ile Lys Arg Pro Arg Phe Ala Met 1.0 Val Ile Ala Leu Val Ile Thr Leu Leu Gly Ala Ile Ala Leu Arg Ile 20 25 30 Ile Pro Val Glu Gln Tyr Pro Gln Ile Thr Pro Pro Val Val Asn Val 4.0 Ser Ala Ser Trp Pro Gly Ala Ser Ser Ala Asp Val Ala Glu Ala Ile 55 60 Ala Thr Pro Leu Glu Thr Gln Leu Asn Gly Val Asp His Met Leu Tyr 70 7.5 Met Glu Ser Thr Ser Ser Asp Glu Gly Thr Tyr Ser Leu Asn Ile Thr 85 90 Phe Ala Ala Gly Thr Asp Pro Asp Leu Ala Ala Ile Asp Val Gln Asn 100 105 110 Arg Val Ala Gln Ala Val Ala Gln Leu Pro Thr Glu Ala Gln Gln Asn 115 120 Gly Val Gln Val Arg Lys Arg Ala Thr Asn Leu Met Met Gly Val Ser 135 140 Leu Tyr Ser Pro Asn Asn Thr His Thr Pro Leu Phe Val Ser Asn Tyr 150 155 Ala Ser Thr Gln Val Arg Glu Ala Leu Ser Arg Leu Pro Gly Val Gly 165 170 Gln Val Gln Met Phe Gly Ala Arg Asp Tyr Ser Met Arg Ile Trp Leu 180 185 Arg Pro Asp Arg Met Asn Ala Leu Asn Val Thr Ser Asp Asp Val Ala 195 200 205 Gln Ala Leu Arg Glu Gln Asn Val Gln Gly Ala Ala Gly Gln Val Gly 215 220 Thr Pro Pro Val Phe Asn Gly Gln Gln Thr Leu Thr Ile Asn Gly 230 235 Leu Gly Arg Leu Asn Gln Ala Asp Asp Phe Ala Asn Ile Ile Ile Arg 245 250 Ala Gly Glu Met Gly Gln Leu Val Arg Leu Lys Asp Val Ala Thr Ile 260 265 Glu Leu Gly Ser Leu Ser Tyr Ser Ser Gly Ala Gln Leu Asn Gly His 275 280 285 Asp Ser Ala Tyr Leu Gly Ile Tyr Pro Thr Pro Ser Ala Asn Ala Leu 290 295 300 Arg Val Ala Asp Ala Val Arg Ala Glu Leu Glu Arg Leu Ser Thr Arg 310 315 Phe Pro Asp Asp Leu Val Tyr Glu Val Lys Phe Asp Thr Thr Ser Phe 325 330 Val Ala Ala Thr Ile Lys Glu Ile Gly Val Ser Leu Ala Leu Thr Met 340 345 Leu Ala Val Val Val Val Ser Leu Phe Leu Gln Ser Trp Arg Ala 355 360 365 Thr Leu Ile Val Ala Leu Ala Ile Pro Val Ser Leu Val Gly Thr Phe 375

380

Ala Val Leu Tyr Thr Leu Gly Tyr Ser Ala Asn Thr Leu Ser Leu Phe

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395
             390
Ala Ile Ile Leu Ala Leu Thr Met Val Val Asp Asp Ala Ile Val Val
        405 410 415
Val Glu Ser Val Glu Thr Leu Met Ala Glu Gly Gln Ser Arg Thr Ala
      420 425 430
Ala Thr Ala Leu Ala Leu Arg Gln Ile Ala Gly Pro Val Ile Ala Thr
   435 440 445
Thr Leu Val Leu Leu Ala Val Phe Val Pro Val Ala Leu Leu Pro Gly
450 455 460
Ile Val Gly Glu Leu Tyr Arg Gln Phe Ala Val Thr Leu Ser Thr Ala
465 470 475
Val Thr Leu Ser Ser Leu Val Ala Leu Thr Leu Thr Pro Ala Leu Cys
      485 490 495
Ala Leu Leu Leu Arg Pro Arg Pro Ala Gln Pro Ala Ala Val Phe Arg
   500 505 510
Gly Phe Asn Arg Gly Leu Asp Ala Thr Arg Thr Leu Tyr Thr Arg Ile
   515 520 525
Val Ser Val Phe Asn Leu Arg Pro Trp Leu Ala Leu Leu Ala Thr Ala
 530 535 540
Gly Ala Ala Ala Val Val Phe Ser Phe Met Ser Met Pro Lys Gly
545 550 555
Phe Leu Pro Gln Glu Asp Gln Gly Tyr Phe Phe Ala Ser Val Gln Leu
          565 570
Pro Glu Ala Ala Ser Leu Glu Arg Thr Glu Ala Val Met Thr Thr Ala
  580
                      585
                                     590
Arg Glu Leu Ile Ala Lys Asn Pro Ala Val Glu Asp Val Ile Gln Val
595 600 605
Ser Gly Phe Asn Ile Leu Asn Gly Thr Ser Ala Ser Asn Gly Gly Phe
610 615
                             620
Ile Ser Ile Met Leu Lys Asp Trp Ser Glu Arg Pro Pro Leu Asp Glu
     630
                            635
Val Met Gly Thr Leu Gln Arg Gln Leu Leu Ala Leu Pro Glu Ala Thr
                         650
           645
Ile Met Thr Phe Ala Pro Pro Thr Leu Pro Gly Leu Gly Asn Ala Ser
660 665
                                     670
Gly Phe Asp Leu Arg Ile Gln Ala Gln Ala Gly Gln Ser Pro Ala Glu
   675
                   680
                                  685
Leu Glu Arg Val Thr Arg Glu Val Leu Ala Lys Ala Asn Gln His Pro
 690
                695
Gln Leu Ser Arg Val Phe Thr Thr Trp Ser Ser Asn Val Pro Gln Met
705 710 715
Thr Leu Thr Val Asp Arg Glu Arg Ala Ala Arg Leu Asp Val Pro Val
          725
                         730
Ser Arg Ile Phe Ser Ser Leu Gln Thr Ala Phe Gly Gly Thr Arg Ala
           745
Gly Asp Phe Ser Val Asn Asn Arg Val Tyr His Val Val Met Gln Asn
     755 760
                                  765
Glu Met Gln Trp Arg Glu Arg Ala Glu Gln Ile Ser Glu Leu Phe Val
         775
                               780
Arg Ser Asn Ser Gly Glu Arg Val Arg Leu Ser Asn Leu Val Thr Ile
           790 795
                                          800
Thr Pro Thr Val Gly Ala Pro Phe Ile Gln Gln Tyr Asn Gln Phe Pro
          805 810 815
Ser Val Ser Val Ser Gly Ser Ala Ala Glu Gly Val Ser Ser Ser Thr
       820
                      825
Ala Met Ala Ala Met Gly Glu Ile Leu Ala Glu Asn Leu Pro Ala Gly
    835 840 845
Tyr Asp Tyr Ala Trp Ser Gly Met Ser Tyr Gln Glu Gln Gln Thr Gly
 850 855 860
Asn Gln Ala Ile Trp Ile Val Leu Ala Ala Val Val Met Ala Trp Leu
              870
                            875
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Phe Leu Val Ala Gln Tyr Glu Ser Trp Thr Leu Pro Ala Ser Val Met
             885
                               890
Leu Ser Val Leu Phe Ala Ile Gly Gly Ala Leu Val Trp Leu Trp Leu
          900
                           905
                                            910
Ala Gly Tyr Ala Asn Asp Val Tyr Val Gln Ile Gly Leu Val Leu Leu
      915 920
Ile Ala Leu Ala Ala Lys Asn Ala Ile Leu Ile Val Glu Phe Ala Arg
  930 935
                                     940
Ala Arg Arg Met Asp Gly Met Ala Ile Val Asp Ala Ala Arg Glu Gly
                 950
                                  955
Ala Ser Arg Arg Phe Arg Ala Val Met Met Thr Ala Val Ser Phe Ile
              965 970
Ile Gly Val Leu Pro Met Met Leu Ala Thr Gly Ala Gly Ala Gln Ser
          980 985 990
Arg Arg Ile Ile Gly Thr Thr Val Phe Ser Gly Met Leu Val Ala Thr
                        1000 1005
Val Val Gly Ile Val Phe Ile Pro Ala Leu Phe Val Leu Phe Gln Arg
                    1015 1020
Leu Arg Glu Trp Gly His Gly Leu Thr Asp Ser Ser Pro Thr Ala His
1025 1030 1035
Ser Ala Ser Ala Pro Glu Lys Ser Ala Ser Arg His Arg Arg
             1045
                               1050
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Gly Arg Val Val Ser Ser Gln Cys Asp Val Ala Trp Ile Ser Gln Ala
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Ile Leu Ile Ala Leu Leu Ser Val Ser Gly Leu Ser Val Asp Arg Thr
         20
                                             30
Cys Met Val Leu Met Cys Gly Leu Gly Arg Met Ser Gln Cys Arg Ser
 3.5
                        4.0
                                         45
Leu Met Leu Ser Ile Leu Ser Asp Arg Gln Ala Asp Arg Leu Met Glu
                  55
                                60
Trp Asp Ile Arg Asn Gly Val Ile Gln Arg Tyr Gly Arg Arg His Gly
              70
65
Ile Ala Val Pro Val Ser Asp Val Val Val Pro Leu Leu Ala Ala Gly
              85
                               90
Ser Glu Gly Pro Gly
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<213> Enterobacter cloacae
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                               10
Lys Phe Met Thr Thr Ala Asp Phe Lys Arg Pro Lys Leu Glu Leu Pro
                           25
                                             30
Asn Gly Ala Asp Lys Leu Leu His Ser Cys Cys Ala Pro Cys Ser
       35
                     40
                                         4.5
Gly Glu Val Met Glu Ala Ile Gln Ala Ser Gly Ile Asp Tyr Thr Ile
                   55
Phe Phe Tyr Asn Pro Asn Ile His Pro Gln Lys Glu Tyr Leu Ile Arg
                7.0
                                  75
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Lys Asp Glu Asn Ile Arg Phe Ala Glu Gln His Gly Val Pro Phe Ile

8.5 90 Asp Ala Asp Tyr Asp Thr Asp Asn Trp Phe Glu Arg Ala Lys Gly Met 100 105 110 Glu Trp Glu Pro Glu Arg Gly Ile Arg Cys Thr Met Cys Phe Asp Met 115 120 125 Arg Phe Glu Arg Thr Ala Leu Tyr Ala Ala Glu Asn Gly Phe Asn Val 130 135 140 Ile Ser Ser Ser Leu Gly Ile Ser Arg Trp Lys Asn Met Gln Gln Ile 145 150 155 160 Asn Asp Cys Gly Gln Arg Ala Ala Ala His Tyr Pro Gly Met Val Tyr 165 170 175 Trp Asp Tyr Asn Trp Arg Lys Gln Gly Gly Ser Ser Arg Met Ile Glu 180 185 190 Ile Ser Lys Arg Glu Gln Phe Tyr Gln Glu Glu Tyr Cys Gly Cys Val 195 200 205 Tyr Ser Leu Arg Asp Ser Asn Leu His Arg Lys Ser Gln Gly Arg Pro 210 215 220 Leu Ile Gln Ile Gly Lys Leu Tyr Tyr Gly Lys Glu Asp Asp Gln Ala 230 235

<210> 9843 <211> 268 <212> PRT <213> Enterobacter cloacae

<400> 9843 Ile Lys Leu Lys Arg Thr Gly Met Met His Ser Ser Ala Cys Asp 10 Cys Glu Ala Ser Leu Cys Glu Thr Leu Arg Gly Phe Ser Ala Gln His 20 25 Pro Asp Ser Val Ile Tyr Gln Thr Ser Leu Met Ser Ala Leu Leu Ser 35 40 Glv Val Tyr Glu Glv Glu Thr Thr Ile Ala Asp Leu Leu Ala His Glv 50 55 Asp Phe Gly Leu Gly Thr Phe Asn Glu Leu Asp Gly Glu Met Ile Ala 70 75 Phe Ser Ser Gln Val Tyr Gln Leu Arg Ala Asp Gly Ser Ala Arg Ala 85 Ala Lys Pro Glu Gln Lys Thr Pro Phe Ala Val Met Thr Trp Phe Gln 100 105 110 Pro Gln Tyr Arg Lys Thr Phe Asp Gly Pro Val Ser Arg Gln Gln Ile 115 120 His Asp Val Ile Asp Gln Gln Val Pro Ser Asp Asn Leu Phe Cys Ala 135 140 Leu Arg Ile Asp Gly Asn Phe Arg His Ala His Thr Arg Thr Val Pro 150 155 Arg Gln Thr Pro Pro Tyr Arg Ala Met Thr Asp Val Leu Asp Asp Gln 165 170 Pro Val Phe Arg Phe Asn Gln Arg Glu Gly Val Leu Val Gly Phe Arg 180 185 190 Thr Pro Gln His Met Gln Gly Ile Asn Val Ala Gly Tyr His Glu His 200 195 205 Phe Ile Thr Asp Asp Arg Gln Gly Gly Gly His Leu Leu Asp Tyr Gln 210 215 220 Leu Glu Asn Gly Val Leu Thr Phe Gly Glu Ile His Lys Leu Met Ile 230 235 240 Asp Leu Pro Ala Asp Ser Ala Phe Leu Gln Ala Asn Leu His Pro Ser 250 255 245

Asn Leu Asp Ala Ala Ile Arg Ala Val Glu Asn

<210> 9844 <211> 278 <212> PRT <213> Enterobacter cloacae

<400> 9844 Pro Ala Ala Asp Gly Pro Ala Pro Ser Gln Pro Asp Phe Val Asn Gln 10 Tyr Lys Asp Arg Glu Met Gln Lys Val Ala Leu Val Thr Gly Ser Gly 20 25 30 Gln Gly Ile Gly Lys Ala Ile Ala Leu Arg Leu Val Lys Asp Gly Phe 35 40 45 Ala Val Ala Ile Ala Asp Tyr Asn Glu Glu Thr Ala Lys Ala Val Ala 5.5 Asp Glu Ile Thr Arg Asn Gly Gly Lys Ala Val Ala Val Lys Val Asp 70 75 Val Ser Asp Arg Glu Gln Val Phe Ala Ala Val Glu Lys Ala Arg Thr 85 90 Ala Leu Gly Gly Phe Asn Val Ile Val Asn Asn Ala Gly Val Ala Pro 100 105 110 Ser Thr Pro Ile Glu Ser Ile Thr Pro Glu Ile Val Asp Lys Val Tyr 115 120 125 Asn Ile Asn Val Lys Gly Val Ile Trp Gly Ile Gln Ala Ala Ile Asp 135 140 Ala Phe Arg Lys Glu Gly His Gly Gly Lys Ile Ile Asn Ala Cys Ser 150 155 160 Gln Ala Gly His Thr Gly Asn Pro Glu Leu Ala Val Tyr Ser Ser Ser 165 170 Lys Phe Ala Val Arg Gly Leu Thr Gln Thr Ala Ala Arg Asp Leu Ala 180 185 190 Pro Leu Gly Ile Thr Val Asn Ala Tyr Cys Pro Gly Ile Val Lys Thr 195 200 205 Pro Met Trp Ala Glu Ile Asp Arg Gln Val Ser Glu Ala Ala Gly Lys 215 210 220 Pro Leu Gly Tyr Gly Thr Glu Thr Phe Ala Lys Arg Ile Thr Leu Gly 230 235 240 Arg Leu Ser Glu Pro Glu Asp Val Ala Ala Cys Val Ser Tyr Leu Ala

Arg Leu Ser Glu Pro Glu Asp Val Ala Ala Cys Val Ser Tyr Leu Ala
245 250 255
Gly Pro Asp Ser Asp Tyr Met Thr Gly Gln Ser Leu Leu Ile Asp Gly
260 265 270

Gly Met Val Phe Asn

<210> 9845 <211> 86 <212> PRT

<213> Enterobacter cloacae

Val Ser Ala Gly Trp 85

<210> 9846 <211> 415 <212> PRT

<213> Enterobacter cloacae

<400> 9846

Arg Met Ala Ile Pro Ala Arg Val Arg Ala Ala Asn Leu Ser Ala Gly 1.0 Thr Leu Phe Pro Phe Pro Asp Gly Arg Leu Met Ile Ser Pro Gln Gly 2.5 Ala Ala Met Ile Asn Val Gly Ile Ile Gly Ser Gly Phe Ile Gly Pro 40 Ala His Ile Glu Ala Leu Arg Arg Leu Gly Phe Val Gln Val Val Ala · 50 5.5 Leu Cys Asp Gly Ser Leu Val Lys Ala Gln Glu Lys Ala Arg Gln Leu 70 75 Asn Val Pro His Ala Tyr Ala Ser Val Glu Glu Leu Leu Ala His Pro 85 90 Asn Leu His Ala Val His Asn Cys Thr Pro Asn His Leu His Ala Glu 100 105 110 Ile Asn Arg Gln Ile Leu Arg Ala Gly Lys His Val Phe Ser Glu Lys 115 120 125 Pro Leu Cys Met Thr Pro Asp Glu Ala Arg Glu Leu Val Ala Leu Ala 135 140 Glu Gln Ala Gly Val Val His Gly Val Ser Phe Val Tyr Arg Gln Phe 145 150 155 160 Ala Met Val Arg Gln Ala Ala Ser Met Met Arg Ala Gly Thr Val Gly 165 170 Arg Leu Phe Ala Ser His Gly Ser Tyr Leu Gln Asp Trp Met Leu Leu 180 185 190 Glu Thr Asp Tyr Asn Trp Arg Val Glu Ala Ala Leu Gly Gly Ala Ser 200 205 195 Arg Ala Val Ala Asp Ile Gly Ser His Trp Cys Asp Thr Val Gln Tyr 215 220 210 Val Thr Gly Arg Arg Ile Thr Glu Val Met Ala Asp Leu Ser Ile Val Trp Pro Arg Arg Lys Ala Ser Ala Gly Gly Tyr Gln Thr Phe Ser His 245 250 Asp Glu Gln Ala Glu Tyr Glu Val Lys Pro Val Thr Thr Glu Asp Phe 260 265 Gly Ser Val Leu Phe Arg Phe Asp Asp Gly Ser Lys Gly Ser Phe Ser 280 Val Ser Gln Val Ser Ala Gly Arg Lys Asn Arg Leu Thr Phe Glu Ile 295 Asn Gly Ser Glu Gln Ser Val Ala Trp Asp Gln Glu Ile Pro Gln Gln 310 315 Leu Trp Ile Gly His Arg Ala Arg Ala Asn Gln Thr Leu Thr Asp Asp 325 330 335 Pro Gly Leu Met Asn Pro Asp Val Ala Asp Ser Ala His Phe Pro Gly 345 Gly His Ile Glu Gly Trp Pro Asp Ala Phe Lys Asn Met Met Ala Gln 355 360 365 Phe Tyr Arg Ala Val Gln Ala Gly Ala Met Pro Asp Thr Pro Gln Phe 370 375 380 Ala Thr Phe His Asp Gly Ala Asn Val Met Tyr Ile Ile Asp Ala Ile 390 395 Val Lys Ser His Gln Gln Gln Arg Trp Val Arg Val Glu Gln

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<210> 9847
<211> 340
<212> PRT
<213> Enterobacter cloacae
<400> 9847
Ile Tyr Gly Ser Leu His Lys Thr Leu Thr Ala Gly Cys Val Val Ala
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Met Ser Ile Gln Lys Ile Ala Gln Leu Ala Gly Val Ser Val Ala Thr
            20
                             25
Val Ser Arg Val Leu Asn Asn Ser Asp Thr Val Lys Ala Lys Asn Arg
                          40
Glu Arg Val Leu Arg Ala Ile Gln Glu Ser Asn Tyr Gln Pro Asn Leu
                      55
                                           60
Leu Ala Arg Gln Leu Arg Thr Ala Arg Ser Tyr Met Ile Leu Val Met
                   70
                                       75
                                                           80
Val Ser Asn Ile Ala Asn Pro Phe Cys Ala Glu Val Val Lys Gly Ile
               85
                                   90
Glu Ala Glu Ala Glu Lys Asn Gly Tyr Arg Ile Leu Leu Cys Asn Ser
           100
                               105
                                                   110
Gly Ser Asp Ile Glu Arg Ser Arg Ser Gly Leu Ser Leu Leu Ser Gly
        115
                           120
                                               125
Lys Ile Val Asp Gly Ile Ile Thr Met Asp Ala Phe Ser Lys Leu Pro
   130
                       135
                                           140
Glu Leu Ala Ala Leu Ile Gly Asn Ala Pro Trp Val Gln Cys Ala Glu
145
                  150
                                       155
Tyr Ala Asp Ala Gly Ala Val Ser Cys Val Gly Ile Asn Asp Val Asp
                165
                                   170
Ala Ser Gln His Ala Val Ser Gln Leu Ala Asp Gly Gly Arg Lys Arg
           180
                               185
                                                   190
Ile Ala Met Ile Asn His Asp Leu Ser Tyr Lys Tyr Ala Arg Leu Arg
       195
                           200
                                               205
Glu Arg Gly Tyr Lys Ser Val Ile His Leu Arg Asp Leu Asp Tyr Gln
    210
                       215
                                           220
Ala Val Glu Tyr Ala Ser Asp Leu Ser Ser Gly Ala Gly Met Ala Ala
                   230
225
                                        235
Met Gln Asn Leu Leu Lys Asp Asn Pro Pro Asp Ala Val Phe Ala Val
                245
                                    250
Ser Asp Thr Leu Ala Ala Gly Ala Leu Arg Ala Ile Gln Gln Ala Gly
            260
                               265
                                                  270
Leu Arg Val Pro Glu Asp Ile Ala Val Val Gly Phe Asp Gly Thr Glu
        275
                           280
                                               285
Leu Ala Asp Met Ile Ser Leu Thr Thr Ile Glu Gln Pro Ser Arg Asp
                       295
                                           300
Ile Gly Arg Lys Ala Val Asp Leu Leu Leu Asn Lys Ile Asp Asn Pro
                    310
                                       315
Asp Ala Pro Thr Glu Arg Val Met Met Asp Trp Arg Phe Ile Ser Arg
                325
                                   330
Ala Ser Thr
            340
<210> 9848
<211> 103
<212> PRT
<213> Enterobacter cloacae
<400> 9848
Asn Asp Asn Arg Arg Cys Trp Met Ser Lys Lys Ile Ile Asp Trp Asp
                                  1.0
Glu Leu Arg Ala Glu Leu Leu Ser Asp Ser Glu Val Gln Ala Ser Phe
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Asp Ala Glu Glu Arg Lys Glu Arg Leu Arg Glu Met Leu Ala Gln Trp 40 Arg Asn His Ala Gly Leu Thr Arg Ala Gln Val Ala Glu Arg Met Gly 55 60 Val Ser Ala Pro Thr Val Ser Arg Met Glu Ala Asn Ile Thr Arg Ala 70 7.5 Ser Leu Asp Thr Leu Thr Arg Tyr Ala Leu Val Cys Gly Val Lys His 85 90 Pro Gln Ile Thr Leu Tvr

100

<210> 9849 <211> 544

<212> PRT <213> Enterobacter cloacae

<400> 9849 Tyr Cys Lys Leu Leu Pro Phe Ala Leu Ala Leu Leu Thr Asn Phe Val 10 Gly Glu Gln Ala Val Met Lys Arg Val Trp Ser Gly Leu Leu Gly 20 25 30 Ile Gly Ala Leu Pro Ala Val Ala Ala Thr Cys Glu Gln Thr Ser Arg 40 Gln Gly Asp Ile Gln Gly Lys Phe Asp Ala Ser Gly Glu Val Cys Phe 5.0 55 60 Ser Leu Pro Glu Leu Gly Glu Asn Tyr Val Ser Ala Thr Leu Asn Gly 70 75 80 Val Thr Asp Ala Arg Leu Leu Asp Gly Gln Asn Arg Arg Ile Arg Thr 90 8.5 Leu Ile Glu Asn Gly Pro Ala Asp Gly Glu His Thr Leu Leu Phe Ala 100 105 Leu Pro Val Lys Gln Asn Thr Ser Leu Val Leu His Gly Glu Ala Gly 115 120 Lys Pro Trp Arg Phe Gln Trp Arg Met Lys Glu Thr Ser Pro Leu Pro 130 135 140 Arg Val Gln Met Leu Ala Pro Glu Ser Pro Thr Leu Lys Ala Leu Ala 145 150 155 Ser Val Ile Ser Ala Gly Gly Ser Thr Glu Ala Phe Trp Gln Ala Gln 165 170 Arg Arg Gln Gly Thr Pro Met Val Glu Pro Val Asp Ala Ser His Lys 180 185 190 Arg Val Thr Phe Leu Trp Arg Gly Ala Arg Asp Asn Val Phe Ile Leu 200 Gly Ser Pro Ala Gly Asp His Asp Pro Leu Phe Arg Leu Gly Asn Ser 215 220 Asp Val Trp Phe Arg Ser Tyr Val Val Pro Ala Asp Thr Val Met Gln 230 225 235 Tyr Lys Leu Ala Pro Asp Val Pro Ile Val Glu Gly Ser Thr Arg Asp 245 250 Gln Arg Arg Ala Ile Leu Val Ser Ala Gln Ala Asp Pro Leu Asn Pro 265 270 Asn Thr Phe Gly Glu Gln Lys Thr Asp Arg Trp Asn Arg Phe Ser Leu 275 280 285 Leu Asp Leu Ser Pro Ala Arg Tyr Cys Ser Val Gln Ala Thr Ala Lys 295 300 Pro Leu Val His Gly Thr Leu Ser Arg Gln Ser Phe Ser Ser His Ile 310 315 Leu Gly Asn Ala Arg Asp Val Met Ile Tyr Gln Pro Arg Gly Ala Gln 325 330 Pro Ala Arg Trp Thr Leu Ile Leu Phe Asp Gly Gln Val Tyr Gln Asp

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345
         340
                                         350
Glu Tyr His Phe Ala Asn Val Leu Asp Gly Leu Ile Ala Arg His His
    355
           360
                           365
Leu Pro Pro Ile Asn Val Val Phe Ile Asp Ser Leu Asp His Ala Arg
 370 375 380
Arg Gly Asn Glu Leu Pro Pro Asn Pro Asp Phe Ala Asp Phe Met Ala
      390 395
His Glu Leu Leu Pro Trp Leu Arg Gly Lys Gly Ile Gly Met Gln Arg
       405 410 415
Gln Lys Thr Val Leu Ala Gly Ser Ser Tyr Gly Gly Ile Ala Ser Ser
         420 425
Trp Val Ala Leu Arg Tyr Pro Arg Leu Phe Gly Asn Val Leu Ser Leu
     435 440 445
Ser Gly Ser Tyr Trp Trp Ala Pro Glu Gly Asp Ala Pro Gly Trp Leu
       455
                       460
Thr Arg Gln Tyr Gln Gln Ser Pro Pro Tyr Pro Val Arg Phe Trp Leu
    470
                                475
Gln Ala Gly Lys Phe Glu Thr Ala Gly Pro Gly Gly Gly Ile Tyr Arg
          485
                            490
                                             495
Thr Thr Gln Asp Phe Glu Gln Val Leu Arg Lys Lys Gly Tyr Arg Val
      500
                         505
                             510
Ser Phe His Pro Ser Ser Ser Gly His Asp Tyr Ala Ala Trp Cys Glu
 515 520
Ala Leu Ile His Gly Met Arg Asp Leu Thr Gly Leu Arg Arg Gln
                   535
<210> 9850
<211> 298
<212> PRT
<213> Enterobacter cloacae
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Pro Met Ser Asp Tyr Pro Thr Ile Ala Leu Thr Gly Pro Gly Ala Ile
Glv Thr Thr Ile Ala Ala Val Leu His Glu Ala Glv Arg Thr Pro Leu
Leu Cys Gly Arg Thr Ala His Pro Glu Leu Arg Leu Arg His Asp Glu
      35
                   40
Gly Glu Ile Val Val Pro Gly Pro Val Leu Thr Asp Pro Ser Val Ile
                  55
Thr Arg Pro Val Asp Leu Val Phe Leu Ala Val Lys Thr Thr Gln Asn
                7.0
                                7.5
Ala Asp Ser Ala Gly Trp Leu Arg Ala Leu Cys Asp Glu Asn Thr Val
           85
Val Cys Ala Leu Gln Asn Gly Val Glu Gln Lys Ala Gln Leu Ala Pro
                         105
Leu Val Asn Glv Ala Thr Val Leu Pro Ser Val Val Tro Phe Pro Ala
                     120
                                      125
      115
Gln Arg Glu Pro Asp Ala Ser Val Trp Leu Arg Ala Lys Pro Arg Leu
  130
                  135
                                   140
Thr Leu Pro Asp Val Pro Gln Ala Gln Arg Val Val Glu Ala Leu Arg
               150
                               155
Asp Thr Arg Cys Ala Val Glu Leu Ser Glu Asp Phe Pro Thr Val Ala
      165 170 175
Trp Arg Lys Leu Leu Gln Asn Ala Val Ala Gly Leu Met Val Leu Ala
       180
                      185
                                         190
Asn Arg Arg Ala Gly Met Phe Arg Arg Glu Asp Ile Ser Glu Leu Ala
     195
                   200
                                     205
Leu Ala Tyr Leu Arg Glu Gly Leu Thr Val Ser Arg Ala Glu Gly Ala
               215
                                220
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Lys Leu Asp Asp Ala Val Ala Glu Glu Ile Leu Ala Asn Phe Gln Arg

230 235 Ala Pro Val Asp Leu Gly Thr Ser Ile Leu Ala Asp Arg Gln Ala Asp 245 250 Arg Pro Met Glu Trp Asp Ile Arg Asn Gly Val Ile Gln Arg Tyr Gly 260 265 270 Arg Arg His Gly Ile Ala Val Pro Val Ser Asp Val Val Val Pro Leu 275 280 Leu Ala Ala Gly Ser Glu Gly Pro Gly <210> 9851 <211> 593 <212> PRT <213> Enterobacter cloacae <400> 9851 Leu Thr Cys Pro Pro Thr Ala Arg Phe Tyr Arg Pro Ile Cys Thr Pro 10 Ala Thr Leu Met Arg Leu Ser Ala Pro Ser Lys Thr Asn Arg Arg Thr 20 25 Thr Val Asn Ser Glu Lys Gln Ser Arg Gln Trp Ala His Gly Ala Asp 3.5 40 Met Val Val Gly Gln Leu Glu Ala Gln Gly Val Lys Gln Val Phe Gly 55 50 60 Ile Pro Gly Ala Lys Ile Asp Lys Val Phe Asp Ser Leu Leu Asp Ser Ser Ile Glu Ile Ile Pro Val Arg His Glu Ala Asn Ala Ala Phe Met 85 90 Ala Ala Ala Val Gly Arg Leu Thr Gly Lys Ala Gly Val Ala Leu Val 105 100 Thr Ser Gly Pro Gly Cys Ser Asn Leu Ile Thr Gly Ile Ala Thr Ala 115 120 125 Asn Ser Glu Gly Asp Pro Val Val Ala Leu Gly Gly Ala Val Lys Arg 130 135 140 Ala Asp Lys Ala Lys Leu Val His Gln Ser Met Asp Thr Val Ala Met 150 155 Phe Ser Pro Val Thr Lys Tyr Ala Val Glu Val Asn Ser Pro Asp Ala 165 170 Ile Ala Glu Val Val Ser Asn Ala Phe Arg Ala Ala Glu Gln Gly Arg 180 185 Pro Gly Gly Ala Phe Val Ser Leu Pro Gln Asp Ile Val Asp Gln Pro 195 200 Thr Thr Gly Ala Ile Leu Pro Ala Ser Thr Ala Ala Leu Met Gly Pro 215 220 Ala Pro Glu Ser Ala Ile Asn Glu Val Ala Lys Leu Ile Ala Lys Ala 230 235 Lys Asn Pro Val Ile Leu Leu Gly Leu Met Ala Ser Gln Pro Ala Asn 245 250 Ser Ala Ala Leu His Lys Leu Leu Glu Arg Ser Arg Ile Pro Val Thr 260 265 270 Ser Thr Tyr Gln Ala Ala Gly Ala Val Asn Gln Glu His Phe Thr Arg 275 280 285 Phe Ala Gly Arg Val Gly Leu Phe Asn Asn Gln Ala Gly Asp Arg Leu 295 300 Leu His Leu Ala Asp Leu Ile Ile Cys Ile Gly Tyr Ser Pro Val Glu 310 315 Tyr Glu Pro Ser Met Trp Asn Ser Gly Asp Ala Thr Leu Val His Ile 325 330 335 Asp Val Leu Pro Ala Tyr Glu Glu Arg Lys Tyr Val Pro Asp Leu Glu 345 340

Leu Val Gly Asp Ile Ala Ala Thr Leu Asn Leu Leu Ala Ser Arg Ile

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355
                     360
                                     365
Glu His Lys Leu Glu Leu Ser Gln Arg Ala Ser Glu Ile Leu Val Asp
 370
          375 380
Arg Gln His Gln Arg Asp Leu Leu Asp Arg Arg Gly Ala Ser Leu Asn
         390 395
Gln Phe Ala Leu His Pro Leu Arg Ile Val Arg Ala Met Gln Asp Ile
          405 410 415
Val Asn Asn Asp Val Thr Leu Thr Val Asp Met Gly Ser Phe His Ile
      420 425 430
Trp Ile Ala Arg Tyr Leu Tyr Ser Phe Arg Ala Arg Gln Val Met Ile
           440 445
Ser Asn Gly Gln Gln Thr Met Gly Val Ala Leu Pro Trp Ala Ile Gly
 450 455
                                 460
Ala Trp Leu Val Asn Pro Gly Arg Lys Val Val Ser Val Ser Gly Asp
              470
                             475
Gly Gly Phe Leu Gln Ser Ser Met Glu Leu Glu Thr Ala Val Arg Leu
            485
                            490
Asn Ala Asn Ile Leu His Ile Ile Trp Val Asp Asn Ala Tyr Asn Met
        500
                         505
                                        510
Val Ala Ile Gln Glu Glu Lys Lys Tyr Gln Arg Leu Ser Gly Val Glu
     515
                      520
                                    525
Phe Gly Pro Val Asp Phe Lys Ala Tyr Ala Asp Ala Phe Gly Ala Lys
530
               535
                                  540
Gly Phe Ala Val Glu Ser Ala Asp Ala Leu Glu Pro Thr Leu Arg Ala
545 550 555
Ala Met Asp Val Asp Gly Pro Ala Val Val Ala Ile Pro Val Asp Tyr
            565
                            570
Ser Asp Asn Pro Leu Leu Met Gly Gln Leu His Leu Ser Gln Ile Leu
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<211> 80 <212> PRT <213> Enterobacter cloacae

<210> 9852

<210> 9853

<400> 9852 Pro Arg Pro Pro Arg Gly Ile Ser Arg Arg Trp Gly Ser Pro Leu Thr 10 1.5 Pro Ile Ala Arg Ala Ser Ser Lys Arg Arg Cys Gly Arg Lys Ser Thr 20 25 Val Lys Ser Pro Arg Arg Arg Val Asn Arg Leu Ala Thr Gly Arg Lys 35 40 Pro Leu Pro Asn Ala Leu Arg Leu Ala Val Cys Pro Ser Arg Lys Thr 50 55 60 Trp Pro Pro Ala Ser Leu Thr Ser Pro Gly Arg Ile Pro Thr Thr 70

<211> 255 <212> PRT <213> Enterobacter cloacae

<400> 9853
Val Thr Ser Leu Phe Val Arg Phe Leu Thr Cys Tyr Asn Lys Leu Leu
1 5 10 15
Thr Phe Gln Gly Val Thr Ala Val Pro Glu Ile Asn Gln His Gly Gln

20 25 30 Thr Val Asn Asp Ile Val Pro Asp Trp Lys Cys Ala Arg Ala Leu Thr 35 40 45

Arg Thr Leu Leu Thr Gly Gln Tyr Cys Arg Leu Glu Pro Leu Asp Ala Asp Arg His Ser Ala Asp Leu Phe Glu Ala Tyr Ala Leu Gly Asp Asp Ser Asp Trp Thr Trp Leu Ala Ser Thr Gln Pro Val Ser Val Glu Ala 85 90 Thr Ala His Trp Val Leu Gly Lys Val Leu Asp Asp Asp Leu Val Pro 100 105 Phe Ala Ile Ile Asp Leu Arg Thr Glu Lys Ala Val Gly Leu Val Ser 115 120 125 Tyr Met Ala Ile Glu Arg Phe Gln Gly Ser Val Glu Ile Gly His Val 130 135 140 Thr Trp Ser Arg Arg Met Lys Gly Thr Arg Val Gly Thr Glu Ala Val 145 150 155 Trp Leu Leu Lys Asn Ala Phe Glu His Gln Tyr Arg Arg Leu Glu 165 170 175 Trp Lys Cys Asp Ser Met Asn Ile Ala Ser Arg Asn Ala Ala Glu Arg 185 Leu Gly Phe Val Trp Glu Gly Arg Leu Arg Gln Lys Leu Val Arg Lys 195 200 Gly Arg Asn Arg Asp Ser Asp Met Leu Ser Ile Ile Asp Gly Glu Trp 215 220 Pro Gln Arg Asp Ala Glu Leu Arg Ala Trp Leu Ala Ala Glu Asn Phe 225 230 235 Asp Gly Glu Gly Arg Gln Val Arg Arg Leu Glu Glu Phe Arg 245 250

<210> 9854 <211> 731 <212> PRT

<213> Enterobacter cloacae

<400> 9854 Glu Leu Ile Met Asn Asn Thr Thr Met His Lys Thr Leu Leu Ala Ile 1.0 Ala Ile Gly Ala Val Thr His Ser Ala Phe Ala Ala Asp Glu Lys Lys 2.0 25 Glu Asp Thr Ile Val Val Gln Ser Thr Ala Gly Ser Asp Phe Lys Pro 4 0 Gly Gly Asp Gln Leu Val Pro Ala Phe Leu Asp Gly Gln Val Ala Asn 55 60 Gly Gly Arg Met Gly Met Leu Gly Gln Gln Asn Ala Met Asp Val Pro 70 7.5 Phe Asn Ile Ile Ser Tyr Thr Ser Lys Leu Val Glu Asp Gln Gln Ala 90 85 Lys Thr Ile Ala Asp Val Val Ala Asn Asp Ala Gly Val Gln Phe Val 100 105 Gln Gly Tyr Gly Asn Ser Ala Glu Thr Phe Arg Ile Arg Gly Leu Lys 120 Phe Asp Gly Asp Asp Met Thr Phe Gly Gly Leu Ser Gly Val Leu Pro 135 Arg Gln Val Val Asp Ala Gln Met Val Asp Arg Ile Glu Ile Phe Lys 150 155 Gly Ala Asn Ser Leu Met Asn Gly Ala Ala Ser Ser Gly Val Gly Gly 165 170 Met Ile Asn Leu Glu Pro Lys His Ala Gly Asp Thr Pro Gln Ala Lys 180 185 190 Val Gly Val Asp Tyr Thr Ser Asp Ser Gln Ile Gly Thr Thr Leu Asp 195 200 205 Ala Gly Arg Arg Phe Gly Asp Asn Asp Gln Phe Gly Ala Arg Val Asn

Leu Val His Arg Glu Gly Glu Thr Gly Val Pro Asn Asp Arg Arg Arg Thr Thr Leu Leu Ser Thr Gly Leu Asp Tyr Lys Gly Asp Arg Phe Arg Thr Ser Leu Asp Leu Gly Tyr Gln Lys Lys Thr Phe His Gly Ser Pro Thr Ser Val Asn Ile Ser Ala Val Asp Phe Val Pro Glu Pro Pro Lys - 275 280 285 Asn Asp Arg Asn Phe Ser Gln Lys Trp Ala Tyr Ser Asp Ile Glu Asn 290 295 Glu Phe Gly Met Trp Arg Ser Glu Tyr Asp Ile Thr Asp Ser Trp Thr 310 315 Ala Tyr Thr Gly Leu Gly Ala Gln His Ala His Glu Glu Gly Ile Tyr 325 330 335 Ser Ala Pro Lys Leu Leu Asp Lys Ser Gly Asn Ala Val Val Ser Arg Leu Asp Thr Asn Arg Ile Ser Asp Ser Val Ser Gly Met Ala Gly Ile Arg Gly Asn Phe Thr Thr Gly Phe Val Ser His Lys Val Asn Val Gly Tyr Ser Ala Met Thr Lys Asn Glu Lys Ile Ala Trp Lys Met Ser Ala 385 390 Thr Lys Asp Asn Pro Thr Thr Asn Ile Tyr His Asn Thr Gly Val Asp Met Pro Asp Ser Ser Asn Leu Asn Gly Ser Gly Gly Lys Tyr Ser Asp Pro Leu Thr Ser Gly Arg Thr Arg Thr Gln Gly Trp Leu Leu Ser Asp Thr Leu Gly Val Leu Asp Asp Lys Leu Leu Phe Thr Ala Gly Ala Arg His Gln Lys Val Val Ile Arg Gly Tyr Asn Lys Ile Thr Gly Ala Glu Asn Asp Ala Asp Gly Phe Asp Gly Ser Arg Trp Met Pro Thr Tyr Gly Val Val Tyr Lys Pro Trp Glu Glu Ile Ser Leu Tyr Ala Asn His Thr Glu Ala Leu Gln Pro Gly Glu Thr Ala Pro Arg Ser Ala Asn Asn Tyr Gly Gln Ser Thr Gly Ile Val His Ser Lys Gln Asn Glu Val Gly Val Lys Ala Asp Phe Gly Arg Val Gly Gly Ser Leu Ala Leu Phe Glu Ile Lys Met Pro Ser Ala Ile Leu Asp Asp Ser Gly His Tyr Gly Leu Asp Ala Glu Gln Arg Asn Arg Gly Val Glu Leu Asn Val Phe Gly Glu Pro Met Leu Gly Met Arg Leu Asn Ala Ser Ala Thr Trp Leu Gln Ala Glu Leu Thr Lys Thr Lys Asn Gly Val Asn Gln Gly Asn Asp Ala Ile Gly Ile Pro Ser Phe Tyr Ala Val Leu Gly Ala Glu Tyr Asp Ile Lys Pro Ile Glu Gly Leu Thr Ala Thr Ala Arq Val Asn His Ser Gly Thr Gln Tyr Ala Asp Leu Ala Asn Ser Lys Leu Asp Ser Tyr Thr Thr Leu Asp Leu Gly Met Arg Tyr Arg Phe Ala Val Asn His Asn Glu Asn Gln Met Thr Val Arg Ala Gly Ile Asp Asn Val Thr Asn Glu Asn Tyr Trp Ser Ser Val Asp Asp Ser Gly Thr Tyr Ile Thr Gln Gly Glu Pro Arg

5393 710 Thr Phe Lys Val Ser Val Gly Tyr Glu Phe <210> 9855 <211> 163 <212> PRT <213> Enterobacter cloacae <400> 9855 Gln Ala Val Thr Ala Met Asn Gly Thr Ile Thr Thr Trp Phe Lys Asp 10 Lys Gly Phe Gly Phe Ile Lys Asp Glu Asn Gly Asp Asn Arg Tyr Phe 20 25 His Val Ile Lys Val Ala Asn Pro Asp Leu Ile Lys Lys Asp Ala Ala 35 40 45 Val Thr Phe Glu Pro Thr Thr Asn Ser Lys Gly Leu Ser Ala Tyr Ala 55 Val Lys Val Ile Pro Glu Ser Lys His Leu Tyr Ile Ala Gly Glu Arg 65 70 75 Val Lys Leu Thr Ser Ile Lys Ser Phe Val Val Phe Ser Glu Glu Glu 85 90 Pro Val Asp Thr Lys Ile Asp Lys Glu Asn Ala Val Leu Ser Val Gly 100 105 Leu Leu Met Asn Ser Ile Lys Pro Lys Thr Glu Lys Lys Pro Gly Glu 115 120 125 Met Arg Thr Val Lys Lys Leu Ala Ile Thr Thr Phe Gln Asn Thr Thr 130 135 140 Leu Ile Phe Thr Glu Asp Glu Ile Asp Ile Asp Ala Thr Val Lys Leu 145 150 155 Leu Lys <210> 9856 <211> 310 <212> PRT <213> Enterobacter cloacae <400> 9856 Cys Arg Leu Ser Lys Ile Lys Glu Ser Ala Arg Ala Met Lys Arg Pro 10 Asp Tyr Arg Thr Leu Gln Ala Leu Asp Ala Val Ile Arg Glu Arg Gly 20 2.5 Phe Glu Arg Ala Ala Gln Lys Leu Cys Ile Thr Gln Ser Ala Val Ser 35 40 Gln Arg Ile Lys Gln Leu Glu Asn Met Phe Gly Gln Pro Leu Leu Val Arg Thr Val Pro Pro Arg Pro Thr Glu Gln Gly Gln Lys Leu Leu Ala 70 75 Leu Leu Arg Gln Val Glu Leu Leu Glu Asp Glu Trp Leu Gly Asp Glu 85 90 Gln Thr Gly Ser Thr Pro Leu Leu Ser Leu Ala Val Asn Ala Asp 100 105 110 Ser Leu Ala Thr Trp Leu Leu Pro Ala Leu Ala Pro Val Leu Ala Asp 120 125 Ser Pro Ile Arg Leu Asn Leu Gln Val Glu Asp Glu Thr Arg Thr Gln 135 140 Glu Arg Leu Arg Arg Gly Glu Val Val Gly Ala Val Ser Ile Gln Pro

150

Gln Ala Leu Pro Ser Cys Leu Val Asp Gln Leu Gly Ala Leu Asp Tyr

170

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Leu Phe Val Gly Ser Lys Ala Phe Ala Glu Arg Tyr Phe Pro Asn Gly
        180
                       185
Val Thr Arg Ala Ala Leu Leu Lys Ala Pro Ala Val Ala Phe Asp His
    195
                       200
                                           205
Leu Asp Asp Met His Gln Ala Phe Leu Gln Gln Asn Phe Asp Leu Pro
 210
                  215
                                       220
Pro Gly Ser Val Pro Cys His Ile Val Asn Ser Ser Glu Ala Phe Val 225 230 235
Gln Leu Ala Arg Gln Gly Thr Thr Cys Cys Met Ile Pro His Leu Gln
              245 250 255
Ile Glu Lys Glu Leu Lys Ser Gly Glu Leu Ile Asp Leu Thr Pro Gly
          260 265 270
Leu Tyr Gln Arg Arg Met Leu Tyr Trp His Arg Phe Ala Pro Glu Ser
    275 280
Arg Met Met Arg Asn Val Thr Asp Ala Leu Leu Ala Phe Gly His Lys
 290
                      295
                                        300
Val Leu Arg Gln Asp
<210> 9857
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 9857
Arg Ala Ser Ala Ser Pro Ile Thr Glu Pro Leu Pro Gly Arg Thr Leu
                                10
Ser Ser Pro Ala Gly Ser Pro Ala Cys Leu Lys Ile Arg Ala Ser Ser
                             25
Ser Ala Ile Ser Gly Val Ala Ser Ala Gly Leu Arg Ile Thr Ala Phe
                         40
Pro Ala Ala Ile Ala Gly Ala Thr Phe Cys Ile Ser Leu Ala Ile Gly
                    5.5
Glu Phe His Gly Val Met Ala Ala Thr Thr Pro Arg Gly Ser
<210> 9858
<211> 123
<212> PRT
<213> Enterobacter cloacae
<400> 9858
Cys Arg Ala Arg Arg Gly Ser Pro Asp Gly Cys Cys Thr Gly Ser Arg
Arg Ala Val Ala Arg Ser Pro Ala Gly Arg Pro Ala Pro Arg Pro Ala
Arg Arg Cys Thr Gln Ser Gln Asp Ala Ala Arg Ser Cys Pro Ala Lys
       35
                         40
                                            45
Arg Tyr Trp Cys Ala Cys Cys Ala Pro Glu Ser Pro Cys Thr Pro Ala
                      55
Ser Ala Pro Arg Asp Arg Ser Pro Ser Ala Tyr Pro Pro Ala Gly
                  70
                                     75
Ala Ala Arg Gln Lys Ser Asp Arg Asp Ala Ala Arg Gln Arg Pro Thr
                                90
              85
Ala Ala Val Asn Arg Ala Pro Ala Pro Ala Pro Asp Thr Ser Leu Pro
          100
                   105
Asp Arg Leu Pro Ser Ser Pro Tyr Leu Ser
                         120
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<210> 9859 <211> 255 <212> PRT <213> Enterobacter cloacae

<400> 9859 Leu His Thr Gly Thr Thr Phe Val Thr Leu Arg Ala Arg Phe Asp Thr 10 Glu Cys Lys Met Ser Arg Asn Val Ser Leu Ala Val Ala Phe Leu Ala 20 2.5 30 Thr Ala Leu Ser Gly His Ala Leu Ala Asp Gly Ile His Ser Phe Ser 35 4.0 45 Gln Ala Lys Thr Ala Gly Val Lys Ile Asn Ala Asp Val Pro Gly Asp 55 60 Phe Tyr Cys Gly Cys Lys Ile Asn Trp Gln Gly Lys Lys Gly Val Val 70 75 Asp Leu Gly Ser Cys Gly Tyr Lys Val Arg Lys Asn Glu Asn Arg Ala 90 Ser Arg Ile Glu Trp Glu His Val Val Pro Ala Trp Gln Phe Gly His 105 Gln Arg Gln Cys Trp Gln Asp Gly Gly Arg Lys Asn Cys Ala Lys Asp 120 Pro Val Tyr Arg Gln Met Glu Ser Asp Met His Asn Leu Gln Pro Ala 130 135 140 Val Gly Glu Val Asn Gly Asp Arg Gly Asn Phe Met Tyr Ser Gln Trp 150 155 Asn Gly Gly Glu Gly Gln Tyr Gly Gln Cys Ala Met Lys Val Asp Phe 165 170 175 Lys Glu Lys Val Ala Glu Pro Pro Ala Arg Ala Arg Gly Ser Ile Ala 180 185 190 Arg Thr Tyr Phe Tyr Met Arg Asp Arg Tyr Asp Leu Asn Leu Ser Arg 195 200 205 Gln Gln Thr Gln Leu Phe Asn Ala Trp Asp Lys Leu Tyr Pro Val Thr 215 220 Asp Trp Glu Cys Gln Arg Asp Glu Arg Ile Ala Lys Val Gln Gly Asn 225 230 235

<210> 9860 <211> 250

<212> PRT <213> Enterobacter cloacae

245

<400> 9860

His Met Glu Phe Leu Thr Met Arg Ile Pro Arg Ile Tyr His Pro Glu 1.0 Leu Ile Thr Pro Gly Gly Glu Ile Ala Leu Ser Asp Asp Ala Ala Asn 20 His Val Gly Arg Val Leu Arg Met Gly Ala Gly Gln Ala Ile Gln Leu 4.0 Phe Asp Gly Ser Asn Gln Val Phe Asp Ala Glu Ile Thr Arg Ala Asp 55 Lys Lys Ser Val His Val Lys Val Leu Arg Gly Asp Val Asp Asp Arg 70 75 Glu Ser Pro Leu His Ile His Leu Gly Gln Val Met Ser Arg Gly Glu 90 95 Lys Met Glu Phe Thr Ile Gln Lys Ser Ile Glu Leu Gly Val Ser Leu 100 105 Ile Thr Pro Leu Phe Ser Glu Arg Cys Gly Val Lys Leu Asp Ala Glu 120 115 125 Arg Leu Asn Lys Lys Ile Gln Gln Trp Gln Lys Ile Ala Ile Ala Ala

135

His Asn Pro Tyr Val Gln Arg Ala Cys Gln Ala Gln Lys Ser

```
Cys Glu Gln Ser Gly Arg Asn Arg Ile Pro Glu Ile Arg Pro Ala Met
                           155
        150
Asp Leu Glu Asp Trp Cys Ala Glu Glu Glu Ser Gly Leu Lys Leu Asn
          165
               170 175
Leu His Pro Arg Ala Ser Ala Ser Ile Asn Thr Leu Pro Leu Pro Val
       180 185 190
Glu Arg Val Arg Leu Leu Ile Gly Pro Glu Gly Gly Leu Ser Ala Asp
     195 200 205
Glu Ile Ala Met Thr Ala Arg Tyr Gln Phe Thr Asp Ile Leu Leu Gly
 210 215 220
Pro Arg Val Leu Arg Thr Glu Thr Thr Ala Leu Thr Ala Ile Thr Ala
225 230 235
Leu Gln Val Arg Phe Gly Asp Leu Gly
           245
```

<210> 9861 <211> 320 <212> PRT

<213> Enterobacter cloacae

<400> 9861 Pro Glu Lys Lys Met Ile Lys Leu Gly Ile Val Met Asp Pro Ile Ala 10 Asn Ile Asn Ile Lys Lys Asp Ser Ser Phe Ala Met Leu Leu Glu Ala 20 25 Gln Arg Arg Gly Tyr Glu Leu His Tyr Met Glu Met Asn Asp Leu Tyr 35 40 Leu Ile Asn Gly Glu Ala Arg Ala Arg Thr Arg Ile Val Asn Val Glu 5.0 55 60 Gln Asn Tyr Glu Lys Trp Tyr Glu Phe Gly Thr Glu Gln Asp Ile Ala 70 75 Leu Ala Asp Leu Asn Val Ile Leu Met Arg Lys Asp Pro Pro Phe Asp 8.5 90 Thr Glu Tyr Ile Tyr Ser Thr Tyr Ile Leu Glu Arg Ala Glu Glu Lys 105 110 100 Gly Thr Leu Ile Val Asn Lys Pro Gln Ser Leu Arg Asp Cys Asn Glu 115 120 125 Lys Leu Tyr Thr Ala Trp Phe Ser Asp Leu Thr Pro Glu Thr Leu Val 135 140 Thr Arg Ser Lys Thr Gln Leu Lys Glu Phe Trp Gln Lys His Gly Asp 150 155 Ile Ile Met Lys Pro Leu Asp Gly Met Gly Gly Ala Ser Ile Phe Arg 165 170 Val Lys Glu Gly Asp Pro Asn Ile Gly Val Ile Ala Glu Thr Leu Thr 180 185 190 Glu Leu Gly Thr Arg Tyr Cys Met Ala Gln Asn Tyr Leu Pro Ala Ile 200 195 205 Lys Asp Gly Asp Lys Arg Val Leu Val Val Asp Gly Glu Pro Val Pro 210 215 220 Tyr Cys Leu Ala Arg Ile Pro Gln Gly Gly Glu Thr Arg Gly Asn Leu 225 230 235 Ala Ala Gly Gly Arg Gly Glu Pro Arg Pro Leu Ser Glu Ser Asp Trp 245 250 Glu Ile Ala Arg Arg Val Gly Pro Thr Leu Lys Ala Lys Gly Leu Ile 265 270 260 Phe Val Gly Leu Asp Ile Ile Gly Asp Arg Leu Thr Glu Val Asn Val 280 285 275 Thr Ser Pro Thr Cys Ile Arg Glu Ile Glu Ala Glu Phe Pro Ile Ser 295 300 Ile Thr Gly Met Leu Met Asp Ala Ile Glu Lys Arg Leu Gln Lys 315

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<210> 9862
<211> 106
<212> PRT
<213> Enterobacter cloacae
<400> 9862
Leu Arg Thr Gly Ser Phe Ser Cys Ala Gly Lys Val Ser Thr Arg Arg
                                  10
Ser Ile Ala Cys Ala Ala Pro Arg Val Cys Ser Val Ala Asn Thr Arg
          20
                       25
                                               30
Trp Pro Val Ser Ala Ala Val Ser Ala Arg Arg Ile Val Ser Leu Ser
                       40
                                             4.5
Arg Ser Ser Pro Ser Arg Ile Thr Ser Gly Ser Ser Arg Ser Ala Leu
                      55
Arg Arg Ala Ser Ala Lys Asp Gly Leu Cys Arg Pro Ile Ser Arg Cys
                  70
                                    75
Trp Ile Arg Gln Arg Ser Leu Trp Tyr Ile Asn Ser Thr Gly Ser Ser
             85
Arg Val Arg Ile Cys Pro Ser Val Trp
<210> 9863
<211> 109
<212> PRT
<213> Enterobacter cloacae
<400> 9863
Tyr Ala Ala Ala Gly Ala Val Asp Gly Val Met Ser Ala Val Ser Pro
                                  10
Cys Ala Asp Gly Leu Val Leu Arg Leu Tyr Ile Gln Pro Lys Ala Ser
                               25
Arg Asp Ser Ile Val Gly Leu His Gly Asp Glu Leu Lys Val Ala Ile
35
                          4.0
                                              4.5
Thr Ala Pro Pro Val Asp Gly Gln Ala Asn Ala His Leu Thr Lys Tyr
 50
                      55
                                          60
Leu Val Lys Gln Phe Arg Val Ala Lys Ser Gln Val Ile Ile Glu Lys
                  70
                                    75
                                                      80
Gly Glu Leu Gly Arg His Lys Gln Val Lys Ile Leu Asn Pro Gln Ser
           85
                                  90
Ile Pro Thr Glu Val Ala Ala Leu Thr Glu Gln Asp
           100
                               105
<210> 9864
<211> 199
<212> PRT
<213> Enterobacter cloacae
<400> 9864
Thr Met Gln Lys Val Val Leu Ala Thr Gly Asn Ala Gly Lys Val Arg
                                                     15
Glu Leu Ala Ser Leu Leu Asn Asp Phe Gly Leu Asp Val Val Ala Gln
Thr Glu Leu Gly Val Asp Ser Ala Glu Glu Thr Gly Leu Thr Phe Ile
                          40
Glu Asn Ala Ile Leu Lys Ala Arg His Ala Ala Gln Val Thr Gly Leu
                      55
Pro Ala Ile Ala Asp Asp Ser Gly Leu Ala Val Asp Phe Leu Gly Gly
Ala Pro Gly Ile Tyr Ser Ala Arg Tyr Ser Gly Pro Asp Ala Thr Asp
                                   90
```

Gln Gln Asn Leu Glu Lys Leu Leu Val Ala Leu Lys Asp Val Pro Asp 100 105 Glu Gln Arg Thr Ala Gln Phe His Cys Val Leu Val Tyr Met Arg His 115 120 125 Ala Glu Asp Pro Thr Pro Ile Val Cys His Gly Ser Trp Pro Gly Val 140 135 Ile Thr Arg Glu Ala Ala Gly Asn Gly Gly Phe Gly Tyr Asp Pro Ile 150 155 Phe Phe Val Pro Thr Glu Gly Lys Thr Ala Ala Glu Leu Thr Arg Glu 165 170 175 Glu Lys Ser Ala Ile Ser His Arg Gly Arg Ala Leu Lys Leu Leu Leu 180 185 Glu Ala Leu Arg Asn Gly

<210> 9865 <211> 129 <212> PRT <213> Enterobacter cloacae

195

<400> 9865 Gly Lys Gly Trp Gln Ser Val Gly Met Gln Thr Ile Arg Ser Tyr Ala 10 Lys Gln Leu Arg Arg Glu Leu Thr Gln Glu Glu Arg Arg Leu Trp Tyr 20 25 3.0 Leu Leu Arg Ser Arg Arg Phe Glu Asn Tyr Lys Phe Arg Arg Gln His 40 4.5 Pro Val Gly Asn Tyr Ile Leu Asp Phe Ala Cys Cys Ala Ala Arg Leu 55 Ala Val Glu Leu Asp Gly Gly Gln His Asp Glu Asn Gln Glu Tyr Asp 70 75 Arg Gln Arg Thr Leu Trp Leu Asn His Lys Asp Trp His Val Ile Arg 8.5 90 Phe Trp Asn Asn Glu Leu Trp Asn Asn Glu Glu Ala Val Leu Glu Arg

Ile Leu Glu Thr Leu Gln Ala Leu Gln Pro Ser Pro Arg Pro Ser Pro

120

100 105

<210> 9866 <211> 357 <212> PRT <213> Enterobacter cloacae

115

```
115
Gly Ala Ile Leu Ser Leu Ser Leu Gly Lys His Phe Pro Ile Leu Asp
 130
         135
                       140
Gly Asn Val Lys Arg Val Leu Ala Arg Cys Tyr Ala Val Asp Gly Trp
     150
                 155
Pro Gly Lys Lys Glu Val Glu Lys Arg Leu Trp Glu Ile Ser Glu Ala
         165 170 175
Val Thr Pro Ala Lys Gly Val Glu Arg Phe Asn Gln Ala Met Met Asp
       180
             185 190
Leu Gly Ala Met Val Cys Thr Arg Ser Lys Pro Lys Cys Glu Leu Cys
    195 200 205
Pro Val Asn Asn Leu Cys Val Ala Tyr Ala Asn His Thr Trp Ala Gln
 210 215 220
Tyr Pro Gly Lys Lys Pro Lys Gln Thr Leu Pro Glu Arg Thr Gly Tyr
225 230 235
Met Leu Leu Met Gln His Gly Asp Glu Val Phe Leu Ala Gln Arg Pro
        245 250 255
Pro Ser Gly Leu Trp Gly Gly Leu Tyr Cys Phe Pro Gln Phe Glu Asp
        260 265 270
Glu Ala Ser Leu Arg Ala Trp Leu Glu Gln Arg Gly Ile Ala Ala Glu
     275 280 285
Thr Leu Thr Gln Leu Asn Ala Phe Arg His Thr Phe Ser His Phe His
                295 300
Leu Asp Ile Val Pro Met Trp Leu Pro Val Ser Ser Phe Thr Ser Cys
             310
                 315
Met Asp Glu Gly Thr Ala Leu Trp Tyr Asn Leu Ala Gln Pro Pro Ser
           325 330 335
Val Gly Leu Ala Ala Pro Val Glu Arg Leu Leu Gln Gln Leu Arg Val
     340
                      345
Gly Ala Met Val
```

<211> 420 <212> PRT

355

<210> 9867

<213> Enterobacter cloacae

<400> 9867 Thr Ser Cys Ser Arg Val Lys Thr Ser Thr Ser Lys Ala Ile Arg His 10 Arg Lys Asn Asn Asn Ala Gln Leu Leu Pro Gly Cys Ala Ala Leu Ala 20 25 Arg Ala Tyr Gly Phe Val Gly Arg Val Ser Ala Ala Pro Pro Gly Asn 35 40 Ser Asn Pro Lys Ala Asn Thr Thr Arg Thr Pro Gly Met Met Lys Lys Leu Leu Ala Leu Ala Leu Val Ala Pro Leu Leu Val Ser Cys Ser Ser 75 70 Lys Lys Gly Asp Glu Tyr Asn Glu Ala Trp Val Lys Asp Thr Asn Gly 90 85 Phe Asp Ile Leu Met Gly Gln Phe Ala His Asn Ile Glu Asn Ile Trp 105 Gly Phe Asn Glu Val Leu Ile Ala Gly Pro Lys Asp Tyr Val Lys Tyr 115 120 125 Thr Asp Ala Tyr Gln Thr Arg Ser His Ile Asn Phe Asp Asp Gly Thr 135 140 Ile Thr Val Glu Thr Ile Ala Gly Thr Glu Pro Ala Ala His Leu Arg 150 155 Gln Ala Ile Ile Lys Thr Leu Leu Met Gly Asp Asp Pro Gly Ser Ile 170 165 Asp Leu Tyr Ser Asp Ala Asp Asp Ile Thr Ile Ser Lys Glu Pro Phe

185 Leu Tyr Gly Gln Val Val Asp Gln Thr Gly Gln Pro Ile Arg Trp Glu 195 200 Gly Arg Ala Thr Lys Phe Ala Asp Tyr Leu Leu Gln Thr Arg Leu Lys 215 220 Ser Arg Thr Asn Gly Leu Lys Val Ile Tyr Ser Val Thr Ile Asn Leu 225 230 235 Val Pro Asn His Leu Asp Lys Arg Ala His Lys Tyr Leu Gly Met Val 245 250 255 Arg Gln Ala Ser Arg Lys Tyr Gly Val Asp Glu Ser Leu Ile Leu Ala 260 265 270 Ile Met Gln Thr Glu Ser Ser Phe Asn Pro Tyr Ala Val Ser Arg Ser 275 280 285 Asp Ala Leu Gly Leu Met Gln Val Val Gln His Ser Ala Gly Lys Asp 290 295 300 Val Phe Arg Ala Gln Gly Lys Ser Gly Thr Pro Ser Arg Arg Tyr Leu 305 310 315 Phe Asp Pro Gln Ser Asn Ile Asp Thr Gly Thr Ala Tyr Leu Ala Met 325 330 335 Leu Asn Asn Val Tyr Leu Gly Gly Ile Asp Asn Pro Thr Ser Arg Arg 345 350 Tyr Ala Val Ile Thr Ala Tyr Asn Gly Gly Ala Ser Ser Val Met Arg 355 360 365 Val Leu Ser Asn Asp Lys Val Gln Ala Ala Asn Ile Ile Asn Ser Met 370 375 380 Ala Pro Gly Asp Val Tyr Asp Thr Leu Thr Thr Arg His Pro Cys Ala 385 390 395 Glu Ser Arg Arg Tyr Met Tyr Lys Val Asn Thr Ala Gln Lys Asn Tyr 405 410

Arg Arg Arg 420

<210> 9868

<211> 561 <212> PRT

<213> Enterobacter cloacae

<400> 9868 Lys Met Ile Tyr Ser Ala Asp Leu Leu Ile Ser Arg Val Ile Val Met 10 Lys Val Ser Phe Gln Ile Lys Leu Phe Ile Ser Leu Val Ala Phe Phe 20 25 30 Ser Val Leu Phe Ala Leu Leu Gly Gly Tyr Tyr Tyr Val Asp Val Gly 40 4.5 Arg Gln Leu Tyr Gln Glu Met Ser Ala Arg Ala Lys Ile Gln Ala Glu 55 Glu Ile Ala Leu Ile Pro Thr Leu Arg Lys Glu Val Glu Gln Lys Asp 75 70 Ile Gln Gly Ile His Asp Phe Met Gln Lys Ile Ala Ala Arg Ser Asp 90 Ala Ser Phe Ile Val Ile Gly Asp Asn Lys Gly Leu His Leu Phe His 105 Ser Val Phe Ala Asp Arg Val Gly Lys Thr Leu Val Gly Gly Asp Asn 120 125 115 Asp Glu Val Leu His Gly Lys Ser Thr Ile Thr Ile Arg Lys Gly Gly 135 140 Leu Gly Ile Ser Leu Arg Ser Lys Ala Pro Ile Phe Asn Asp Ala Gly 150 155 Gln Val Val Gly Ile Val Ser Val Gly Tyr Leu Thr Ser Tyr Leu Asp 170 165 Thr Ile Thr Val Ser Lys Val Val Asn Ile Leu Ile Ala Ala Val Leu

180 185 Leu Leu Ile Ala Leu Phe Ile Phe Ser Trp Phe Phe Thr Arg Ser Ile 195 200 205 Lys Lys Gln Ile Phe Ser Leu Glu Pro Arg Glu Ile Gly Leu Leu Val 210 215 220 Arg Gln Gln Lys Ala Met Met Glu Ser Ile Tyr Glu Gly Val Ile Ala 225 230 235 Ile Asp Asp Asp Leu Arg Ile Glu Val Ile Asn Gln Ala Ala Arg Lys 245 250 255 Leu Leu Gly Leu Arg Gln Pro Ala Arg Glu Leu Arg Gly Gln Leu Ile 260 265 270 Ser Gln Val Ile Ala Pro Val Pro Phe Asn Ala Gln Thr Met Leu 280 285 Ala Lys Asp Thr His Asp Glu Ile Cys Arg Phe Asn Asp Leu Thr Val 290 295 300 Ile Ala Ser Arg Val Arg Ile Met Leu Glu Asp Ala Leu Gln Gly Trp 305 310 315 320Val Ile Thr Phe Arg Asp Arg Asn Glu Ile Asp Ser Leu Ser Ala Gln 325 330 335 Leu Ser Gln Val Lys Arg Tyr Val Asp Asn Leu Arg Ile Met Arg His 345 340 Glu Gln Leu Asn Arg Met Thr Thr Leu Ser Gly Leu Leu His Met Gly 355 360 365 Arg Tyr Asp Glu Ala Ile Arg Tyr Ile Gln Ala Gln Ser Glu His Ala 370 375 380 Gln Glu Leu Leu Asp Phe Ile Ser Ser Arg Phe Ser Ser Pro Thr Leu 390 395 Cys Gly Leu Leu Gly Lys Ala Ala Arg Ala Arg Glu Lys Gly Val 40.5 410 Glu Leu Ser Phe Asp Pro Ala Cys Arg Val Asp Lys Pro Phe Leu Pro 420 425 430 Leu Leu Glu Ser Glu Leu Ile Ser Ile Ile Gly Asn Leu Leu Asp Asn 435 440 445 Ala Ile Glu Ala Thr Gln Arg Ala Pro Leu Pro His Ala Pro Val Asp 455 450 460 Val Leu Ile Lys Leu Asn Glu Gln Glu Leu Ile Ile Glu Val Ala Asp 475 470 Gln Gly Val Gly Ile Thr Pro Glu Ile Arg Asp Arg Ile Phe Glu Arg 490 485 Gly Ile Thr Thr Lys Thr Arg Gly Asp His Gly Ile Gly Leu Tyr Leu 505 500 510 Ile Glu Ser Tyr Val Thr Gln Ala Gly Gly Ala Ile Glu Val Ala Asp 520 515 525 Asn Thr Pro Arg Gly Ala Ile Phe Ser Leu Phe Ile Pro Ala Thr Gly 540 535 Thr Ala Arq His Pro Val Glu Glu Leu Glu Asp Thr Asp Tyr Ala Thr 550 555

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<210> 9869
<211> 213
<212> PRT
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<213> Enterobacter cloacae

Gly Pro Phe His Arg Ile Val Phe Ala Phe Leu Arg Ile Ser Ala Ser 55 Phe Cys Ala Glu Thr Ser Pro Arg Ser Arg Ile Cys Ser Ser Ser Leu 70 75 Met Ser Leu Thr Asp Phe Arg Val Ala Val Ala Val Ser Glu Asn Ser 8.5 90 Val Ala Thr Arg Thr Ser Val Gly Thr Gly Ile Ser Gln Val Pro Ser 100 105 110 Arg Arg Leu Ala Ser Ser Thr Arg Ser Ala Ser Tyr Arg Asp Leu Pro 115 120 125 Thr Leu Trp Pro Cys Ala Ala Thr Lys Val Phe Ala Ile Pro Pro Pro 130 135 140 Thr Ile Ser Trp Ser Ala Ile Leu Asp Arg Glu Ser Ser Thr Val Ser 150 155 Leu Val Glu Thr Leu Glu Pro Pro Thr Ile Ala Thr Ile Gly Arg Ala 165 170 175 Gly Ser Phe Ser Ala Leu Pro Ser Ala Ser Ser Ser Ser Ala Ser Ser 180 185 190 Gly Pro Ala Gln Ala Thr Ser Ala Asn Leu Pro Ile Pro Trp Val Asp 200 Ala Cys Ala Arg 210

<210> 9870 <211> 282 <212> PRT <213> Enterobacter cloacae

<400> 9870 Ile Phe Leu Ile Leu Ser Pro Thr Pro Ala Ser Leu Thr Val His Phe 10 Ser Glu Leu Ile Gln Ile Asn Glu Tyr Gly Ser Asn Ile Met Lys Met 20 25 Arg Ala Ile Gly Leu Ala Val Gly Thr Thr Leu Leu Leu Ser Gly Cys 3.5 40 Gln Asn Met Asp Ser Asn Gly Leu Met Thr Ser'Gly Ala Glu Ala Phe 55 60 Gln Ala Tyr Ser Leu Ser Asp Ala Gln Val Lys Ala Leu Ser Asp Glu 70 75 Ala Cys Lys Asp Met Asp Gly Lys Ala Thr Leu Ala Pro Ala Asn Ser 8.5 90 Thr Tyr Thr Gln Arg Leu Asn Lys Ile Ala Ser Ala Leu Gly Asp Asn 100 105 110 Ile Asn Gly Gln Pro Val Asn Tyr Lys Val Tyr Met Ala Lys Asp Val 120 125 115 Asn Ala Phe Ala Met Ala Asn Gly Cys Ile Arg Val Tyr Ser Gly Leu 135 140 130 Met Asp Met Met Thr Asp Asn Glu Val Glu Ala Val Ile Gly His Glu 160 150 155 Met Gly His Val Ala Leu Gly His Val Lys Lys Gly Met Gln Val Ala 165 170 Leu Gly Thr Asn Ala Val Arg Ala Ala Ala Ala Ser Ala Gly Gly Ile 180 185 190 Val Gly Ser Leu Ser Gln Ser Gln Leu Gly Asp Val Gly Glu Lys Leu 200 205 195 Val Asn Ser Gln Phe Ser Gln Arg Gln Glu Ser Glu Ala Asp Asp Tyr 215 220 Ser Tyr Asp Leu Leu Arg Lys Arg Gly Ile Asn Pro Ser Gly Leu Ala 230

Thr Ser Phe Glu Lys Leu Ala Lys Leu Glu Glu Gly Arg Gln Ser Ser

5403 245 250 Met Phe Asp Asp His Pro Ala Ser Val Glu Arg Ala Gln His Ile Arg 260 265 Asp Arg Met Ala Ala Asp Gly Ile Lys <210> 9871 <211> 438 <212> PRT <213> Enterobacter cloacae <400> 9871 Phe Ile Phe Thr Lys Gln Arg Val Ser Gln Val Asn His Phe Ser Ser 10 Val Thr Ile Thr Leu Met Lys Asn Ile Ser Tyr Lys Lys Arg Lys Ala 20 25 Asp Met Met Thr Ala Arg Trp Gln Gly Thr Ile Ala Leu Leu Leu Leu 40 Ile Ile Ile Ser Tyr Val Asp Arg Val Asn Ile Ser Val Met Ile Leu 55 Asn Pro Glu Phe Ala Glu His Phe Gln Leu Asn Glu Asn Arg Met Leu 70 7.5 Gln Gly Met Leu Met Thr Cys Phe Leu Leu Gly Tyr Gly Phe Ser Ala 85 90 Leu Leu Thr Pro Val Ile Glu Ser Lys Leu His Tyr Arg Gln Gly 100 105 Leu Leu Ser Ser Ile Ala Ile Trp Ala Ala Val Cys Ala Val Ser Pro 115 120 Leu Leu Gly Ser Leu Thr Gly Met Leu Ile Ala Arg Val Ile Leu Gly 130 135 140 Ile Ala Glu Gly Pro Leu Phe Ser Leu Lys Thr Arg Phe Ile Ser Asp 150 155 Asn Phe Ser Ala Gln Glu Ile Gly Lys Pro Asn Ala Val Thr Ala Leu 165 170 Gly Val Ser Leu Gly Leu Ala Val Gly Phe Pro Leu Val Thr Trp Leu 180 185 Met Ser His Leu Gly Trp Ala Gly Ser Phe Tyr Thr Leu Ala Ala Ile 200 205 Asn Leu Leu Gly Gly Ser Leu Ile Trp Arg Phe Leu Pro Ala Pro 215 Arg Lys Leu Pro Thr Ala Lys Lys Pro Gly Phe Val His Thr Phe Thr 230 235 Leu Ala Trp Gln Thr Pro Leu Leu Gly Trp Ile Met Val Val Glu Ile 245 250 Ala Thr Leu Ser Tyr Leu Trp Gly Ser Ser Ala Trp Leu Pro Ala Trp 260 265 Leu Arg Asp Glu His His Phe Ser Leu His Ala Thr Gly Trp Leu Ala 275 280 285 Ala Ile Pro Phe Leu Leu Ser Leu Gly Ser Lys Phe Leu Gly Gly Val 295 300 Leu Leu Asp Lys Met Arg Pro Glu Gln Ala Pro Met Leu Phe Val Val 310 315 Gly Gly Ala Met Thr Ala Leu Ser Val Val Ala Leu Met Leu Ser His 325 330 Gln Pro Ala Trp Leu Ala Leu Phe Met Leu Ser Ala Asn Val Phe Trp 345 Gly Leu Gln Gly Ala Ala Ile Pro Ala Val Ile Gln His His Ala Ala 360 Arg Glu Ala Val Gly Ser Ala Tyr Gly Ile Ile Asn Gly Ile Gly Asn 375

Ile Cys Ala Ala Phe Ile Pro Leu Leu Met Gly Met Val Met Arg Ser

```
390
                                   395
Val Gly Ser Val Ser Ser Gly Phe Ser Val Leu Val Val Ser Gln Val
           405
                          410
Val Thr Leu Leu Ala Gly Gly Met Leu Leu Leu Arg Met Arg Arg Ala
        420
                         425
Ala Ala Ile Ser Ala
      435
<210> 9872
<211> 232
<212> PRT
<213> Enterobacter cloacae
<400> 9872
Cys Gln Ala Ala Asp His Arg Arg Thr Gly Thr Arg Cys Glu Cys Arg
                               1.0
Ile Gln Ala Val Asp Val Glu Gly Gln Ile Asp Arg His Val Ala Asp
                           25
Asp Leu Leu Asn Leu Ser Gln Asn Ile Val His Ala Ala Ile Val His
                       40
Leu Ala Arg Val Glu Tyr Gly Glu Ala Val Val Phe Val Glu Leu Gly
 5.0
                    5.5
                                      60
Ala Asp Ala Asp Leu His Gly Val Val Arg Ile Asp Gln Ala Phe Leu
                 70
                                  75
Arg Arg Arg Val Glu His Gly Ala Val Val Glu Leu Thr Ala Val Arg
             8.5
                               90
Val Gly Val Gly Val Arg Ile Glu Val His Gln Arg His Phe Thr Glu
          100
                            105
                                             110
Val Leu Arg Val Gly Ala Gln Gln Arg Gln Gly His Glu Val Val Thr
                        120 125
 115
Ala Glu Gly Glu His Ala Phe Thr Gly Arg Gln Gln Leu Leu Gly Val
                    135
                                      140
Arg Leu Gln Phe Phe Ala His Leu Thr Arg Val Ala Glu Gly Val His
145
                 150
                                   155
Gln Ile Ala Ala Val His His Val Gln Thr Leu Ala His Val Glu Val
             165
                               170 175
Pro Arg Glu Ala Val Val Leu Pro Gly Gln Val Ser Gly Asn Leu Thr
          180
                           185
                                             190
Asp Arg Arg Arg Ala Met Thr Thr Thr Arg Ala Thr Gly Arg Cys His
                                205
       195
                     200
Val Glu Arg Tyr Ala Gly Asp His Pro Val Arg Ile Ala Val Val Arg
 210
                    215
Leu Glu Val His Arg Lys Ala
                 230
<210> 9873
<211> 475
<212> PRT
<213> Enterobacter cloacae
<400> 9873
Lys Leu Ile Thr Gln Leu Glu Gly Ile Met Pro Asp Asn Asn Lys Gln
                               10
Gly Arg Thr Ser Asn Lys Ala Met Thr Phe Phe Val Cys Phe Leu Ala
Ala Leu Ala Gly Leu Leu Phe Gly Leu Asp Ile Gly Val Ile Ala Gly
                        40
Ala Leu Pro Phe Ile Thr Asp Glu Phe Gln Ile Ser Ala His Thr Gln
                     55
Glu Trp Val Val Ser Ser Met Met Phe Gly Ala Ala Val Gly Ala Val
                 70
                                   75
```

```
Gly Ser Gly Trp Leu Ser Phe Lys Leu Gly Arg Lys Lys Ser Leu Met
                          90
Ile Gly Ala Ile Leu Phe Val Ala Gly Ser Leu Phe Ser Ala Ala Ala
        100
                       105
Pro Asn Val Glu Val Leu Ile Ile Ser Arg Val Leu Leu Gly Leu Ala
   115 120 125
Val Gly Val Ala Ser Tyr Thr Ala Pro Leu Tyr Leu Ser Glu Ile Ala
 130 135 140
Pro Glu Lys Ile Arg Gly Ser Met Ile Ser Met Tyr Gln Leu Met Ile
145 150 155
Thr Ile Gly Ile Leu Gly Ala Tyr Leu Ser Asp Thr Ala Phe Ser Tyr
           165 170 175
Ser Gly Ala Trp Arg Trp Met Leu Gly Val Ile Ile Ile Pro Ala Ile
        180 185 190
Leu Leu Leu Ile Gly Val Phe Phe Leu Pro Asp Ser Pro Arg Trp Phe
     195 200 205
Ala Ala Lys Arg Arg Phe His Asp Ala Glu Arg Val Leu Leu Arg Leu
               215
                               220
Arg Asp Thr Ser Ala Glu Ala Lys Asn Glu Leu Glu Glu Ile Arg Glu
              230 235 240
225
Ser Leu Lys Val Lys Gln Ser Gly Trp Ala Leu Phe Lys Glu Asn Ser
           245 250 255
Asn Phe Arg Arg Ala Val Phe Leu Gly Val Leu Leu Gln Ile Met Gln
        260 265
Gln Phe Thr Gly Met Asn Val Ile Met Tyr Tyr Ala Pro Lys Ile Phe
                    280 285
Glu Leu Ala Gly Tyr Thr Asn Thr Thr Glu Gln Met Trp Gly Thr Val
                 295
                                300
  290
Ile Val Gly Leu Thr Asn Val Leu Ala Thr Phe Ile Ala Ile Gly Leu
              310
                             315
305
Val Asp Arg Trp Gly Arg Lys Pro Thr Leu Thr Leu Gly Phe Leu Val
            325
                          330 335
Met Ala Val Gly Met Gly Val Leu Gly Thr Met Met His Met Gly Ile
        340
                       345
His Ser Pro Thr Ala Gln Tyr Phe Ala Val Ala Met Leu Leu Met Phe
      355
                    360
                                    365
Ile Ile Gly Phe Ala Met Ser Ala Gly Pro Leu Ile Trp Val Leu Cys
                 375
                                380
  370
Ser Glu Ile Gln Pro Leu Lys Gly Arg Asp Phe Gly Ile Thr Cys Ser
              390
                              395
Thr Ala Thr Asn Trp Ile Ala Asn Met Ile Val Gly Ala Thr Phe Leu
                          410
           405
Thr Met Leu Asn Thr Leu Gly Asn Ala Asn Thr Phe Trp Val Tyr Ala
        420
                       425
                                      430
Gly Leu Asn Leu Phe Phe Ile Val Leu Thr Ile Trp Leu Val Pro Glu
     435
                    440
                                    445
Thr Lys His Val Ser Leu Glu His Ile Glu Arg Asn Leu Met Lys Gly
                                 460
 450
                455
Arg Pro Leu Arg Glu Ile Gly Ala His Asp
              470
<210> 9874
<211> 151
<212> PRT
<213> Enterobacter cloacae
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<400> 9874

Tyr Ser Asp His Ala Trp Arg Cys Gly Ala Arg Val Met Ser Gly Thr $1 \\ 5 \\ 10 \\ 15$ Leu Leu Ala Phe Asp Phe Gly Thr Lys Ser Ile Gly Val Ala Val Gly $20 \\ 20 \\ 30$

```
Gln Arg Ile Thr Gly Thr Ala Arg Pro Leu Thr Ala Leu Lys Ala Asn
                         40
Asp Gly Thr Pro Asp Trp Asn Leu Ile Glu Arg Leu Leu Lys Glu Trp
                     5.5
Gln Pro Asp Asp Val Ile Val Gly Leu Pro Leu Asn Met Asp Gly Thr
                  70
                                    7.5
Glu Gln Pro Leu Thr Ala Arg Ala Arg Lys Phe Ala Asn Lys Ile His
             8.5
                                90
Gly Arq Phe Gly Val Ser Val Lys Leu His Asp Glu Arg Leu Ser Thr
          100
                         105
Val Glu Ala Arg Ala Gly Leu Phe Glu His Gly Gly Phe Arg Ala Leu
                               125
      115 120
Asn Lys Gly Ser Val Asp Ser Ala Ser Ala Val Ile Ile Leu Glu Ser
 130 135
Tyr Phe Asp Gln Gly Tyr
<210> 9875
<211> 140
<212> PRT
<213> Enterobacter cloacae
<400> 9875
Cys Pro Ala Val Ala Arg Phe Cys Leu Arg Gly Ser Gly Leu Pro Pro
                              1.0
Pro Thr Tyr Ser Pro Val Ala His Thr Ala Pro Arg Ala Arg Pro Gly
```

20 25 His Pro Asp Ala Ala Ser Ala Pro Glu Pro His Ala Gly Phe Pro Pro 45 4.0 Val Asp Tyr Ala Pro Asp Leu Ser Pro Ala Pro Glu Arg Tyr Arg Pro 50 55 Gly Ala Arg Ser Pro Ala Pro His Arg Ala Cys Ala Ala Trp Pro Thr 70 7.5 65 Pro Asp Gly Arg Phe Pro Pro Pro Ser Ala Pro Gly Val Ser Ser Arg 90 85 Cys Arg Ala Ala His Gln Ala Glu Ser His Pro Asp Leu His Ala Ala 105 100 Arg Cys Ala Gly Pro Arg Gln Arg Thr Gly Cys Ala Gly Leu Ser Pro 120 115 Ala Ala Gly Ser Gly Asn Val His Ser Gly Thr 135 130

<210> 9876 <211> 239 <212> PRT <213> Enterobacter cloacae

```
100
                         105
Ile Ala Thr Arg Leu Ser Asp Gln Arg Pro Ile Glu Ile Pro Ala Leu
    115
                120
                           125
Asn Val Leu Ile Gln Ile Asn Ile Ser Asp Glu Asn Ser Lys Ser Gly
 130
      135
                        140
Ile Thr Leu Ser Glu Leu Asp Ala Leu Ala Ala Asp Val Ala Ala Leu
   150 155
Pro Arg Leu Thr Leu Arg Gly Leu Met Ala Ile Pro Ala Pro Glu Ser
         165 170 175
Ser Tvr Glu Arg Gln Phe Ala Val Ala Gln Gln Met Ala Val Ala Phe
        180 185 190
Glu Ala Leu Lys Ala Arg Tyr Asp Thr Val Asp Thr Leu Ser Leu Gly
                    200 205
    195
Met Ser Asp Asp Met Glu Ala Ala Ile Ala Ala Gly Ser Thr Met Val
                215 220
Arg Ile Gly Thr Ala Ile Phe Gly Ala Arg Asp Tyr Pro Gln
                                235
                230
<210> 9877
<211> 195
<212> PRT
<213> Enterobacter cloacae
<400> 9877
Gly Asn Leu Arg Asn Ala Met Lys Thr Leu Thr Phe Leu Leu Ser Thr
                            1.0
Val Ile Glu Leu Tyr Thr Met Ala Leu Leu Leu Arg Val Trp Met Gln
       20
                         25
                                         3.0
Trp Ala Arg Cys Asp Phe Tyr Asn Pro Phe Ser Gln Phe Ile Val Lys
35
                    40
                                    45
Ile Thr Gln Pro Ile Val Gly Pro Leu Arg Arg Ile Ile Pro Ala Met
50
                   55
                                   60
Gly Pro Ile Asp Ser Ser Ser Leu Leu Met Ala Phe Ile Leu Ser Val
               70
                               75
Ile Lys Ala Ile Val Leu Phe Met Val Ile Thr Phe Gln Pro Ile Ile
            85
                            90
Trp Ile Ser Ala Val Leu Ile Leu Val Lys Thr Val Gly Ser Leu Ile
                       105
         100
Phe Trp Val Leu Leu Val Met Ala Ile Met Ser Trp Val Ser Arg Gly
                      120
      115
                                      125
Arg Ser Pro Val Glu Tyr Ala Leu Ile Gln Leu Thr Glu Pro Leu Leu
  130
                  135
                                   140
Arg Pro Ile Arg Ser Leu Leu Pro Ala Met Gly Gly Ile Asp Phe Ser
145
               150
                               155
Pro Met Leu Leu Val Leu Leu Leu Tyr Val Leu Asn Met Gly Ile Ala
            165 170
Glu Leu Leu Gln Ala Thr Gly Asn Met Leu Leu Pro Gly Leu Trp Met
                       185
        180
Ala Leu
     195
<210> 9878
<211> 391
<212> PRT
<213> Enterobacter cloacae
<400> 9878
Asn Cvs Tvr Trp Lvs His Cvs Val Met Ala Asn Leu Pro Pro Leu Ser
                            10
Leu Tyr Ile His Ile Pro Trp Cys Val Gln Lys Cys Pro Tyr Cys Asp
```

2.5

```
Phe Asn Ser His Ala Leu Lys Gly Glu Val Pro His Asp Asp Tyr Val
                      40
Ala His Leu Leu Ala Asp Leu Asp Ala Asp Val Pro Tyr Ala Gln Gly
                   55
Arg Glu Val Lys Thr Ile Phe Ile Gly Gly Gly Thr Pro Ser Leu Leu
             70
Ser Gly Pro Ala Met Gln Thr Leu Leu Asp Gly Val Arg Ala Arg Leu
                            90
          8.5
Asn Leu Ala Ala Asp Ala Glu Ile Thr Met Glu Ala Asn Pro Gly Thr
         100
                         105
                                          110
Val Glu Ala Asp Arg Phe Val Glu Tyr Gln Arg Ala Gly Val Asn Arg
     115 120
                           125
Ile Ser Ile Gly Val Gln Ser Phe Ser Glu Pro Lys Leu Lys Arg Leu
       135 140
Gly Arg Ile His Gly Pro Glu Glu Ala Lys Arg Ala Ala Asn Leu Ala
145 150 155
Thr Gly Leu Gly Leu Arg Ser Phe Asn Leu Asp Leu Met His Gly Leu
            165 170 175
Pro Asp Gln Ser Leu Glu Glu Ala Leu Asp Asp Leu Arg Gln Ala Ile
         180
                         185 190
Glu Leu Asn Pro Pro His Leu Ser Trp Tyr Gln Leu Thr Ile Glu Pro
195 200 205
Asn Thr Leu Phe Gly Ser Arg Pro Pro Val Leu Pro Asp Asp Asp Ala
                   215
                                    220
Leu Trp Asp Ile Phe Glu Gln Gly His Gln Leu Leu Thr Ala Ala Gly
                230
                                235
Tyr Gln Gln Tyr Glu Thr Ser Ala Tyr Ala Lys Pro Gly Tyr Gln Cys
             245
                             250
Gln His Asn Leu Asn Tyr Trp Arg Phe Gly Asp Tyr Leu Gly Ile Gly
                         265
         260
Cys Gly Ala His Gly Lys Val Thr Phe Pro Asp Gly Arg Ile Leu Arg
                      280
      275
Thr Ala Lys Thr Arg His Pro Arg Gly Tyr Met Glu Gly Arg Tyr Leu
                   295
                                    300
  290
Glu Arg Gln His Asp Val Glu Ala Val Asp Lys Pro Phe Glu Phe Phe
                310
                                315
Met Asn Arg Phe Arg Leu Leu Glu Ala Ala Pro Arg Ala Glu Phe Thr
             325
                             330
Arg Tyr Thr Gly Leu Pro Glu Ser Val Ile Arg Pro Gln Ile Asp Glu
         340
                                          350
                          345
Ala Leu Ala Gln Gly Tyr Leu Thr Glu Cys Asp Val Ser Trp Gln Ile
                      360
                                      365
Thr Glu His Gly Lys Leu Phe Leu Asn Ser Leu Leu Glu Leu Phe Leu
                375
Ala Glu Asn Pro Glu Gly
                390
```

<210> 9879 <211> 448 <212> PRT <213> Enterobacter cloacae

<400> 9879

Arg Cys Gln Leu Ile Glu Leu His Gln Ile Thr Thr Leu Asn Val Pro 1 5 10 15 15 16 Ile Thr Thr Tyr Leu Pro Leu Thr Cys Glu Glu Ser Asn Met Asn Leu 20 25 30 CLys Leu Gln Leu Lys Ile Leu Ser Phe Leu Gln Phe Cys Leu Trp Gly 35 40 45 Ser Trp Leu Thr Thr Leu Gly Ser Tyr Met Phe Val Thr Leu Lys Phe 50 55

```
Asp Gly Ala Ser Ile Gly Ala Val Tyr Ser Ser Leu Gly Ile Ala Ala
               7.0
Val Phe Met Pro Thr Leu Leu Gly Ile Val Ala Asp Lys Trp Leu Ser
          8.5
                             90
Ala Lys Trp Leu Tyr Met Leu Cys His Leu Val Gly Ala Gly Thr Leu
        100 105
Phe Met Ala Ala Glu Val Thr Thr Pro Gly Ala Met Phe Met Val Ile
 115 120 125
Leu Leu Asn Ser Leu Ala Tyr Met Pro Thr Leu Gly Leu Ile Asn Thr
 130 135 140
Ile Ser Tyr Tyr Arg Leu Lys Ser Ala Gly Leu Asp Ile Val Thr Asp
          150
                               155
Phe Pro Pro Ile Arg Ile Trp Gly Thr Ile Gly Phe Ile Met Ala Met
            165 170 175
Trp Gly Val Ser Phe Ala Gly Phe Glu Leu Ser His Met Gln Leu Tyr
         180
             185 190
Ile Gly Ala Ala Leu Ser Val Leu Leu Ala Leu Phe Thr Leu Thr Leu
     195 200 205
Pro Thr Ile Pro Val Ser Asn Gln Gln Lys Asn Gln Ser Trp Ser Thr
 210
                   215
                                   220
Met Leu Gly Leu Asp Ala Phe Ala Leu Phe Lys Asn Lys Arg Met Ala
               230
                    235
Ile Phe Phe Ile Phe Ser Met Leu Leu Gly Ala Glu Leu Gln Ile Thr
                             250 255
            245
Asn Met Phe Gly Asn Thr Phe Leu His Ser Phe Asp Asn Asp Pro Leu
         260
                         265 270
Phe Ala Gly Ser Phe Ile Val Glu His Ala Ser Val Met Met Ser Ile
      275
                      280
                                       285
Ser Gln Ile Ser Glu Thr Leu Phe Ile Leu Thr Ile Pro Phe Phe Leu
                                   300
                   295
 290
Ser Arg Tyr Gly Ile Lys Asn Val Met Leu Ile Ser Ile Ala Ala Trp
                310
                                315
Met Leu Arg Phe Gly Leu Phe Ala Tyr Gly Asp Pro Ser Ala Phe Gly
             325
                             330
Thr Val Leu Leu Val Leu Ser Met Ile Val Tyr Gly Cys Ala Phe Asp
                          345
                                          350
         340
Phe Phe Asn Ile Ser Gly Ser Val Phe Val Glu Lys Glu Val Lys Pro
      355
                       360
                                       365
Glu Ile Arg Ala Ser Ala Gln Gly Met Phe Leu Met Met Thr Asn Gly
                   375
   370
                                    380
Phe Gly Cys Ile Leu Gly Gly Val Val Ser Gly Lys Val Val Glu Met
               390
                                395
Tyr Thr Thr Asn Gly Ile Thr Asp Trp Gln Pro Val Trp Leu Ile Phe
             405
                             410
Ala Gly Tyr Ser Leu Val Leu Phe Phe Ala Phe Ile Ala Leu Phe Lys
         420 425
Tyr Lys His Val Arg Val Pro Asn Gly Ala Gln Pro Ile Ala His
                      440
                                       445
```

<210> 9880 <211> 276

<212> PRT <213> Enterobacter cloacae

<400> 9880

Leu Lys Ala Met Ser His Arg Leu Ala Val Gln Leu Lys Leu Pro Ile 1 5 10 15 15 16 17 17 Pro His Ala Val Pro Phe Ser His Cys Leu Phe Pro Pro Arg Glu 20 25 30 30 Arg Pro Gly Thr Pro Tyr Arg Asn Trp Lys Ile Pro Thr Met Gln His 35 40 45

```
Glu Leu Ile Asp Val Leu Ile Val Glu Asp Glu Asn Glu Leu Ala Gln
                  55
Leu His Ala Glu Leu Ile Gly Lys His Pro Arg Leu Arg Leu Val Gly
              70
                               75
Ile Ala Ala Ser Leu Ala Asp Ala Gln Val Gln Leu Glu Ser Lys Gln
          85
                           90
Pro Lys Leu Met Leu Leu Asp Asn Tyr Leu Pro Asp Gly Lys Gly Ile
      100 105 110
Thr Leu Ile Ser Asn Pro Met Leu Thr Arg Ala Asn Cys Ser Val Ile
 115 120 125
Phe Ile Thr Ala Ala Ser Asp Met Asp Thr Cys Ser Gln Ala Ile Arg
 130 135 140
Asn Gly Ala Phe Asp Tyr Ile Leu Lys Pro Val Ser Trp Lys Arg Leu
145 150 155 160
Ser Gln Ser Leu Glu Arg Phe Val Gln Phe Ala Glu Gln Gln Arg Val
           165
                           170
Trp Lys Ile Val Asp Gln Gln Asn Val Asp Ser Leu Tyr Gln Leu Gln
        180 185
Ala Lys Asn Tyr Arg Leu Asp Asn Gly Ser Lys Gly Ile Glu Glu Asn
    195 200 205
Thr Leu Ala Arg Val Gln Met Leu Phe Asn Asn Lys Ala Ala His Cys
210
                 215
                                 220
Phe Thr Val Asp Glu Val Val Ser Glu Thr Gly Leu Ser Lys Thr Thr
               230
                   235
Thr Arg Arg Tyr Leu Glu His Cys Val Glu Val Gly Phe Leu Thr Val
           245 250 255
Glu Met Leu Tyr Gly Lys Ile Gly His Pro Arg Arg Met Tyr Arg Arg
                        265
Ser Ala Thr
```

Ser Ala Inr 275

<210> 9881 <211> 132 <212> PRT

<213> Enterobacter cloacae

<400> 9881 Cys Arg Pro Phe Ala Ala Pro Gly Ala Val Ser Glu Gly Ser Ala Val 1.0 Asn Gln Gln Glu Gly Gly Met Ser Ala Gln Pro Val Asp Leu Gln Ile 25 30 20 Phe Gly Arg Ser Leu Arg Val Asn Cys Pro Pro Glu Gln Arg Asp Ala 40 Leu Asn Gln Ala Ala Asp Asp Leu Asn Gln Arg Leu Gln Asp Leu Lys 55 Glu Arg Thr Arg Val Thr Asn Thr Glu Gln Leu Val Phe Ile Ala Ala 75 70 Leu Asn Ile Ser Tyr Glu Leu Thr Gln Glu Lys Ala Lys Thr Arg Asp 85 90 Tyr Ala Ala Ser Met Glu Gln Arg Ile Lys Met Leu Gln Gln Thr Ile 100 105 Glu Gln Ala Leu Leu Asp Gln Gly Arg Ser Pro Glu Arg Pro Gly Pro 120 Lvs Phe Glu

130 <210> 9882 <211> 231

<212> PRT <213> Enterobacter cloacae <400> 9882 Asn Tyr Asp Asp Thr Phe Thr Leu Asn Gln Gly Phe Lys Gly Tyr Ser 10 Leu Arg Arg His Leu Gly Asp Ser Leu Ser Phe Leu Leu Pro Thr Thr 20 25 Met Thr Gln Phe Pro Glu Val Ser Ala Ser Arg Gln Asp Ile Arg Gln 35 40 4.5 Leu Ile Arg Gln Arg Arg Ala Leu Ser Ala Glu Gln Gln Ala His 55 60 Phe Ala Gln Gln Ala Ala Ala Arg Met Met Ala Tyr Pro Pro Val Val 65 70 75 Met Ala Asn Thr Val Ala Leu Phe Leu Ser Phe Asp Gly Glu Leu Asp 90 85 Thr Gln Pro Leu Ile Asp Gln Leu Trp Arg Ala Gly Lys Lys Val Tyr 100 105 110 Leu Pro Val Leu His Pro Phe Ser Arg Gly Asn Leu Leu Phe Leu His 115 120 125 Tyr His Pro His Ser Glu Leu Val Val Asn Arg Leu Lys Ile Thr Glu 130 135 140 Pro Lys Leu Asp Val Arg Asp Val Leu Pro Leu Ser Glu Leu Asp Val 145 150 155 160 Leu Ile Thr Pro Leu Val Ala Phe Asp Glu Gln Gly Gln Arg Leu Gly 165 170 Met Gly Gly Gly Phe Tyr Asp Arg Thr Leu Gln Asn Trp Gln Gln Tyr 180 185 190 Gly Leu Gln Pro Val Gly Tyr Ala His Asp Cys Gln Gly Val Glu Val 195 200 205 Leu Pro Val Glu Lys Trp Asp Val Pro Leu Pro Ala Val Val Thr Pro 210 215 Ser Lys Thr Trp Thr Trp

<210> 9883 <211> 347 <212> PRT

<213> Enterobacter cloacae

<400> 9883 Phe Gln Gln Pro Arg His Gln Arg Gly Val Asn Thr Leu Val Asp Lys 10 Gln Pro Arg Pro Gly Asp Thr Arg Leu Pro Arg Arg Ala Glu Asn Ala 20 25 Val Ala Asp Pro Ala Arg Gly Leu Phe Asp Ile Gly Ile Leu Gln His 35 40 Asp Gly Arg Arg Phe Ala Ala Gln Phe Gln Arg Gly Arg Asp Gln Phe 55 Phe Arg Arg His Val Arg Gln Met Thr Ala Arg Gly Gly Ala Ala Gly 70 75 Lys Gly Asn Phe Pro His Ala Arg Met Thr Arg Gln Arg Ile Ala Asn 85 90 95 His Arg Ala Phe Ala Arg Gln Asp Thr Gln Gln Pro Gly Gly Gln Pro 105 100 Gly Leu Phe Lys Asn Pro Arg Gln Leu Gln Arg His Gln Arg Arg Gly 115 120 125 Phe Gly Gly Leu Glu Asp His Arg Val Pro Gly Gly Asn Arg Arg Cys 130 135 140 Asp Leu Leu His Phe Ala Gly Asn Arg Arg Val Pro Arg Arg Asp Gly 150 155 Arg His His Ala Lys Gly Leu Val Ala Ala Gln Arg Gln Gln Ile Arg 170 165 Leu Ala Arg Arg Arg Lys Phe Pro Phe Gln Gln Leu Ala Gly Gly Gly

180 185 Lys Val Ala Arg Arg Ser Arg Arg Ala His His Gln Pro Ala Arg Phe 195 200 205 Arg Gln Arg Leu Ala Val Ile Thr Ala Leu His Leu Arg Gln Arg Ile 210 215 220 Asp Ala Gly Phe Asn Lys Ile Gly Asn Phe Met Gln Asp Leu Arg Ala 230 235 His Val Arg Gln Thr Val Thr Pro Cys Gly Ile Ala Pro Gly Ala Leu 245 250 Ser Gly Gly Tyr Arg Leu Leu Gln Val Ile Gln Thr Gly Gly Ile Gln 260 265 270 Arg Arg Val Glu Arg Pro Val Cys Arg Lys Val Ala Leu His Arg Val 275 280 285 Ala Ala Ala Ala Ser Pro Leu Ala Ala Asp Lys Asn Leu Gln Ile Val 290 295 300 His Arg His Ser Ser Ala Gln Gly Gln Leu Ala Ala Gly Ala His Arg 305 310 315 320 Ala Gln Cys Arg Gln Gly Gly Gly Phe Arg Ile Arg Ser Gln Arg Gln 325 330 Ser Ala Gln Phe Gln Met Glu Leu Ala Glu 340

<210> 9884 <211> 386 <212> PRT

<213> Enterobacter cloacae

<400> 9884 Asn Met Ala Lys His Leu Phe Thr Ser Glu Ser Val Ser Glu Gly His 10 Pro Asp Lys Ile Ala Asp Gln Ile Ser Asp Ala Val Leu Asp Ala Ile 20 Leu Ala Gln Asp Pro Lys Ala Arg Val Ala Cys Glu Thr Tyr Val Lys 40 Thr Gly Met Val Leu Val Gly Gly Glu Ile Thr Thr Ser Ala Trp Val 60 55 Asp Ile Glu Glu Ile Thr Arg Asn Thr Val Arg Glu Ile Gly Tyr Val 75 70 His Ser Asp Met Gly Phe Asp Ala Asn Ser Cys Ala Val Leu Ser Ala 85 90 Ile Gly Lys Gln Ser Pro Asp Ile Asn Gln Gly Val Asp Arg Ala Asp 105 100 Pro Leu Glu Gln Gly Ala Gly Asp Gln Gly Leu Met Phe Gly Tyr Ala 120 125 115 Thr Asn Glu Thr Asp Val Leu Met Pro Ala Pro Val Thr Tyr Ala His 135 140 130 Arg Leu Val Gln Arg Gln Ala Glu Val Arg Lys Asn Gly Thr Leu Pro 150 155 Trp Leu Arg Pro Asp Ala Lys Ser Gln Val Thr Phe Gln Tyr Asp Asp 165 175 170 Gly Lys Ile Val Gly Ile Asp Ala Val Val Leu Ser Thr Gln His Ala 185 180 Glu Glu Ile Asp Gln Lys Ser Leu Gln Glu Ala Val Met Glu Glu Ile 200 205 Ile Lys Pro Val Leu Pro Thr Glu Trp Leu Ser Ser Ala Thr Lys Phe 220 215 210 Phe Ile Asn Pro Thr Gly Arg Phe Val Ile Gly Gly Pro Met Gly Asp 230 235 Cys Gly Leu Thr Gly Arg Lys Ile Ile Val Asp Thr Tyr Gly Gly Met 245 250 Ala Arg His Gly Gly Gly Ala Phe Ser Gly Lys Asp Pro Ser Lys Val

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2.60
                           265
Asp Arg Ser Ala Ala Tyr Ala Ala Arg Tyr Val Ala Lys Asn Ile Val
      275
                       280
                                         285
Ala Ala Gly Leu Ala Asp Arg Cys Glu Ile Gln Val Ser Tyr Ala Ile
          295
                                      300
Gly Val Ala Glu Pro Thr Ser Ile Met Val Glu Thr Phe Gly Thr Glu
        310 315
Lys Val Pro Ser Glu Gln Leu Thr Leu Leu Val Arg Glu Phe Phe Asp
           325 330 335
Leu Arg Pro Tyr Gly Leu Ile Gln Met Leu Asp Leu Leu His Pro Ile
                                350
          340 345
Tyr Gln Glu Thr Ala Ala Tyr Gly His Phe Gly Arg Glu His Phe Pro
      355 360 365
Trp Glu Lys Thr Asp Lys Ala Ala Leu Leu Arg Asp Ala Ala Gly Leu
                                      380
                    375
Lys
385
<210> 9885
<211> 190
<212> PRT
<213> Enterobacter cloacae
<400> 9885
Ala His Thr Thr Asp Pro Pro Ala Gly Gly Ala Ser Cys Ala Ser Pro
                               10
Leu Pro Ala Leu Cys Ser Ala Pro Met Lys Ala Pro Arg Leu Pro Ile
          20
                           25
Ala Ile Gln Gln Ala Val Met Arg Ser Leu Arg Glu Lys Leu Ala Gln
                        40
                                         4.5
      35
Ala Asn Leu Lys Leu Gly Arg Asn Tyr Pro Glu Pro Lys Leu Val Tyr
                     55
                                     60
 50
Gln Gln Arg Gly Thr Ala Ala Gly Thr Ala Trp Leu Glu Ser Tyr Glu
                                  75
                 7.0
Ile Arg Leu Asn Pro Val Leu Met Met Glu Asn Gln Gln Ala Phe Ile
                               90
             85
Glu Glu Val Val Pro His Glu Leu Ala His Leu Leu Val Trp Lys His
                           105
                                             110
          100
Phe Gly Arg Val Ala Pro His Gly Lys Glu Trp Lys Trp Met Met Glu
                                          125
       115
                        120
Ala Val Leu Gly Val Pro Ala Arg Arg Thr His Gln Phe Glu Leu Glu
                     135
                                      140
   130
Ser Val Arg Arg Asn Thr Phe Pro Tyr Arg Cys Gln Cys Gln Gln His
                 150
                                  155
Gln Leu Thr Val Arg Arg His Asn Arg Val Val Arg Gly Glu Ala Thr
             165
                               170
Tyr Arg Cys Val Lys Cys Gly Glu Pro Leu Val Ala Glu
                            185
          180
```

<210> 9886 <211> 236 <212> PRT

<213> Enterobacter cloacae

<400> 9886

Asn Arg Ser Gly Ile Pro Asp Leu Asp His Arg Asn Ala Asp Gly Arg 1 5 10 15 Tyr Arg Lys Thr Phe Thr Glu Ile Thr Cys Asp Ser Ala Cys Val Tyr 20 20 25 30 30 35 Pro His Thr Gly Arg Cys Arg Phe Leu Asn Gln Glu Thr Val Pro Leu 45 45

```
Thr Met Asn Leu Gln His His Phe Leu Ile Ala Met Pro Ala Leu Gln
                  55
Asp Pro Ile Phe Arg Arg Ala Val Val Tyr Ile Cys Glu Tyr Asn Glu
               7.0
                                75
Asp Gly Ala Met Gly Ile Ile Ile Asn Lys Pro Leu Glu Asn Leu Gln
            85
                            90
Val Glu Gly Ile Leu Asp Lys Leu Lys Ile Pro Ala Glu Ala Arg Leu
        100 105
                                         110
Pro Glu Ile Arg Leu Asp Lys Pro Val Met Leu Gly Gly Pro Leu Ala
   115 120
                          125
Glu Asp Arg Gly Phe Ile Leu His Thr Pro Pro Val Phe Ser Ser Ser
        135 140
Ile Arg Ile Ser Asp Asn Thr Val Val Thr Thr Ser Arg Asp Val Leu
      150 155
Glu Thr Leu Gly Thr Ala Ser Gln Pro Ser Glu Val Leu Val Ala Leu
          165
                 170
Gly Tyr Ala Ser Trp Glu Lys Gly Gln Leu Glu Gln Glu Ile Leu Asp
             185
                                        190
         180
Asn Ala Trp Leu Thr Ala Pro Ala Asp Met Asn Ile Leu Phe Lys Thr
                     200 205
     195
Pro Ile Ala Asp Arg Trp Arg Asp Ala Ala Lys Leu Ile Gly Ile Asp
210 215
Ile Leu Thr Met Pro Gly Val Ala Gly His Ala
               230
```

<210> 9887 <211> 127 <212> PRT

<213> Enterobacter cloacae

<400> 9887 Leu Ser Ala Thr Ala Ile Ser Arg Ala Gly Gly Ser Arg Gly Ala Pro

1.0 1 Val Thr Ala Ile Thr Cys Arg Cys Asn Gly Leu Ala Ser Ala Arg Gln 20 25 Arg Gly Met Ser Met Ala Arg Thr Ile Phe Cys Thr Phe Leu Gln Arg 4.0 45 35 Asp Ala Glu Gly Gln Asp Phe Gln Leu Tyr Pro Gly Asp Leu Gly Lys 55 Arg Ile Tyr Asn Glu Ile Ser Lys Glu Ala Trp Gly Gln Trp Gln Lys

7.0 7.5 Lys Gln Thr Met Leu Ile Asn Glu Lys Lys Leu Ser Met Met Asn Pro 90 85

Glu His Arg Lys Leu Leu Glu Gln Glu Met Val Asn Phe Leu Phe Glu 100 105 Gly Lys Asp Val His Ile Glu Gly Tyr Thr Pro Pro Glu Lys 120

<210> 9888 <211> 463

<212> PRT <213> Enterobacter cloacae

115

<400> 9888

Thr His Lys Ile Thr Lys Gly Leu Ile Met Ser Thr Thr Asp Asp Ser 1.0 1.5 Phe Ser Val Thr His Asp Pro Ile Asp Ile Gln Arg Pro Ser Leu Lys 25 30 Glu Arg Trp Trp His Ile Met Asp Thr Trp Lys Ile Gly Ile Ile Pro 35 Leu Pro Leu Phe Val Leu Ala Gly Ala Leu Ile Ala Ile Asp Cys Leu

```
55
Gly Gly Lys Leu Pro Ser Asp Ile Val Val Met Val Ala Thr Leu Ala
          70
                              75
Phe Phe Gly Phe Ala Cys Gly Glu Phe Gly Lys Arg Leu Pro Ile Val
          8.5
                         90
Gly Lys Leu Gly Ala Ala Ala Ile Cys Ala Thr Phe Ile Pro Ser Ala
             105
Leu Val Tyr Tyr Gly Leu Leu Pro Asp Val Val Val Glu Ser Thr Thr
    115 120 125
Lys Phe Tyr Lys Ser Thr Asn Ile Leu Tyr Leu Tyr Ile Cys Cys Ile
 130 135 140
Ile Val Gly Ser Ile Met Ser Met Asn Arg Thr Val Leu Ile Gln Gly
             150 155
Phe Leu Arg Ile Phe Phe Pro Met Leu Cys Gly Glu Ile Val Gly Met
            165 170 175
Ile Val Gly Met Gly Val Gly Leu Ala Leu Gly Leu Glu Pro Phe Gln
         180 185 190
Ile Phe Phe Phe Ile Ile Leu Pro Ile Met Ala Gly Gly Val Gly Glu
                     200 205
      195
Gly Ala Ile Pro Leu Ser Ile Gly Tyr Ala Thr Leu Leu His Met Asp
                  215 220
   210
Gln Gly Val Ala Leu Gly Arg Val Leu Pro Met Val Met Leu Gly Gly
                230 235
Leu Thr Ala Ile Ile Ile Ser Gly Cys Leu Asn Gln Leu Gly Lys Arg
                 250 255
            245
Tyr Pro His Leu Thr Gly Glu Gly Gln Leu Met Pro Asn Arg Ala Asn
                         265 270
Ala Asp Ala Thr Val Ser Gln Pro Ala Phe Ser Gly Lys Ala Asp Val
            280 285
Thr Thr Ile Ala Ser Gly Ala Leu Leu Ala Val Leu Leu Tyr Met Leu
                   295
                        300
   290
Gly Met Leu Gly His Lys Leu Ile Gly Leu Pro Ala Pro Val Gly Met
                   315
                310
Leu Phe Met Ala Val Leu Val Lys Leu Cys Asn Gly Ala Ser Pro Arg
            325 330
Leu Leu Glu Gly Ser Gln Val Val Tyr Lys Phe Phe Gln Thr Ser Val
                         345
         340
Thr Tyr Pro Ile Leu Phe Ala Val Gly Val Ala Ile Thr Pro Trp His
                                      365
                      360
Glu Leu Val Ala Ala Phe Thr Leu Thr Asn Leu Leu Val Ile Ile Ser
                      380
                   375
Thr Val Ser Ala Leu Val Ala Thr Gly Phe Phe Val Gly Lys Lys Ile
                390
                               395
Gly Met His Pro Ile Asp Val Ala Ile Val Ser Cys Cys Gln Ser Gly
                            410
                                            415
            405
Gln Gly Gly Thr Gly Asp Val Ala Ile Leu Thr Ala Gly Asn Arg Met
                         425
                                         430
         420
Ser Leu Met Pro Phe Ala Gln Ile Ala Thr Arg Ile Gly Gly Ala Ile
    435
                      440
                                      445
Asn Val Ser Ile Ser Leu Leu Ile Leu Gly Asn Phe Leu Val
```

<210> 9889

<211> 344

<212> PRT

<213> Enterobacter cloacae

<400> 9889

Gly Gly Ser Met Gln Ser Gln Pro Ile Asp Phe Arg His Thr Val Val 1 5 10 15 Ala Lys His Pro Glu Arg Leu Ser Gln Ile Arg Tyr Leu Leu Ala Asp

Ser Gly Leu Gly Leu Asp Asn Asp Ile Thr Leu Phe Val Glu Ala Trp 4.0 Ser Gly Ala Gln Leu Val Gly Cys Ala Gly Leu Ala Ala Asn Val Ile 55 60 Lys Cys Val Ala Val Asn Glu Gln Leu Arg Gly Glu Asn Leu Ser Ala 70 75 Arg Leu Leu Ala Glu Val Glu Asn Ala Ala Leu Glu Arg Gly His Phe 90 85 His Leu Phe Leu Cys Thr Arg Pro Cys Asn Lys Glu Arg Phe Gly Arg 105 110 Ser Gly Phe Trp Pro Ile Ala Gln Ser Gly Asn Asn Ala Val Leu Met 115 120 Glu Asn Thr Pro Gln Gly Ile Ala Arg Tyr Cys Arg Thr Leu Ser Arg 135 140 Met Arg Arg Gly Gly Glu Lys Ile Gly Ala Ile Val Met Asn Ala Asn 155 150 Pro Phe Thr Leu Gly His Arg His Leu Val Glu Gln Ala Ala Ala Gln 165 170 Cys Asp Ala Leu His Leu Phe Val Val Arg Glu Asp Ala Ser Phe Phe 180 185 Pro Phe Ser Ala Arg Leu Glu Met Val Arg Ala Gly Val Ala His Leu 195 200 Pro Asn Val Val His Glu Gly Ser Gln Tyr Ile Ile Ser Arg Ala 215 220 Thr Phe Pro Ala Tyr Phe Leu Lys Glu Thr Gly Lys Val Gln Gln Ala 235 230 Trp Ser Glu Ile Asp Val Leu Ile Phe Arg Asp Phe Ile Ala Pro Ala 245 250 Leu Gly Ile Thr His Arg Phe Ile Gly Ser Glu Pro Phe Cys Asp Ile 265 270 260 Thr Arg Gln Tyr Asn Gln Thr Leu His Asp Leu Leu Ala Ser His Ile 280 285 275 Asp Val Val Glu Met Pro Arg Ile Lys Ala Thr Gly Asn Ala Ile Ser 300 295 Ala Ser Glu Val Arg Arg Leu Leu Lys Thr Gln Gln Phe Ser Arg Ile 310 • 315 Arg Glu Ile Val Pro Asp Ser Thr Phe Ala His Leu Glu Ala His Tyr 330 Arg Ala Ser Ala Glu Val Ala

<210> 9890 <211> 301 <212> PRT

<213> Enterobacter cloacae

340

<400> 9890 Thr Gly His Gln Leu Gly Gly Ala Glu Met Ser Lys Leu Arg Arg Ser 10 Met Leu Phe Leu Pro Gly Ala Asn Ala Ala Met Leu Ser Thr Ala Phe 25 3.0 20 Ile Tyr Arg Pro Asp Ser Ile Met Phe Asp Leu Glu Asp Ala Val Ala 35 40 Leu Arg Glu Lys Asp Thr Ala Arg Met Leu Val Phe His Ala Leu Gln 55 His Pro Met Tyr Gln Asp Ile Glu Thr Val Val Arg Ile Asn Pro Leu 70 7.5 Ser Thr Pro Phe Gly Leu Leu Asp Leu Glu Ala Ala Val Arg Ala Gly 85 90 Val Asp Val Ile Arg Leu Pro Lys Thr Asp Thr Pro Asp Asp Ile Tyr

```
105
Glu Leu Glu Gly His Leu Glu Arg Ile Glu Gln Ala Cys Gly Arg Glu
           120
 115
Val Gly Ser Thr Arg Val Met Ala Ala Ile Glu Ser Ala Ile Gly Val
 130 135
                               140
Ile Asn Ala Val Ala Ile Ala Arg Ser Ser Pro Arg Leu Ile Gly Ile
     150 155
Ala Leu Ala Ala Phe Asp Tyr Val Met Asp Met Gln Thr Glu Arg Gly
        165 170 175
Asp Gly Thr Glu Leu Phe Tyr Ala Arg Cys Ala Val Leu His Ala Ala
        180 185
                           190
Arg Ala Ala Gly Ile Asp Ala Phe Asp Val Val Trp Ser Asp Val Asn
                         205
     195 200
Asp Glu Ala Gly Phe Leu Arg Glu Val Asp Leu Ile Arg Lys Met Gly
      215 220
Phe Asn Gly Lys Ser Leu Ile Asn Pro Arg Gln Ile Asp Leu Leu His
              230 235
Asn Ala Tyr Ala Pro Thr Arg Glu Glu Val Glu His Ala Lys Arg Val
           245 250 255
Ile Glu Ala Ala Glu Glu Gly Glu Arg Asn Gly Leu Gly Val Val Ser
            265 270
        260
Leu Asn Gly Lys Met Val Asp Ala Pro Ile Ile Asn His Ala Gln Val
  275
                    280
Val Leu Glu Arg Ala Ala Ala Ser Gly Val Arg Arg
                 295
```

<210> 9891 <211> 207 <212> PRT

<213> Enterobacter cloacae

<400> 9891 Val His Arg Gln Asn Arg Arg Gly Asp Pro Leu Pro Arg Arg Gln Arg 1.0 Asp Arg His Cys Ala Thr Gly Glu Gly Gly Ser Met Thr Leu Ala Thr 25 30 20 Pro Val Arg Ala Gly Val Ser Leu Glu Glu Leu Leu Ala Ala Lys Glu 35 4.0 Arg Arg Ala Ala Arg Gln Ala Asp Trp Leu Thr His Tyr Gln Gln Pro 55 60 50 Val Ile Ser Leu Thr Leu Val Thr Pro Gly Glu Ile Lys Asp Ser Leu 70 Arg Tyr Arg Asn Thr Met Gly Val Ala Leu Gln Met Cys Asp Gln Leu 90 Leu Trp Glu Asn Arg Trp Gln Val Leu Asp Arg Leu Val Leu Trp Leu 105 110 100 Pro Thr Gly Pro Glu Ala Leu Trp Cys Val Ala His Pro Ala Ala Glu 120 125 Ile Lys Ala His Cys Ala Glu Leu Glu Gln Thr His Pro Leu Gly Arg 135 140 130 Leu Trp Asp Leu Asp Val Ile Cys Pro Glu Asn Gly Leu Val Gly Arg 150 155 Gln Ser Leu Gly Ser His Leu Arg Arg Cys Leu Ile Cys Asp Glu Pro 165 170 Ala His Ala Cys Ser Arg Ser Arg His His Pro Val Glu Gln Val Val 190 180 185 Ser Arg Val Glu Lys Met Ile Asp Asp Trp Phe Ala Arg Asp 205 200

<210> 9892 <211> 257 <212> PRT <213> Enterobacter cloacae

<400> 9892 Leu Trp Ile Met Pro Val Ser Arg Thr Phe Ser Gln Ala Asp Asn Ser 5 10 Phe Met Lys Asn Asp Val Ile Ser Pro Glu Phe Asp Glu Asn Gly Arg 20 25 Pro Leu Arg Arg Ile Arg Ser Phe Val Arg Arg Gln Gly Arg Leu Thr 40 4.5 Lys Gly Gln Gln His Ala Leu Asp Asn Tyr Trp Pro Val Met Gly Val 55 60 Glu Phe Ser Glu Gln Pro Leu Asp Phe Thr Asp Leu Phe Gly Arg Asp 75 70 Ala Pro Val Thr Leu Glu Ile Gly Phe Gly Met Gly Thr Ser Leu Val 85 90 Thr Met Ala Lys Ala Arg Pro Glu Gln Asn Phe Leu Gly Ile Glu Val 100 105 110 His Ser Pro Gly Val Gly Ala Cys Leu Ala Thr Ala His Glu Glu Gly 120 125 115 Val Glu Asn Leu Arg Val Met Cys His Asp Ala Val Glu Val Leu His 135 140 130 Lys Met Ile Pro Asp Asn Ser Leu Asn Met Val Gln Leu Phe Phe Pro 150 155 160 145 Asp Pro Trp His Lys Ala Arg His Asn Lys Arg Arg Ile Val Gln Ala 165 170 175 Pro Phe Ala Glu Leu Val Lys Ser Lys Leu Lys Leu Gly Gly Val Phe 185 190 180 His Met Ala Thr Asp Trp Glu Pro Tyr Ala Glu His Met Leu Glu Val 200 205 195 Met Ser Ser Leu Asp Gly Tyr Lys Asn Gln Ser Glu Ser Asn Asp Tyr 215 220 210 Val Pro Arg Pro Asp Ser Arg Pro Val Thr Lys Phe Glu Gln Arg Gly 230 235 225 His Arg Leu Gly His Gly Val Trp Asp Leu Met Phe Glu Arg Val Lys

<210> 9893 <211> 666 <212> PRT <213> Enterobacter cloacae

245

<400> 9893 Tyr Lys Glu Leu Arg Phe Ala Met Ser Asp Asp Met Ser Ser Leu Ser 10 Pro Ser Ser Ala Gly Glu Gln Gly Val Leu Arg Ser Met Gln Glu Val 25 Ala Met Ser Ser Gln Glu Ala Ser Lys Met Leu Arg Thr Tyr Asn Ile 4.5 35 40 Ala Trp Trp Gly Asn Asn Tyr Tyr Asp Val Asn Glu Leu Gly His Ile 55 Ser Val Cys Pro Asp Pro Asp Val Pro Glu Ala Arg Val Asp Leu Ala 75 70 Lys Leu Val Lys Thr Arg Glu Ala Gln Gly Gln Arg Leu Pro Ala Leu 85 90 Phe Cys Phe Pro Gln Ile Leu Gln His Arg Leu Arg Ser Ile Asn Ala 100 105 Ala Phe Lys Arg Ala Arg Glu Ser Tyr Gly Tyr Asn Gly Asp Tyr Phe

120

Leu Val Tyr Pro Ile Lys Val Asn Gln His Arg Arg Val Ile Glu Ser 135 Leu Ile His Ser Gly Glu Pro Leu Gly Leu Glu Ala Gly Ser Lys Ala 150 155 Glu Leu Met Ala Val Leu Ala His Ala Gly Met Thr Arg Ser Val Ile 165 170 Val Cys Asn Gly Tyr Lys Asp Arg Glu Tyr Ile Arg Leu Ala Leu Ile 180 185 Gly Glu Lys Met Gly His Lys Val Tyr Leu Val Ile Glu Lys Met Thr 200 205 Glu Ile Ala Ile Val Leu Glu Glu Ala Glu Arg Leu Asn Val Ile Pro 210 215 220 Arg Leu Gly Val Arg Ala Arg Leu Ala Ser Gln Gly Ser Gly Lys Trp 225 230 235 240 Gln Ser Ser Gly Gly Glu Lys Ser Lys Phe Gly Leu Ala Ala Asn Gln 245 250 255 Val Leu Gln Leu Val Glu Ile Leu Arg Glu Arg Gly Arg Leu Asp Ser 265 270 260 Ile Gln Leu Leu His Phe His Leu Gly Ser Gln Met Ala Asn Ile Arg 275 280 285 Asp Ile Ala Thr Gly Val Arg Glu Ser Ala Arg Phe Tyr Val Glu Leu 290 295 300 His Lys Leu Gly Val Asn Ile Gln Cys Phe Asp Val Gly Gly Leu 310 315 Gly Val Asp Tyr Glu Gly Thr Arg Ser Gln Ser Asp Cys Ser Val Asn 325 330 335 Tyr Gly Leu Asn Glu Tyr Ala Asn Asn Ile Ile Trp Ala Ile Gly Asp 345 350 340 Ala Cys Glu Glu His Gly Leu Pro His Pro Thr Val Ile Thr Glu Ser 355 360 365 Gly Arg Ala Val Thr Ala His His Thr Val Leu Val Ser Asn Ile Ile 375 380 370 Gly Val Glu Arg Ser Glu Ile Thr Glu Ala Thr Pro Pro Ala Asp Asp 390 395 Ala Pro Arg Ser Leu Gln Ser Met Trp Glu Thr Trp Gln Glu Met His 405 410 415 Glu Pro Gly Thr Arg Arg Ser Leu Arg Glu Trp Leu His Asp Ser Gln 425 420 Met Asp Leu His Asp Ile His Val Gly Tyr Ser Ser Gly Thr Phe Ser 440 445 435 Leu Gln Glu Arg Ala Trp Ala Glu Gln Leu Tyr Leu Asn Met Cys His 455 460 Glu Val Gln Lys Gln Leu Asp Pro Ser Asn Arg Ala His Arg Pro Ile 470 475 Ile Asp Glu Leu Gln Glu Arg Met Ala Asp Lys Met Tyr Val Asn Phe 490 495 485 Ser Leu Phe Gln Ser Met Pro Asp Ala Trp Gly Ile Asp Gln Leu Phe 505 510 500 Pro Val Leu Pro Leu Glu Gly Leu Asn His Ala Pro Glu Arg Arg Ala 520 525 515 Val Leu Leu Asp Ile Thr Cys Asp Ser Asp Gly Ala Ile Asp His Tyr 535 540 530 Val Asp Gly Asp Gly Ile Ala Thr Thr Met Pro Met Pro Glu Tyr Asp 550 555 Pro Glu Asn Pro Pro Met Leu Gly Phe Phe Met Val Gly Ala Tyr Gln 570 565 Glu Ile Leu Gly Asn Met His Asn Leu Phe Gly Asp Thr Glu Ala Val 590 580 585 Asp Val Phe Val Phe Pro Asp Gly Ser Val Glu Val Glu Leu Ser Asp 605 600 595 Glu Gly Asp Thr Val Ala Asp Met Leu Glu Tyr Val Gln Leu Asp Pro

610 615 Lys Lys Leu Leu Thr Gln Phe Arg Asp Gln Val Lys Asn Thr Gly Leu 630 635 Asp Asp Ala Leu Gln Gln Gln Phe Leu Glu Glu Phe Glu Ala Gly Leu 645 650 Tyr Gly Tyr Thr Tyr Leu Glu Asp Glu 660

<210> 9894 <211> 146 <212> PRT <213> Enterobacter cloacae

<400> 9894 Ser Ile Asn Lys Phe Val Thr Leu Ser Leu Asp Glu Thr Phe Ile Ala 1.0 Phe Ile Leu Thr Val Leu Asn Lys Lys Gln Ser Phe Ile Tyr Glu Thr 25 3.0 Lys Ala Trp Arg Ile Val Met Ser Trp Ile Gly Val Cys Asp Ala Glu 45 35 40 Gln Val Gln Glu Asp Phe Pro Phe Ser Gly Asn Val Asp Gly Lys Glu 55 50 Ile Gly Val Tyr Leu Ile Asp Gly Glu Tyr Tyr Ala Leu Glu Asp Val 70 75 Cys Pro His Ala Tyr Ala Leu Leu Ser Gln Gly Phe Val Glu Asp Gly 90 8.5 Lys Val Glu Cys Pro Leu His Glu Ala Val Phe Asp Val Lys Thr Gly 100 105 Gln Cys Leu His Gly Pro Gly Gly Arg Asn Leu Asn Arg Tyr Pro Val 120 125 Arg Val Phe Glu Asn Gln Ile Gln Ile Thr Phe Val Glu Glu Thr Val

135

Ala 145

> <210> 9895 <211> 372 <212> PRT

<213> Enterobacter cloacae

<400> 9895 Thr Arg Cys Ala Cys Thr Thr Ser Arg Ala Ser Arg Gly Ala Thr Pro 1.0 Ala Ser Gly His Ser Tyr Arg Leu Thr Ala Thr Glu Gly Asn Ala Met Thr Thr Thr Val Gln His Tyr Leu Asp Lys Gly Leu Arg Gly Leu Trp 40 Tyr Pro Val Leu Ala Ser Trp Glu Val Gln Ser Ala Pro Val Gly Ile 55 Thr Arg Leu Gly Glu Gln Ile Val Val Trp Arg Asn Lys Asp Gly Gln 70 7.5 Val Gln Ala Leu Glu Asp Arg Cys Pro His Arg Gly Ala Arg Leu Ser 90 Met Gly Trp Asn Leu Gly Asp Arg Ile Ala Cys Trp Tyr His Gly Val 100 105 Glu Val Ala Gly Asn Gly Glu Val Lys Asp Val Pro Ala Val Asp Lys 120 115 Cys Pro Leu Val Gly Gln Gln Cys Val Arg Ser Tyr Ser Val Gln Glu 130 135 140 Ala His Gly Ala Ile Phe Leu Trp Phe Gly Val Thr Ala Asp Gln Gln 155

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Pro Asp Glu Leu Thr Phe Pro Asp Glu Leu Ala Asp Thr Asp Ser Phe
                         170
                                        175
        165
Ser Asn Phe Leu Cys Thr Ala Ala Trp Lys Cys Asn Tyr Gln Tyr Ala
            185
   180
Leu Glu Asn Val Met Asp Pro Met His Gly Thr Tyr Leu His Ser Ser
 195 200 205
Ser His Ser Met Ala Glu Gly Asp Arg Lys Ala Asp Met Val Leu Gln
 210 215 220
Pro Thr Lys Thr Gly Phe Ile Phe Glu Lys Lys Gly Gln Ser Gly Val
225 230 235
Asn Phe Asp Trp Val Glu Leu Gly Asn Ser Gly Thr Cys Trp Met Arg
        245 250 255
Leu Ser Ile Pro Tyr Lys Lys Arg Phe Gly Pro Gly Gly His Phe Phe
        260
           265 270
Ile Val Gly Met Val Val Pro Glu Asp Asn Asp Asn Cys Arg Val Phe
     275 280
                        285
Phe Trp Arg Ile Arg Arg Val Gln Gly Trp Gln Arg Asp Met Trp Arg
                295
                              300
Phe Met Tyr Arg Asn Arg Leu Glu Lys Leu His Trp Glu Val Leu Glu
                 315 320
     310
Gln Asp Arg Val Val Leu Glu Ser Leu Ala Pro Asn Ala Arg Asp His
                         330 335
           325
Glu Tyr Leu Tyr Gln His Asp Val Gly Leu Ser Arg Leu Arg Arg Met
           345 350
        340
Met Gln Lys Ala Ala Lys Glu Gln Leu Ala Met Arg Glu Ala Gln Gln
             360
355
Glv Ala Ala
  370
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<211> 184 <212> PRT <213> Enterobacter cloacae

...

<210> 9896

<400> 9896 Asp Val Thr Glu Glu Ser Val Met Thr Asp Ser Ile Val Thr Asn Lys 1.0 Thr Gly Ile Lys Pro Asp His Leu Thr Met Glu Glu Trp Val Glu Ser 20 25 Arg Ile Ala Arg Phe Glu Gly Arg Lys Tyr Asp Trp Asn Ala Leu Lys 40 Phe Gln Ala Asp Phe Asp Pro Lys Tyr Arg Arg Ala Gln Met Arg Tyr Ile Gly Thr Gly Ala Thr Gly Val Ala Asn Asp Thr Asn Thr Val Gln 75 70 Ala Asp His Phe Thr Phe Ser Thr Met Val Leu Pro Ser Lys Cys Glu 90 95 Gly Pro Leu His Leu His Asp Asp Val Glu Glu Val Phe Phe Met Leu 105 110 100 Lys Gly Gln Ile Thr Leu Met Ile Gln Asp Gly Asp Asn Tyr Thr Glu 125 120 Thr Val Leu Arg Glu Arg Asp Leu Ile Ser Val Pro Pro Gly Ile Tyr 135 140 Arg Gly Leu Phe Asn His Gly Glu Glu Glu Ala Leu Met Cys Val Met 155 150 Leu Gly Thr Asn Lys Pro Glu Ile Pro Thr Tyr Pro Ser Asp His Pro 165 170 Leu Ser Lys Val Lys Arg Asn

<210> 9897

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<211> 260
<212> PRT
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<213> Enterobacter cloacae

<400> 9897

Gly Gly Met Met Thr Gly Phe Arg Glu Gln Gly Ser Gly Ile Pro Leu Met Leu Leu His Gly Ile Ser Ser Gly Ala Ala Ser Trp His Lys Gln 25 30

Met Ala Leu Asn Gly Phe Arg Val Leu Ala Trp Asp Met Pro Gly Tyr 45 40

Gly Glu Ser Pro Met Leu Ala Val Ala Arg Ala Asn Ala Gly Asp Tyr 55 60

Ala Asp Ala Leu Ala Ala Met Leu Asp Arg Ala Gly Val Trp Gln Ala 75 7.0 Val Leu Val Gly His Ser Leu Gly Ala Leu Val Ala Ser Ala Phe Ala

90 Ala Lys Phe Pro Asp Arg Val Ile His Leu Val Leu Ala Asp Ala Ala

105 110 100 Gln Gly Tyr Gly Asn Ala Ala Pro Glu Gln Arg Glu Gln Val Trp Arg

120 125 115 Asn Arg Glu Gln Gln Met Ala Leu Gly Gly Glu Ile Leu Ala Gln Thr

135 140 130 Arg Ala Pro Lys Leu Leu Arg Pro Gly Ala Arg Ala Glu Asp Ile Ala 150 155

Thr Val Ala Ala Gly Met Arg Val Leu Arg Pro Glu Gly Tyr Leu Ala 170 165

Ala Ser Trp Met Leu Ala His Asp Asp Ile His Gly Trp Leu Lys Arg 185 190 180

Tyr Ser Gly Ser Phe Glu Val Trp Cys Gly Glu Gln Asp Ala Ile Thr 200 205 195 Gln Pro Glu Leu Val Gln Gly Leu Ala Leu Arg Tyr Gly Met Pro Phe

215 220 Ile Ala Ile Pro Gln Ala Gly His Ala Ser Tyr Leu Asp Asn Asp Ala

235 230 Phe Phe Asn Gln Gln Leu Leu Arg Ile Asn Glu Glu Val Arg Asp Glu 245

Cvs Thr Asn 260

<210> 9898

<211> 395 <212> PRT

<213> Enterobacter cloacae

<400> 9898

Glu Ser Thr Arg Gly Phe Thr Met Ser Val Ile Lys Met Thr Asp Leu 10 Asp Leu Ala Gly Lys Arg Val Phe Ile Arg Ala Asp Leu Asn Val Pro 25 Val Lys Asp Gly Lys Val Thr Ser Asp Ala Arg Ile Arg Ala Ser Leu 40 45 35 Pro Thr Ile Glu Leu Ala Leu Lys Gln Gly Ala Lys Val Met Val Thr 55 60 Ser His Leu Gly Arg Pro Thr Glu Gly Glu Tyr Asn Glu Glu Phe Ser 75 70 Leu Leu Pro Val Val Asn Tyr Leu Lys Asp Lys Leu Ser Ser Pro Val 90 Arg Leu Val Lys Asp Tyr Leu Asp Gly Val Glu Val Ala Glu Gly Glu 105 100 Leu Val Val Leu Glu Asn Val Arg Phe Asn Lys Gly Glu Lys Lys Asp

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115
                     120
Asp Glu Thr Leu Ser Lys Lys Tyr Ala Ala Leu Cys Asp Val Phe Val
         135
                                140
Met Asp Ala Phe Gly Thr Ala His Arg Ala Gln Ala Ser Thr His Gly
     150
                   155
Ile Gly Lys Phe Ala Asp Val Ala Cys Ala Gly Pro Leu Leu Ala Asp
         165 170
                               175
Glu Leu Glu Ala Leu Gly Lys Ala Leu Lys Glu Pro Ala Arg Pro Met
        180 185 190
Val Ala Ile Val Gly Gly Ser Lys Val Ser Thr Lys Leu Thr Val Leu
     195 200 205
Asp Ser Leu Ser Lys Ile Ala Asp Gln Leu Ile Val Gly Gly Gly Ile
 210 215
                                220
Ala Asn Thr Phe Val Ala Ala Gln Gly His Asn Val Gly Lys Ser Leu
      230 235
Tyr Glu Ala Asp Leu Val Asp Glu Ala Lys Arg Leu Leu Gly Thr Cys
        245 250 255
Asp Ile Pro Val Pro Thr Asp Val Arg Val Ala Thr Glu Phe Ser Glu
        260 265
Thr Ala Thr Ala Thr Leu Lys Ser Val Asn Asp Ile Lys Asp Glu Glu
      275 280 285
Gln Ile Leu Asp Leu Gly Asp Val Ser Ala Gln Lys Leu Ala Glu Ile
      295 300
Leu Lys Asn Ala Lys Thr Ile Leu Trp Asn Gly Pro Val Gly Val Phe
               310 315
Glu Phe Pro Asn Phe Arg Lys Gly Thr Glu Ile Val Ala Asn Ala Ile
               330 335
Ala Asp Ser Glu Ala Phe Ser Ile Ala Gly Gly Gly Asp Thr Leu Ala
                        345
      340
Ala Ile Asp Leu Phe Gly Ile Ala Asp Lys Ile Ser Tyr Ile Ser Thr
                     360
                         365
      355
Gly Gly Gly Ala Phe Leu Glu Phe Val Glu Gly Lys Val Leu Pro Ala
                 375
  370
Val Ala Met Leu Glu Glu Arg Ala Lys Lys
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<210> 9899 <211> 285 <212> PRT

<213> Enterobacter cloacae

390

<400> 9899 Met Glu Gln Leu Asp Val Val Asp Ser Ile Asn Asn Ala Gly Asn Trp 1.0 Leu Val Arg Asn Gln Ala Leu Leu Leu Ser Tyr Ala Val Asn Ile Val 20 Ala Ala Ile Ala Ile Ile Ile Val Gly Met Ile Val Ala Arg Ile Val 40 Ser Asn Ala Val Asn Arg Val Met Val Ala Arg His Ile Asp Ala Thr 5.5 60 Val Ala Asp Phe Leu Ser Ala Leu Val Arg Tyr Gly Ile Ile Ala Phe 70 75 Thr Leu Ile Ala Ala Leu Gly Arg Val Gly Val Gln Thr Ala Ser Val 85 90 Ile Ala Val Leu Gly Ala Ala Gly Leu Ala Ile Gly Leu Ala Leu Gln 100 105 110 Gly Ser Leu Ser Asn Leu Ala Ala Gly Val Leu Leu Val Thr Phe Arg 115 120 Pro Phe Arg Ser Gly Glu Tyr Val Asp Leu Gly Gly Ile Ala Gly Thr 135 140 Val Leu Gln Val Gln Ile Phe Ser Thr Thr Leu Arg Thr Val Asp Gly

```
145
                150
Arg Ile Val Val Val Pro Asn Gly Lys Ile Ile Ala Gly Asn Ile Ile
          165
                    170
Asn Phe Ser Arg Glu Pro Val Arg Arg Asn Glu Leu Ile Ile Ser Val
    180 185 190
Ala Tyr Asp Ser Asp Ile Asp Gln Val Lys Ser Leu Ile Thr Asn Ile
    195 200 205
Ile Ala Ser Asp Asp Arg Ile Leu Lys Asp Arg Glu Gln Thr Val Arg
 210 215 220
Leu Asn Glu Leu Gly Ala Ser Ser Ile Asn Phe Val Val Arg Ile Trp
225 230 235
Ser Lys Ser Ser Asp Leu Gln Asn Val Tyr Trp Asp Val Leu Glu Arg
          245 250 255
Ile Lys Arg Asp Phe Asp Ala Asn Gly Ile Ser Phe Pro Tyr Pro Gln
              265 270
Met Asp Val Asn Val Lys Lys Val Lys Glu Ala Glu
<210> 9900
<211> 261
<212> PRT
<213> Enterobacter cloacae
<400> 9900
Ala Leu Leu Thr Gly His Ser Ser Gln His Gly Gly Met Thr Val Lys
Phe Lys Val Met Ala Leu Ala Ala Leu Val Ser Leu Gly Ala Val Ser
                           25
                                            30
Val Gln Ala Asn Glu Leu Pro Asn Gly Pro His Ile Val Thr Ser Gly
                                         4.5
 35
                        40
Thr Ala Ser Val Asp Ala Val Pro Asp Val Ala Thr Leu Ala Ile Glu
                    55
                                     60
Val Asn Val Ala Ala Lys Asp Ala Ala Ser Ala Lys Lys Gln Ala Asp
                 70
                                  75
Asp Arg Val Ala Gln Tyr Leu Ser Phe Leu Glu Gln Asn Gly Val Ala
                              90
Lys Lys Asp Ile Ser Ser Ala Asn Leu Arg Thr Gln Pro Asp Tyr Asp
                          105
          100
Tyr Gln Asn Gly Lys Ser Ile Leu Lys Gly Tyr Arg Ala Val Arg Thr
                        120
                                         125
       115
Val Glu Val Thr Val Arg Gln Leu Asp Lys Leu Asn Gly Leu Leu Asp
                    135
                                     140
Gly Ala Leu Lys Ala Gly Leu Asn Glu Ile Arg Ser Val Ser Leu Gly
                 150
                                 155
Val Ala Gln Pro Glu Lys Tyr Lys Asp Glu Ala Arg Lys Ala Ala Ile
                                                175
             165
                              170
Asp Asp Ala Ile His Gln Ala Gln Gln Leu Ala Ser Gly Phe Lys Ser
                           185
          180
                                            190
Lys Leu Gly Pro Val Tyr Ser Val Arg Tyr His Val Ser Asn Tyr Gln
                        200
                                         205
 195
Pro Ser Pro Met Val Arg Met Met Lys Ala Asp Ala Ala Pro Val Ser
 210
                                      220
                    215
Ala Gln Glu Thr Tyr Glu Gln Pro Thr Ile Gln Phe Asp Asp Gln Val
225 230 235 240
Asp Val Val Phe Gln Leu Glu Pro Thr Gln Thr Gln Gln Thr Glu Ala
                               250
Ala Lys Ala Gln
```

<210> 9901 <211> 128

<212> PRT <213> Enterobacter cloacae

<400> 9901 Arg Met Arg Met Ser Ile Gln Asn Glu Met Pro Gly Tyr Lys Asp Leu 10 Asn Gln Leu Leu Asn Gln Gln Gly Val Gly Leu Thr Pro Ala Glu Met 20 25 His Gly Leu Ile Ser Gly Ile Leu Cys Gly Gly Asn Ser Asp Ser Ser 45 40 Trp Gln Pro Leu Ile His Asp Leu Thr Asn Glu Arg Leu Ala Phe Gly 55 60 His Glu Leu Ala Glu Ala Leu Arg Lys Met His Ala Ala Thr Ser Asp 70 7.5 Ser Leu Glu Asp Asp Gly Phe Leu Phe Gln Leu Tyr Leu Pro Glu Gly 85 90 95 Asp Asp Val Ser Val Phe Asp Arg Ala Asp Ala Leu Ala Gly Trp Val 105 110 100 Asn His Tyr Leu Leu Gly Leu Gly Val Thr Gln Pro Lys Leu Glu

120

<210> 9902 <211> 200 <212> PRT

115

<213> Enterobacter cloacae

<400> 9902 Ser Ser Gly Thr Leu Ser Pro Arg Arg Trp Ala Ser Leu Thr Ala Ser 10 Ser Ala Arg Ser Arg Ser Ala Ile Ser Pro Ala Ser Thr Thr Arg Arg 25 20 Cys Thr Thr Cys Trp Pro Arg Ile Leu Thr Trp Trp Arg Cys Arg Ala 40 Ser Arg Pro Pro Ala Thr Pro Phe Arg Pro Arg Lys Cys Ala Val Tyr 60 50 55 Ser Arg His Ser Ser Phe Pro Gly Ser Gly Arg Leu Ser Arg Thr Pro 7.0 75 Pro Ser Arg Thr Ser Lys His Ile Ile Val Arg Val Arg Lys Ser His 90 85 Asn Tyr Gln Glu Phe Ile Met Asn Ile Val Arg Glu Ala Leu Ala Gly 110 105 100 Thr Gln Glu Ser Ser Asp Leu Met Val Lys Ile Ala Pro Ala His Gly 125 120 Glu Leu Glu Ile Val Ile His Ser Glu Val Ile Lys Gln Phe Gly Glu 135 140 130 Gln Ile Arg Gln Val Val Asn Asp Thr Leu Arg Ala Met Asn Val His 155 150 145 Gln Gly Leu Ile Ile Glu Asp Lys Gly Ala Leu Asp Cys Val Ile 170 165 Arg Ala Arg Leu Gln Ser Ala Leu Leu Arg Ala Ala Asn Glu Gln Ala 190 180 185 Ile Asn Trp Gly Ala Leu Lys 195

<210> 9903 <211> 556

<212> PRT <213> Enterobacter cloacae

<400> 9903 Leu Arg Arg Gln Lys Arg Ala Ser Val Thr Ala Trp Ala Trp Cys Arg

10 Ser Thr Ala Lys Trp Trp Met His Arg Leu Leu Thr Thr Arg Arg Trp 25 Cys Trp Ser Ala Arg Arg Pro Pro Ala Cys Val Gly Lys Asp Asp Ile 40 Met Asn Gln Thr Glu Leu Leu His Met Asn Phe Pro His Leu Arg Asp 55 60 Leu Lys Pro Phe Asp Thr Ala His Ser Ala Thr Pro Trp Leu Ala Asp 75 70 Ser Glu Ala Lys His Ser Arg Lys Leu Cys Ala Ser Ile Glu Glu Ala 85 90 Val Lys Arg Cys Gly Leu Gln Asp Gly Met Thr Ile Ser Phe His His 100 105 110 Ala Phe Arg Glu Gly Asp Arg Val Ile Asn Thr Val Val Ala Leu Leu 115 120 125 Ala Arg Met Gly Phe Lys Asn Leu Thr Leu Ala Ser Ser Ser Leu Met 140 130 135 Thr Cys Asn Asp Ala Leu Ile Glu His Ile Glu Ser Gly Val Ile Thr 150 155 160 Arg Ile Tyr Thr Ser Gly Met Arg Gly Arg Leu Ala Asp Ala Ile Ser 170 175 165 His Gly Leu Met Glu Glu Pro Val Gln Ile His Ser His Gly Gly Arg 185 190 180 Val Lys Leu Leu Gln Asp Gly Glu Leu Asn Ile Asp Val Ala Phe Leu 195 200 205 Gly Val Pro Cys Ser Asp Glu Phe Gly Asn Ala Asn Gly Thr His Gly 215 220 210 Lys Ser Cys Cys Gly Ser Leu Gly Tyr Ala Met Val Asp Ala Gln Phe 230 235 225 Ala Arg Lys Val Val Leu Leu Thr Glu Ala Leu Val Pro Phe Pro Asn 250 255 245 Met Pro Ala Ser Leu Val Gln Asp Gln Val Asp Tyr Ile Val Gln Val 265 Glu Ser Val Gly Asp Pro Ala Lys Ile Ser Val Gly Ala Ala Arg Val 280 Thr Ser Asn Pro Arg Glu Leu Met Ile Ala Arg Tyr Ala Ala Asp Val 295 300 Ile Glu His Ser Gly Tyr Phe Lys Pro Gly Phe Ser Met Gln Thr Gly 315 310 Ser Gly Ala Ala Ala Thr Ala Cys Thr Arg Phe Met Glu Glu Lys Met 330 335 Glu Arg Ser Gly Val Lys Ala Arg Phe Ala Leu Gly Gly Ile Thr Gly 345 340 Ser Leu Val Asp Leu His Glu Lys Gly Leu Ile Glu Lys Leu Leu Asp 360 365 Thr Gln Cys Phe Asp Gly Gln Ala Ala Ala Ser Leu Ala Arg Asn Pro 380 375 Asn His Val Glu Ile Ser Thr Asn Val Tyr Ala Asn Pro Gly Ser Lys 395 390 Ala Ala Ser Cys Asp Gln Leu Asp Val Val Ile Leu Ser Ala Leu Glu 415 405 410 Ile Asp Val Asp Phe Asn Val Asn Val Ile Thr Gly Ser Asp Gly Val 420 425 430 Met Arg Gly Ala Ser Gly Gly His Cys Asp Val Ala Ala Ala Ala Asn 435 440 445 Leu Thr Ile Val Val Ala Pro Leu Leu Arg Ser Arg Ile Pro Thr Val 455 Val Lys Arg Val Thr Thr Arg Leu Thr Pro Gly Glu Ser Ile Asp Val 470 475 Leu Val Thr Asp His Gly Ile Ala Val Asn Pro Ala Arg Pro Glu Ile 490

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Arg Glu Arg Leu Met Glu Ala Gly Met Lys Val Val Asp Ile Asn Ala
                     505
Leu Tyr Glu Arg Ala Ile Ser Leu Thr Gly Val Pro Lys Pro Ile Glu
    515
                        520
Phe Thr Asp Lys Ile Val Gly Val Ile Arg Tyr Arg Asp Gly Ser Val
 530 535
                                       540
Ile Asp Thr Val Arg Gln Val Lys Glu Glu Val
     550
<210> 9904
<211> 269
<212> PRT
<213> Enterobacter cloacae
<400> 9904
Ser Met Thr Gly Leu Leu Ala Thr Lys Pro Arg Pro Val Asp Val Pro
                              10
Ala Leu Ala Glu Ala Ala Leu Trp Gln Glu Leu Glu Leu Thr Pro Lys
                            25
Pro Gly Leu Val Asp Arg Leu Asn Asn Gly Ser His Arg Asp Met Asp
                       40
                                         4.5
His Ala Leu Phe Val Arg Ser Ile Met Ala Ile Thr Pro Trp Phe Ala
                    55
Arg Phe Ala Glu Leu Gly Glu Ala His Ala Ala Lys Pro Ala Asp Arg
                 7.0
                                 75
Gln Leu Arg Ile Leu Arg Pro Met Gly Met Ala Cys Glu Gln Ala Met
              85
Tyr Ala Ala Thr Gly Gly Val Asn Thr His Lys Gly Gly Ile Phe Ala
                         105 110
          100
Leu Gly Leu Leu Cys Phe Ala Ala Gly Arg Val Lys Asn Ile Ser Ala
       115
                        120
Asp Ser Leu Cys Cys Glu Val Ser His Ile Cys Arg Gly Leu Val Ala
        135
                                       140
Arg Glu Leu Ala Gly Arg Ser Gly Gln Ala Thr Ala Gly Glu Arg Gln
                                 155
                  150
145
Phe Gln His Tyr Gly Leu Thr Gly Ala Arg Gly Glu Ala Glu Ser Gly
              165 170
Phe Ala Thr Val Arg Lys Ala Leu Gly Gln Trp Asn Gly Gln Leu Leu
                            185
           180
His Asp Leu Leu Leu Arg Leu Met Ala Val Asn Gln Asp Ser Asn Leu
                        200
                                          205
       195
Val Ser Arg Gly Gly Ile Gln Gly Leu Arg Tyr Val Gln Gly Tyr Ala
                                       220
                     215
  210
Arg Glu Leu Leu Ala Asn Cys Trp Asp Arg Glu Ala Leu Leu Lys Met
                                   235
                  230
Asp Lys Ala Leu Ile Glu Arg Asn Leu Ser Pro Gly Gly Ser Ala Asp
                                250
Leu Leu Ser Val Gly Trp Val Leu Ser Ala Ile Lys
           260
<210> 9905
<211> 328
<212> PRT
<213> Enterobacter cloacae
<400> 9905
Ser Met Asp Val Glu Glu Ile Val Ala Leu Ser Val Lys His Asn Val
                                10
Ser Asp Leu His Leu Cys Ser Asp Ser Pro Pro Arg Trp Arg Arg Ser
                             25
Gly Arg Leu Glu Pro Ala Pro Phe Pro Pro Pro Asp Val Glu Ala Leu
```

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4.0
Leu Lys Ala Trp Leu Asn Asp Glu Gln Gln Gly Ala Trp Trp Ala Asn
          55
Gly Gln Val Asp Phe Ala Val Thr Leu Ala Asp Arg Gln Arg Leu Arg
  70
                   75
Gly Ser Ala Phe Lys His Met His Gly Val Ser Ile Ala Leu Arg Leu
          85
                            90
Leu Pro Leu Thr Cys Pro Gln Leu Ser Ala Leu Gly Val Pro Arg Ala
         100 105
Ile Pro Glu Leu Leu Ser Asn Asp Asn Gly Leu Ile Leu Val Thr Gly
 115 120 125
Ala Thr Gly Ser Gly Lys Ser Thr Thr Leu Ala Ala Met Val Asp Phe
                  135
                       140
Leu Asn His Gln Thr Asp Glv His Ile Leu Thr Leu Glu Asp Pro Val
               150 155
Glu Phe Met Tyr Gln Ser Glu Arg Cys Leu Ile Gln Gln Arg Glu Ile
             165 170
Gly Leu His Ser Pro Ser Phe Ala Glu Ala Leu Arg Ser Ala Leu Arg
      180
                         185
                             190
Glu Asp Pro Asp Val Ile Leu Leu Gly Glu Leu Arg Asp Ser Glu Thr
 195
                      200
                                      205
Ile Arg Leu Ala Leu Thr Ala Ala Glu Thr Glv His Leu Val Leu Ala
                   215
Thr Leu His Thr Arg Gly Ala Ala Gln Ala Ile Glu Arg Leu Val Asp
               230 235
Thr Phe Pro Ala Gln Glu Lys Asp Pro Val Arg Asn Gln Leu Ala Gly
                250 255
            245
Ser Leu Arg Ala Val Leu Ala Gln Lys Leu Arg Gln Asp Val Gln Gly
        260
                         265
Gly Arg Val Ala Leu Tyr Glu Leu Leu Val Asn Thr Ser Ala Ala Ala
                      280
Asn Leu Ile Arg Glu Gly Lys Thr Trp Gln Leu Pro Gly Ile Ile Gln
                   295
                                  300
Thr Gly Gln Gln Ala Gly Met Gln Asn Phe Glu Gln Ser Leu Ala Glu
             310
                                315
Arg Arg Ala Gln Gly Arg Leu
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<210> 9906 <211> 81

<212> PRT

<213> Enterobacter cloacae

325

<400> 9906

<210> 9907 <211> 73

<212> PRT

<213> Enterobacter cloacae

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<400> 9907
Thr Arg Ala Leu Leu Ile Gln Glu Phe Ser Arg Gly Phe Ala Glu
                               1.0
Pro Cys His Thr Glu Phe Gly Tyr Val Phe Tyr Asn Asp Met Asn Lys
          20
                           25
Lys Pro Val Ala Arg Ser Gly Phe Gln His Thr Leu Leu Gly Asn Gly
                       40
                             45
Ala Val Asn Gly Leu Leu Ser Pro Tyr Asn Ala Ala Ile Val Val Asn
 50 55
                             60
Cys Phe Thr Leu Asn Thr Lys Ser
<210> 9908
<211> 409
<212> PRT
<213> Enterobacter cloacae
<400> 9908
Pro Arg His Ala Pro Ser Ala Glu Lys Ala Gly Gly Met Thr Ser
                               10
Arg Ile Val Ile Ile Gly Gly Gly Gln Ser Gly Gly Trp Ala Ala Lys
   20
                           25
Thr Leu Arg Asp Glu Gly Phe Asp Gly Glu Ile Cys Val Val Ala Glu
                     4.0
                             45
Glu Glu Trp Asp Phe Tyr Glu Arg Pro Pro Leu Ser Lys Ala Ser Leu
                  55
Leu Glu Pro Asp Ala Ala Leu Pro Arg Leu Phe Thr Asp Glu Val Gln
              70
                    75
Gln Ala Leu Asn Leu Thr Trp Tyr Arg Pro Leu Arg Ala Glu Ser Val
             85
                              90
Asp Arg Val Glu Lys Lys Val Leu Leu Ser Asn Gly Glu Gln Leu Ser
        100
                         105 110
Tyr Asn Ile Leu Leu Ile Ala Thr Gly Gly Arg Ala Arg Leu Pro Ser
     115
                       120
Gln Ala Trp Ala Ser His Pro Gln Val Tyr Thr Leu Arg His Trp Gln
                    135
                                      140
Asp Ala Gln Arg Leu Lys Ser Arg Leu Ser Glu Ser His Lys Leu Ala
    150 . 155
Ile Ile Gly Gly Gly Trp Ile Gly Leu Glu Ile Ala Ala Ser Ala Arg
             165 170
Lys Ser Gly Val Ala Val Thr Leu Phe Glu Gln Gln Pro Ala Leu Cys
          180
                           185 190
Met Arg Ser Val Ser Gly Glu Val Ser Gln Arg Leu Glu Ala Ile His
      195
                        200
                                        205
Arg Glu Gln Gly Val Glu Ile Arg Thr Gly Cys Gly Ala Leu Glu Leu
                    215
                                      220
Glu Asp Asp Gly Gly Leu Pro Val Val His Cys Asp Gly Asn Arg Glu
225
                 230
                                  235
Thr Phe Asp Ala Val Val Gly Ile Gly Val Asp Leu Asn Leu Glu
             245
                              250
Leu Ala Arg Asp Ala Gly Leu Lys Thr Gly Arg Gly Ile Val Val Asp
          260
                           265
                                          270
Ala Gln Gly Arg Thr Ser Asp Pro Phe Ile Phe Ala Ala Gly Asp Val
      275
                       280
Ala Gln His His Tyr Gly Leu Cys Ile Gln Ser Trp Ala Phe Ala
                   295
                                     300
Gln Asn Gln Ala Val Ala Thr Ala Lys Ala Met Leu Asn Pro Asp Ala
305
                 310
                                 315
Pro Gly Tyr Asp Asp Ala Pro Trp Leu Trp Ser Asp Gln Tyr Gln His
```

330

```
Asn Ile Gln Ile Leu Gly Ile Pro Gln Ala Gly Cys Arg Thr Ile Leu
         340
                     345
Arg Glu Glu Ala Leu Tyr Phe Ser Leu Asp Asp Asn Gly Arg Leu Thr
   355
                360
                                     365
Gln Leu Val Ala Phe Asn Asp Ala Arg Thr Val Lys Leu Ala Lys Arg
       375 380
Trp Met Ala Ala Gly Arg Asp Leu Ser Asp Val Pro Leu Ala Asp Pro
                    395
385 390
Thr Phe Ser Leu Met Ser Leu Arg
           405
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<210> 9909 <211> 329 <212> PRT <213> Enterobacter cloacae

<400> 9909 Ser Val Ile Pro Ala Val Leu Lys Ser Gly Ala Ala Ser Arg Met Pro 10 Ser Pro Ser Arg Ser Trp Phe Arg Val Trp Arg Cys Ala Thr Ala Cys 25 Arg Leu Ser Pro Phe Arg Arg Pro Gly Thr Pro Ala Ile Ser Ile Thr 40 Thr Arg Phe Ser Thr Asn Ser Phe Tyr Ala Leu Thr Lys Arg Cys Ala 5.5 - 60 Met Asn Ala Gln Ile Asp Gly Arg Val Ala Val Val Thr Gly Gly Ser 70 75 Ser Gly Ile Gly Phe Glu Thr Leu Arg Leu Leu Gly Glu Gly Ala 90 95 Lys Val Ala Phe Cys Gly Arg Asp Glu Asp Arg Leu Ala Ser Ala His 100 105 110 Ala Thr Leu Gln Asn Glu Phe Pro His Gly Glu Ile Phe Ala Phe Arg 120 125 Cys Asp Val Leu Asn Ala Asp Glu Val Gln Ala Phe Ala Asp Ala Val 135 140 Gln Ala Arg Phe Gly Ala Ala Asp Met Leu Ile Asn Asn Ala Gly Gln 150 155 Gly Tyr Val Ala His Phe His Asp Thr Pro Arg Glu Ala Trp Leu His 165 170 Glu Ala Glu Leu Lys Leu Phe Gly Val Ile Asn Pro Val Gln Ala Phe 180 185 190 Gln Pro Leu Leu Glu Arg Ser Asp Ile Ala Ser Ile Thr Cys Val Asn 200 205 Ser Leu Leu Ala Leu Gln Pro Glu Glu His Met Ile Ala Thr Ser Ala 215 220 Ala Arg Ala Ala Leu Leu Asn Met Thr Leu Thr Leu Ser Lys Glu Leu 225 230 235 Val Gly Lys Gly Ile Arg Val Asn Ser Ile Leu Leu Gly Met Val Glu 245 250 Ser Gly Gln Trp Gln Arg Arg Phe Glu Ser Arg Ala Asp Lys Ser Gln 260 265 270 Ser Trp Pro Glu Trp Thr Ala Glu Ile Ala Arg Lys Arg Gly Ile Pro 280 285 Met Ala Arg Leu Gly Lys Pro Gln Glu Pro Ala Gln Ala Leu Leu Phe 295 300 Leu Ala Ser Pro Leu Ala Ser Phe Thr Thr Gly Ala Ala Leu Asp Val 310 315 Ser Gly Gly Phe Cys Arg His Leu 325

<210> 9910

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<211> 260
<212> PRT
<213> Enterobacter cloacae
<400> 9910
Gly His Ile Met Lys Lys Val Met Leu Ile Gly Leu Gly Ala Met Ala
                                 10
Gln Ala Val Ile Glu Arg Leu Pro Ala Gly Val Ala Ile Gly Trp Ile
         20
                            25
                                                30
Val Ala Arg Ala Ser His His Pro Ala Ile His Asp Gln Phe Gly Asp
       35
                        40
                                            4.5
Ala Val Glu Ala Leu Thr Ser Pro Met Ala Cys Ala Gln Thr Pro Asp
                     55
Leu Val Leu Glu Cys Ala Ser Gln Glu Ala Val Ala Gln Tyr Gly Glu
                7.0
                                     75
Glu Ile Leu Arg Arg Gly Trp His Leu Ala Ile Ile Ser Thr Gly Ala
                         90
              85
Leu Ala Asp Ser Ala Leu Glu Gln Arg Leu Leu Ala Ala Gly Gly Lys
          100
                             105
Leu Thr Leu Leu Ser Gly Ala Val Ala Gly Ile Asp Gly Leu Ala Ala
       115
                          120
Ala Lys Glu Gly Gly Leu Glu Arg Val Thr Tyr Gln Ser Arg Lys Ser
 130 135
                                        140
Pro Ala Ser Trp Arg Gly Ser Tyr Ala Glu Gln Leu Ile Asp Leu Asn
    150 155
Ala Val Ser Glu Ala Lys Val Phe Phe Glu Gly Ser Ala Arg Glu Ala
              165 170
Ala Arg Leu Phe Pro Ala Asn Ala Asn Val Ala Ala Thr Val Ala Leu
                             185
                                                190
Gly Gly Val Gly Met Glu Asp Thr Arg Val Gln Leu Met Val Asp Pro
                         200
                                            205
Ala Thr Lys Arg Asn Thr His Thr Leu His Val Glu Gly Leu Phe Gly
   210
                      215
                                        220
Glu Phe His Leu Glu Leu Ser Gly Leu Pro Leu Ala Ser Asn Pro Lys
                  230
                                     235
Thr Ser Thr Leu Ala Ala Leu Ser Ala Val Arg Ala Cys Arg Glu Leu
              245
                                 250
                                                    255
Ala Leu Ser
<210> 9911
<211> 493
<212> PRT
<213> Enterobacter cloacae
<400> 9911
Gly Val Thr Met Asp Asp Leu Lys Ile Phe Ile Gly Gly Gln Trp Arg
Arg Gly Gly Gly Asn Pro Met Gln Ser His Phe Pro Ala Asp Gly Ser
          20
                             25
Leu Asn Ala Thr Leu Asn Ala Ala Ser Leu Asp Asp Leu Glu Glu Ala
       35
Val Ala Ala Gly Glu Arg Ala Trp Arg Asp Pro Ala Trp Arg Asn Ser
                      55
Leu Pro His Met Arg Ala Lys Ile Leu His Lys Val Ala Asp Leu Ile
                  70
                                     75
Glu Ser Arg Val Asp Ala Leu Ala Gln Met Gln Ser Arg Asp Asn Gly
              85
                                 90
```

Lys Pro Leu Ala Glu Ala Arg Gly Leu Val Met Ser Ala Ala Gly Thr

105 Ala Arg Tyr Phe Ala Ala Ala Cys Glu Leu Leu Glu Gly Glu Leu Pro

```
120
Thr Pro Arg Gln Pro Asp Leu Leu Thr Leu Ser Cys Tyr Glu Pro Leu
            135
                        140
Gly Val Val Ala Ala Ile Thr Pro Trp Asn Ser Pro Ile Ala Ser Glu
                    155
            150
Met Gln Lys Val Ala Pro Ala Ile Ala Ala Gly Asn Ala Val Ile Leu
           165
                170 175
Lys Pro Ala Glu Ala Thr Pro Leu Met Ala Leu Glu Leu Ala Arq Ile
             185 190
        180
Phe Lys Gln Ala Gly Leu Pro Ala Gly Leu Leu Ser Val Leu Pro Gly
    195
          200 205
Lys Gly Ser Val Ile Gly Asp Ala Leu Ala Arg His Pro Arg Val Arg
  210 215 220
Lys Ile Ser Phe Thr Gly Gly Thr Thr Thr Gly Arg His Leu Ala His
225 230 235
Val Ala Ala Glu Lys Leu Ile Pro Ala Ser Leu Glu Leu Gly Gly Lys
        245 250 255
Ser Pro Thr Ile Val Leu Glu Asp Ala Asp Ile Glu Gln Ala Ala Arg
   260 265 270
Gly Ile Cys Tyr Gly Ile Phe Ser Ser Ala Gly Gln Ala Cys Ile Ala
   275 280 285
Gly Ser Arg Leu Phe Ile His Glu Ser Ile Tyr Ala Pro Leu Met Ala
290 295
                                300
Arg Leu Leu Glu Leu Thr Arg Gly Leu Arg Val Gly His Pro Phe Thr
305 310 315 320
Asp Gly Val His Val Gly Pro Leu Ile Asn Glu Lys His Arg Gln Ser
           325
                         330
Val Ile Gln Tyr Val Glu Leu Ala Lys Arg Glu Gly Gly Arg Val Leu
        340 345
                                     350
Cys Gly Glu Ile Pro Ala Asp Pro Ala Leu Val Asn Gly Ser Phe
                    360 365
Phe Leu Pro Thr Ile Ile Glu Gly Leu Ser Asn Ser Ala Arg Ala Cys
 370 375
                                380
Gln Glu Glu Ile Phe Gly Pro Val Leu Val Ala Met Pro Phe Gly Asp
385 390
                             395
Glu Ala Thr Leu Ile His Glu Ala Asn Asp Ser Val Tyr Gly Leu Ala
           405
                          410
Ala Gly Ile Trp Thr Arg Asp Thr Gly Arg Ala Leu Arg Leu Ser Glu
        420
                     425
Gln Leu Glu Ala Gly Thr Val Trp Ile Asn Thr Tyr Lys Val Phe Ala
                    440
                                  445
Ile Ser Thr Pro Phe Gly Gly Phe Lys Glu Ser Gly Leu Gly Arg Glu
                455
                                460
Lys Gly Ile Gln Gly Leu Lys Ala Trp Met Gln Gln Lys Ser Ile Tyr
465 470
                            475
Leu Ala Thr Gly Asn Ser Val Asn His Trp Cys Asp
           485
                          490
<210> 9912
```

<211> 728

<212> PRT

<213> Enterobacter cloacae

<400> 9912

Gly Ile Ser Thr Gly Ala Gly Glu Gln Ile Ala Gln His Ala Ser Met 10 Ile Gln Arg Phe Leu Lys Gln Gln Lys Asn Ala Pro Cys Thr Cys Pro 25 Ala Ala Trp Val Thr Leu Leu Ala Leu Phe Ser Gly Val Ala Gln Asn 4.0

Ala Leu Ser Ser Arg Ala Trp Pro Leu Thr Val Arg Ser Gly Val Lys

55 Met Ser Ser Arg Lys Glu Leu Ala Asn Ala Ile Arg Ala Leu Ser Met 75 Asp Ala Val Gln Lys Ala Lys Ser Gly His Pro Gly Ala Pro Met Gly 8.5 90 Met Ala Asp Ile Ala Glu Val Leu Trp Arg Asp Phe Leu Asn His Asn 100 105 110 Pro Gln Asn Pro Ala Trp Ala Asp Arg Asp Arg Phe Val Leu Ser Asn 115 120 125 Gly His Gly Ser Met Leu Ile Tyr Ser Leu Leu His Leu Thr Gly Tyr 135 140 Asp Leu Pro Ile Glu Glu Leu Lys Asn Phe Arg Gln Leu His Ser Lys 145 150 155 160 Thr Pro Gly His Pro Glu Val Gly Tyr Thr Ala Gly Val Glu Thr Thr 165 170 175 Thr Gly Pro Leu Gly Gln Gly Ile Ala Asn Ala Val Gly Met Ala Ile 180 185 190 Ala Glu Lys Thr Leu Ala Ala Gln Phe Asn Arg Pro Gly His Asp Ile 195 200 205 Val Asp His Phe Thr Tyr Ala Phe Leu Gly Asp Gly Cys Met Met Glu 210 215 220 Gly Ile Ser His Glu Val Cys Ser Leu Ala Gly Thr Leu Lys Leu Gly 225 230 235 Lys Leu Val Ala Phe Tyr Asp Asp Asn Gly Ile Ser Ile Asp Gly His 245 250 255 Val Glu Gly Trp Phe Thr Asp Asp Thr Ala Ala Arg Phe Glu Ala Tyr 260 265 Gly Trp His Val Val Arg Gly Val Asp Gly His Asp Ala Asp Ser Ile 275 280 285 Lys Arg Ala Val Glu Glu Ala Arg Ala Val Thr Asp Lys Pro Ser Leu 290 295 300 Leu Met Cys Lys Thr Ile Ile Gly Phe Gly Ser Pro Asn Lys Ala Gly 305 310 315 Thr His Asp Ser His Gly Ala Pro Leu Gly Asp Ala Glu Ile Ala Leu 325 330 Thr Arg Glu Ala Leu Gly Trp Lys His Pro Ala Phe Glu Ile Pro Ser 340 345 350 Glu Ile Tyr Ala Gln Trp Asp Ala Lys Glu Val Gly Gln Ala Lys Glu 355 360 365 Ala Ala Trp Asn Glu Lys Phe Ala Ala Tyr Ala Lys Ala Phe Pro Gln 370 375 380 Glu Ala Ala Glu Phe Thr Arg Arg Met Lys Gly Asp Met Pro Ser Asp 390 395 Phe Asp Ala Lys Ala Asn Glu Phe Ile Ala Lys Leu Gln Ala Asn Pro 405 410 Ala Lys Ile Ala Ser Arg Lys Ala Ser Gln Asn Ala Ile Glu Ala Phe 420 425 Gly Pro Leu Pro Glu Phe Leu Gly Gly Ser Ala Asp Leu Ala Pro 435 440 Ser Asn Leu Thr Leu Trp Ser Gly Ser Lys Pro Ile Asn Glu Asp Thr 455 Ala Gly Asn Tyr Ile His Tyr Gly Val Arg Glu Phe Gly Met Thr Ala 465 470 475 Ile Ala Asn Gly Ile Ala Leu His Gly Gly Phe Leu Pro Tyr Thr Ser 490 485 495 Thr Phe Leu Met Phe Val Glu Tyr Ala Arg Asn Ala Val Arg Met Ala 500 505 Ala Leu Met Lys Gln Arg Gln Val Met Val Tyr Thr His Asp Ser Ile 520 Gly Leu Gly Glu Asp Gly Pro Thr His Gln Pro Val Glu Gln Val Ala 535

```
Ser Leu Arg Val Thr Pro Asn Met Ser Thr Trp Arg Pro Cys Asp Gln
        550
                            555
Val Glu Ser Ala Val Ala Trp Lys Tyr Gly Val Glu Arg Gln Asp Gly
          565 570
Pro Thr Ala Leu Ile Leu Ser Arg Gln Asn Leu Ala Gln Gln Glu Arg
        580 585 590
Thr Pro Glu Gln Leu Ala Asn Ile Ala Arg Gly Gly Tyr Val Leu Lys
     595 600 605
Asp Cys Ala Gly Gln Pro Glu Leu Ile Phe Ile Ala Thr Gly Ser Glu
  610 615 620
Val Glu Leu Ala Val Ala Ala Trp Glu Lys Leu Thr Ala Glu Gly Val
625 630 635
Lys Ala Arg Val Val Ser Met Pro Ser Thr Asp Ala Phe Asp Lys Gln
           645 650 655
Asp Ala Ala Tyr Arg Glu Ser Val Leu Pro Lys Ala Val Ser Ala Arg
      660 665 670
Val Ala Val Glu Ala Gly Ile Ala Asp Tyr Trp Phe Lys Tyr Val Gly
 675 680 685
Leu Asn Gly Ala Ile Val Gly Met Thr Thr Phe Gly Glu Ser Ala Pro
690 695 700
Ala Glu Gln Leu Phe Glu Glu Phe Gly Phe Thr Val Glu Asn Val Val
705 710
                       715
Ala Lys Ala Lys Glu Leu Leu
<210> 9913
<211> 236
<212> PRT
<213> Enterobacter cloacae
<400> 9913
Tyr Tyr Pro Phe Pro Leu Met Thr Phe Pro Gln Tyr Ser Leu Pro Pro
                 10 15
Gly Gln Leu Cys Glu Asn Tyr Val Met Leu Ser Tyr Tyr Phe Gln Gly
         20
                   25
Leu Val Leu Gly Ala Ala Met Ile Leu Pro Leu Gly Pro Gln Asn Ala
                   4 0
Phe Val Met Asn Gln Gly Ile Arg Arg Gln Tyr His Leu Met Ile Ala
                 55
Leu Leu Cys Ala Val Ser Asp Leu Leu Leu Ile Cys Ala Gly Ile Phe
            70 75 "
Gly Gly Ser Ala Leu Leu Met Gln Ser Pro Trp Leu Leu Ala Leu Val
           85
                        90 95
Thr Trp Gly Gly Val Ala Phe Leu Leu Trp Tyr Gly Phe Gly Ala Leu
         100
                      105
                                    110
Lys Thr Ala Met Ser Ser Asn Leu Glu Leu Ala Ser Ala Glu Val Met
      115 120
Lys Gln Gly Arg Trp Lys Ile Ile Val Thr Met Leu Ala Val Thr Trp
  130
                 135
                                 140
Leu Asn Pro His Val Tyr Leu Asp Thr Phe Val Val Leu Gly Ser Leu
145
    150 155
Gly Gly Gln Leu Asp Val Glu Pro Lys Arg Trp Phe Ala Leu Gly Thr
           165
                          170
Val Ser Ala Ser Phe Leu Trp Phe Phe Gly Leu Ala Ile Leu Ala Ala
        180 185
Trp Leu Ala Pro Arg Leu Arg Thr Ala Lys Ala Gln Arg Ile Ile Asn
    195
                    200
                                    205
```

Thr Leu Val Gly Leu Val Met Trp Phe Ile Ala Phe Gln Leu Ala Lys 210 220 220 Glu Asp Ile His His Val Gln Gly Leu Phe Asn 225 230 235

```
<210> 9914
<211> 232
<212> PRT
<213> Enterobacter cloacae
<400> 9914
Cys Ala Leu Ser Phe His Thr Thr Gly Lys Thr Ile Met Thr Gln Asp
            5
Glu Leu Lys Lys Ala Val Gly Trp Ala Ala Leu Gln Tyr Val Gln Pro
         20
                           25
                                                3.0
Gly Thr Ile Val Gly Val Gly Thr Gly Ser Thr Ala Ala His Phe Ile
      35
                          4.0
                                            45
Asp Ala Leu Gly Thr Met Lys Gly Gln Ile Glu Gly Ala Val Ser Ser
                      55
Ser Asp Ala Ser Thr Glu Lys Leu Lys Ser Leu Gly Ile Thr Val Phe
                  70
                               75
Asp Leu Asn Glu Val Asp Arg Leu Gly Ile Tyr Val Asp Gly Ala Asp
            85
Glu Ile Asn Gly His Met Gln Met Ile Lys Gly Gly Gly Ala Ala Leu
          100
                             105
Thr Arg Glu Lys Ile Ile Ala Ser Val Ala Asp Lys Phe Ile Cys Ile
                          120
                                             125
Ala Asp Ala Ser Lys Gln Val Asp Ile Leu Gly Asn Phe Pro Leu Pro
            135
                                         140
Val Glu Val Ile Pro Met Ala Arg Ser Ala Val Ala Arg Gln Leu Val
                  150
                                     155
Lys Leu Gly Gly Arg Pro Glu Tyr Arg Gln Gly Val Val Thr Asp Asn
               165
                                 170
Gly Asn Val Ile Leu Asp Val His Gly Leu Glu Ile Leu Asp Ala Ile
           180
                              185
                                               190
Ala Leu Glu Asn Ala Ile Asn Gly Ile Pro Gly Val Val Thr Val Gly
     195 200
Leu Phe Ala Asn Arg Gly Ala Asp Val Ala Leu Ile Gly Thr Ala Asp
                      215
Gly Val Lys Thr Ile Val Lys
225
<210> 9915
<211> 411
<212> PRT
<213> Enterobacter cloacae
<400> 9915
Met Ala Lys Val Ser Leu Glu Lys Asp Lys Ile Lys Phe Leu Leu Val
                                 10
Glu Gly Val His Gln Lys Ala Leu Asp Ser Leu Arg Ala Ala Gly Tyr
          20
                              25
Thr Asn Ile Glu Phe His Lys Gly Ala Leu Asp Thr Glu Glu Leu Lys
       35
                          40
Ala Ser Ile Arg Asp Ala His Phe Ile Gly Leu Arg Ser Arg Thr Gln
   50
Leu Thr Glu Asp Val Ile Ala Ala Ala Glu Lys Leu Val Ala Ile Gly
                  70
                                     75
Cys Phe Cys Ile Gly Thr Asn Gln Val Asp Leu Asn Ala Ala Ala Lys
              85
                                  90
Arg Gly Ile Pro Val Phe Asn Ala Pro Phe Ser Asn Thr Arg Ser Val
                             105
           100
                                                110
Ala Glu Leu Val Ile Gly Glu Leu Leu Leu Leu Leu Arg Gly Ile Pro
                          120
```

Glu Ala Asn Ala Lys Ala His Arg Gly Val Trp Asn Lys Leu Ala Ala

```
135
                               140
Gly Ser Tyr Glu Ala Arg Gly Lys Lys Leu Gly Ile Ile Gly Tyr Gly 145 $150$
His Ile Gly Thr Gln Leu Gly Ile Leu Ala Glu Ser Leu Gly Met His
         165 170 175
Val Phe Phe Tyr Asp Ile Glu Ser Lys Leu Pro Leu Gly Asn Ala Thr
      180 185 190
Gln Val Gln His Leu Ser Asp Leu Leu Asn Met Ser Asp Val Val Ser
 195 200 205
Leu His Val Pro Glu Asn Ala Ser Thr Lys Asn Met Met Gly Ala Glu
210 215 220
Glu Leu Ala Leu Met Lys Pro Gly Ser Leu Leu Ile Asn Ala Ala Arg
225 230 235
Gly Thr Val Val Asp Ile Pro Ala Leu Cys Asp Ala Leu Lys Arg Lys $245$
His Leu Ala Gly Ala Ala Ile Asp Val Phe Pro Thr Glu Pro Ala Thr
            265 270
Asn Ser Asp Pro Phe Thr Ser Pro Leu Cys Glu Phe Asp Asn Val Ile
   275 280 285
Leu Thr Pro His Ile Gly Gly Ser Thr Gln Glu Ala Gln Glu Asn Ile
290 295
                                300
Gly Leu Glu Val Ala Gly Lys Leu Ser Lys Tyr Ser Asp Asn Gly Ser
305 310 315
Thr Leu Ser Ala Val Asn Phe Pro Glu Val Ser Leu Pro Leu His Gly
   325 330 335
Gly Arg Arg Leu Leu His Ile His Glu Asn Arg Pro Gly Val Leu Thr
 340
                       345 350
Ala Ile Asn Gln Ile Phe Ala Glu Gln Gly Val Asn Ile Ala Ala Gln
355
                    360
                        365
Tyr Leu Gln Thr Asn Ser Gln Met Gly Tyr Val Val Ile Asp Ile Glu
370 375
                                380
Ala Asp Glu Asp Ile Ala Glu Lys Ala Leu Gln Ser Met Lys Ala Ile
385 390
                  395
Pro Gly Thr Ile Arg Ala Arg Leu Leu Tyr
```

<210> 9916 <211> 374 <212> PRT

<213> Enterobacter cloacae

405

<400> 9916 Phe Pro Gly Arg Glu His Ile Ser Ser Cys Arg Trp Leu Ile Thr Gln 10 Thr Ser Arg Met His Lys Lys Asp Asn His Ile Arg Gly Gln Ser Arg 25 Phe Cys Pro His Lys Arg Leu Asn Asn Ala Phe Met Leu His Ala Ser 35 40 Thr Ser Pro Phe Tyr Pro Leu Phe Ala Ala Leu Asp Val Asn Ala Lys 55 Ile His Glu Gly Glu Ser Gly Arg Arg Leu Trp Ala Glu Cys Val Glu 70 75 Leu Gly Ile Glu Ala Arg Lys Ala Ile Ile Ala Asn Cys His Met Ile 85 Lys Pro Phe Ile Pro Pro Val Val Ala Gly Arg Pro Trp Gln Asp His 105 110 Pro Thr Gln Ala Ile Ala Ser Glu Arg Arg Phe Phe Ser Phe Glu Pro 120 125 Gly Ala Lys Trp His Gly Phe Glu Gly Tyr Ala Arg Glu Gln Tyr Phe 135 140 Val Asp Pro Cys Lys Leu Leu Thr Thr Pro Gly Ile Asp Ala Glu

```
150
Thr Gly His Tyr Thr Asp Phe Gly Ile Pro Ala Thr Ile Leu Ala His
           165
                       170 175
Tyr Leu Arg Glu Asn Gly Ile Val Pro Glu Lys Cys Asp Leu Asn Ser
        180
            185 190
Ile Leu Phe Leu Leu Thr Pro Ala Glu Ser Ala Glu Lys Leu Met Gln
     195 200 205
Leu Val Ala Met Leu Gly Gln Phe Glu Gln His Ile Glu Asp Asp Thr
 210 215 220
Pro Leu Ala Asp Val Leu Pro Thr Ile Tyr Gln Lys Tyr Pro Val Arg
225 230 235
Tyr Arg Asp Tyr Thr Ile Arg Gln Leu Cys Gln Glu Met His Asp Leu
        245 250 255
Tyr Val Ser Phe Asn Val Lys Asp Leu Gln Lys Ala Met Phe Arg Gln
      260 265 270
Glu Ser Leu Pro Ala Val Val Met Asn Pro Gln Asp Ala Asn Gln Glu
 275 280 285
Tyr Ile Arg Gly Asn Val Glu Leu Val Arg Ile Arg Asp Ala Glu Gly
290 295 300
Arg Ile Ala Ala Glu Gly Ala Leu Pro Tyr Pro Pro Gly Val Leu Cys
305 310 315 320
Val Val Pro Gly Glu Val Trp Gly Gly Ala Val Gln Arg Tyr Phe Leu
           325 330 335
Ala Leu Glu Glu Gly Ile Asn Met Leu Pro Gly Phe Ser Pro Glu Leu
 340 345 350
Gln Gly Val Tyr Ser Glu Lys Asp Ala Asp Gly Ile Lys Arg Leu Tyr
355
                    360
Gly Tyr Val Leu Lys
```

370 <210> 9917 <211> 308 <212> PRT

<213> Enterobacter cloacae

<400> 9917 Arg Leu His Leu Ser Ala Asp Ser Gly Gln Leu Pro Arg Leu Ser Phe 1.0 Gln Glu Arg Thr Met Lys Leu Ala Ser Phe Leu Tyr Gln Gly Lys Arg Ser Tyr Gly Ile Val Gln Ala Asp Gly Val Ile Asp Leu Gly Arg Arg 40 Leu Gly Asp Arg Tyr Gly Asp Leu Lys Ala Leu Leu Gln Gly Asn Gly 55 Leu Ala Gln Ala Thr Arg Phe Leu Asn Asp Ala Val Asp Val Pro Leu 70 Asn Ala Ile Thr Phe Leu Pro Val Ile Val Gln Pro Glu Lys Ile Leu 85 90 95 Cys Val Gly Met Asn Tyr Ala Asp Lys Arg Lys Glu Phe Asp Gln His 100 105 110 Asn Pro Ala Pro Thr Leu Phe Val Arg Phe Pro Asp Ser Gln Thr Gly 115 120 His Asn Glu Pro Val Leu Lys Pro Arg His Ser Ser Glu Phe Asp Tyr 135 Glu Gly Glu Leu Ala Val Ile Ile Gly Lys Gly Gly Glu Asn Ile Ser 150 155 Arg Asp Asp Ala Leu Arg His Val Ala Gly Tyr Ser Cys Tyr Met Asp 165 170 175 Gly Ser Ala Arg Asp Trp Gln His Thr Trp Phe Thr Ala Gly Lys Asn 185

Trp Arg Gln Thr Gly Ala Phe Gly Pro Trp Met Ala Thr Ala Asp Glu

```
5438
                         200
                                          205
Ile Pro Asp Pro His Gln Leu Ala Ile Arg Thr Trp Leu Asn Gly Arg
   210
              215
                               220
Met Val Gln Glu Asp Asn Thr Ser Ser Met Ile His Lys Val Ala Glu
             230
                            235
Leu Ile Glu Tyr Ile Ser Thr Phe Thr Arg Leu Ser Pro Gly Asp Val
            245 250 255
Ile Ile Thr Gly Ser Pro Gly Gly Val Gly Lys Lys Arg Asn Pro Pro
        260
              265 270
Leu Phe Met Lys Glu Gly Asp Arg Ile Glu Val Glu Ile Glu His Ile
    275 280 285
Gly His Leu Ser Asn Val Ile Val Glu Ala Pro Ala Val Gly Leu Ala
  290
                    295
Ala Ala His
305
<210> 9918
<211> 129
<212> PRT
<213> Enterobacter cloacae
<400> 9918
Thr Ala Trp Pro Ser Ser Trp Ser Arg Arg Met Gly Leu Asn Val Arg
                               10
Glu Gly Glu Ile Met Ala Lys Asn Arg Ser Arg Arg Leu Arg Lys Lys
        20
                            2.5
Met His Ile Glu Glu Phe Gln Glu Val Gly Phe Ser Val Ala Trp Arg
 35
                        40
                                          45
Phe Pro Glu Gly Thr Ser Val Glu Gln Ile Asp Gln Asp Val Asp Ala
                    55
                                      60
Phe Ile Asn Glu Val Ile Glu Pro Asn Lys Leu Ala Phe Asp Gly Ser
                                 75
                 70
Gly Tyr Leu Ala Trp Glu Gly Leu Ile Cys Thr Gln Glu Val Gly Lys
             8.5
                               90
Cys Thr Glu Glu His Gln Ala Leu Val Arg Lys Trp Leu Glu Asp His
         100
                         105
                                             110
Lys Leu Glu Asp Val Arg Val Ser Glu Leu Phe Asp Val Trp Trp Asp
      115
                        120
<210> 9919
<211> 257
<212> PRT
<213> Enterobacter cloacae
<400> 9919
Ser Lys Asn Gly Ala Ser Ile Ser Trp Pro Ile Leu Ser Glu Gly Val
                               10
Phe Lys Met Arg Lys Thr Leu Leu Ala Val Ala Leu Leu Ala Ile Gly
          20
Ser Thr Ala His Ala Glu Tyr Lys Cys Ser Val Thr Pro Arg Asp Asp
    35
                        40
Val Val Leu Ser Pro Gln Thr Val Gln Val Lys Gly Glu Asn Gly Asn
 50
Leu Val Ile Thr Pro Asp Gly Asn Val Thr Phe Asn Gly Lys Pro Gln
65
                 70
                                   75
Asn Leu Thr Ala Ala Gln Arg Glu Gln Ala Met Asp Tyr Gln Ala Glu
             85
                               90
```

Leu Arg Thr Ala Leu Pro Trp Ile Asn Asp Gly Ala Leu Thr Arg Val

105

Glu Lys Ser Arg Val Ala Leu Asp Lys Ile Ile Thr Lys Glu Val Gly 120 Glu Ser Ser Asn Met Arg Thr Arg Leu Thr Lys Leu Asp Lys Gln Leu 135 140 Lys Glu Gln Met Asn Arg Ile Ile Glu Thr Arg Ser Asp Gly Leu Thr 150 155 160 145 Phe His Tyr Lys Ala Ile Asp Gln Val Arg Ala Asp Gly Gln Gln Leu 165 170 175 Val Asn Gln Ala Met Gly Gly Ile Leu Gln Asp Ser Ile Asn Glu Met 180 185 190 Gly Ala Lys Ala Val Leu Lys Gly Gly Gly Asn Pro Leu Gln Gly Val 195 200 205 Leu Gly Ser Leu Gly Gly Leu Gln Thr Ser Ile Gln Asn Glu Trp Lys 210 215 220 Asn Gln Glu Ala Asp Phe Gln Gln Phe Gly Lys Asp Val Cys Lys Arg 225 230 235 240 Val Val Ser Leu Glu Asp Ser Arg Lys Ala Leu Val Gly Thr Leu Lys 250

<210> 9920 <211> 316 <212> PRT

<213> Enterobacter cloacae <400> 9920 Cys Ile Asp Phe Ile Arg Gly Gln Asp Met Ser Thr Leu Gly His Gln 1.0 Tyr Asp Asn Ser Leu Val Ser Asn Ala Phe Gly Phe Leu Arg Leu Pro 25 30 Met Asn Phe Gln Pro Tyr Asp Ser Asp Ala Asp Trp Val Ile Thr Gly 35 4.0 45 Val Pro Phe Asp Met Ala Thr Ser Gly Arg Ala Gly Gly Arg His Gly 55 60 Pro Ala Ala Ile Arg Gln Val Ser Thr Asn Leu Ala Trp Glu His Asn 75 Arg Phe Pro Trp Asn Phe Asp Met Arg Glu Arg Leu Asn Val Val Asp 8.5 90 Cys Gly Asp Leu Val Tyr Ala Phe Gly Asp Ala Arg Glu Met Ser Glu 105 100 110 Lys Leu Gln Ala His Ala Glu Lys Leu Leu Ala Ala Gly Lys Arg Met 115 120 Leu Ser Phe Gly Gly Asp His Phe Val Thr Leu Pro Leu Leu Arg Ala 135 140 His Ala Lys His Phe Gly Lys Met Ala Leu Val His Phe Asp Ala His 150 155 Thr Asp Thr Tyr Ala Asn Gly Cys Glu Phe Asp His Gly Thr Met Phe 165 170 Tyr Thr Ala Pro Lys Glu Gly Leu Ile Asp Pro Asn His Ser Val Gln 185 180 190 Ile Gly Ile Arg Thr Glu Phe Asp Lys Asp Asn Gly Phe Thr Val Leu 195 200 Asp Ala Gly Gln Val Asn Asp Arg Gly Val Asp Asp Ile Leu Ala Gln 215 220 Val Lys Gln Ile Val Gly Asp Met Pro Val Tyr Leu Thr Phe Asp Ile 230 235 Asp Cys Leu Asp Pro Ala Phe Ala Pro Gly Thr Gly Thr Pro Val Ile 245 250 Gly Gly Leu Thr Ser Asp Arg Ala Ile Lys Leu Val Arg Gly Leu Lys 260 265 270

```
Asp Leu Asn Ile Val Gly Met Asp Val Val Glu Val Ala Pro Ala Tyr
    275
                          280
Asp Gln Ser Glu Ile Thr Ala Leu Ala Ala Ala Thr Leu Ala Leu Glu
 290
                       295
Met Leu Tyr Ile Gln Ala Ala Lys Lys Gly Glu
                  310
<210> 9921
<211> 257
<212> PRT
<213> Enterobacter cloacae
<400> 9921
Ser Thr Ala Gly Ser Arg Leu Met Asn Gly Leu Leu Ser Gly Lys Arg
                                  10
Ile Val Ile Thr Gly Ala Ala Arg Gly Leu Gly Phe His Phe Ala Lys
                               25
Ala Cys Ala Glu Gln Gly Ala Ala Val Val Met Cys Asp Ile Leu Lys
                          40
                                              45
Gly Glu Leu Ala Glu Ser Ala His Ala Leu Ser Glu Arq Gly Tyr Ala
                      55
Ile Glu Pro His Val Ile Asp Leu Ala Asp Pro Gln Ser Ile Glu Gln
                   70
                                       75
Val Phe Ser Ala Ile Gly Glu Gln Gly Gln Ile Asp Gly Leu Val Asn
              85
                                   90
Asn Ala Ala Met Ala Thr Gly Val Gly Gly Lys Asn Met Leu Asp Tyr
           100
                              105
Asp Pro Asp Leu Trp Asp Arg Val Met Ser Val Asn Val Lys Gly Thr
       115
                           120
                                               125
Trp Leu Val Thr Arg Ala Ala Val Pro Leu Leu Arg Glu Gly Ala Gly
  130
                       135
                                           140
Ile Val Asn Val Ala Ser Asp Thr Ala Leu Trp Gly Ala Pro Arg Leu
                   150
                                      155
145
                                                           160
Met Ala Tyr Val Ala Ser Lys Gly Ala Val Ile Ala Met Thr Arg Ser
               165
                                   170
Met Ala Arg Glu Leu Gly Glu Lys Arg Ile Arg Ile Asn Ala Ile Ala
                               185
           180
                                                  190
Pro Gly Leu Thr Arg Val Glu Ala Thr Glu Tyr Val Pro Ala Glu Arg
       195
                           200
                                               205
His Gln Leu Tyr Glu Asn Gly Arg Ala Leu Thr Gly Ala Gln Gln Pro
                       215
                                           220
Glu Asp Val Thr Gly Ser Val Val Trp Leu Leu Ser Asp Leu Ser Arg
                   230
                                      235
Phe Ile Thr Gly Gln Leu Ile Pro Val Asn Gly Gly Phe Val Phe Asn
                                   250
               245
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<210> 9922
<211> 267
<212> PRT
<213> Enterobacter cloacae
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<400> 9922

Gly Arg Ala Met Met Ala Asn Asp Gln Glu Val Lys Tyr Leu Val Pro 10 Gly Leu Glu Arg Gly Leu Gln Leu Leu Ala Phe Gly Glu Gln His 20 25 Arg Asp Leu Thr Phe Ala Glu Leu His Arg Leu Val Asp Met Pro Lys

40 Ala Thr Ala Tyr Arg Val Val Gln Thr Leu Glu Tyr Met Gly Phe Leu

55 Glu Arg Asn Thr Arg Thr Asn Thr Phe Ser Leu Gly Met Asn Val Leu 75 Arg Leu Gly Phe Glu Tyr Ile Ala Ser Leu Asp Val Ala Gln Val Gly 85 90 Gln Pro Val Ile Glu Gln Leu Arg Asp Val Ser Gln Cys Ser Ser His 100 105 Leu Ala Ile Arg Asp Gly Arg Asp Ile Ile Tyr Ile Ala Arg Val Ser 115 120 125 Ala Ala Gly Ser Arg Ile Asn Gln Val Ser Ile Gly Thr Arg Leu Pro 130 135 140 Val His Cys Thr Ser Leu Gly Arg Met Leu Leu Thr Asp Ile Ser Arg 145 150 155 Ala Asp Phe Glu Gln Leu Phe Pro His Glu Arg Leu Pro Gly Asn Thr 165 170 Pro Gly Gln Leu His Asp Arg Glu Ala Leu Trp Gln Met Val Gln Gln 180 185 190 Asp Lys Ala Arg Gly Tyr Val Ile Gly Glu Ser Phe Phe Arg His Gly 195 200 205 Ile Ser Ser Ile Val Tyr Pro Val Tyr Asp Arg Ser Gly Arg Val Ala 215 220 Ala Val Val Ser Ile Leu Val Pro Ser Glu Glu Ile Pro Gln Ser Asp 230 235 Arg Glu Arg Leu Gln Asn Glu Val Arg Leu Ala Ala Asp Lys Ile Ser 245 250 Gly Phe Leu Gly Tyr Leu Ser Gln Ala Ser

<210> 9923 <211> 326 <212> PRT

<213> Enterobacter cloacae

<400> 9923

Leu Arg Arg Ala Cys Phe Thr Pro Asn Leu Gly Gln Met Arg Gln Arg 10 Thr Met Ser Val Thr Gly Ile Glu Lys Leu Glu Phe Gly Val Glu Asp 25 Leu Thr His Cys Ala Lys Phe Met Arg Asp Phe Gly Leu Thr Gly Asp 40 Ala Ser Gly Gln Arg Phe Thr Thr Leu Ser Gly Ala Arg Val Glu Leu 55 60 Asn Pro Ile Asp Ser Pro Asp Leu Pro Pro Ala Phe Glu Ala Gly Asn 75 70 Thr Leu Arg Arg Met Thr Trp Ala Val Ala Ala Gln Ser Asp Leu Asp 8.5 90 Ala Leu Arg Pro Lys Leu Ala Gin Gln Pro Gly Phe Arg Glu Val Gly 100 105 Asp Ala Leu Glu Cys Leu Asp Pro Asn Gly Met Thr Leu Arg Val Gln 115 120 125 Val Thr Gln Gln Thr Asp Val Glu Leu Asn Val Glu Pro Ile Asn Gln 135 Trp Gly Asp Ala Arg Arg Ile Asp Thr Pro Ser Pro Val Tyr Asp Arg 150 155 Ala Gln Pro Ile Asn Val Gly His Val Val Phe Phe Val Glu Glu Leu 165 170 Ala Ala Val Glu Lys Phe Tyr Arg Glu Val Leu Gly Phe Gln Val Ser 185 190 Asp Arg Tyr Ile Asn Arg Ala Val Phe Leu Arg Cys Gly Val Arg Gly 200 Gly His His Asn Leu Phe Leu Leu Gln Leu Pro Asn Arg Lys Arg Gly

215 Leu Asn His Val Ala Phe Thr Val Arg Asp Ile His Glu Val Ile Gly 230 235 Gly Gly Ile Ala Met Asn Lys His Asp Trp Ser Thr Phe Ile Gly Pro 245 250 255 Gly Arg His Pro Val Ser Ser Ala Tyr Phe Trp Tyr Val Asn Ser Pro 260 265 270 Thr Gly Gly Ala Phe Glu Tyr Tyr Thr Asn Asp Asp Tyr Leu Thr Glu 275 280 285 Asn Trp Gln Pro Arg Glu Leu Glu His Ser Leu Val Ser Phe Thr Glu 290 295 300 Trp Ala Val Glu Gly Gly Ile Asp His Asp Thr Arg Arg Gln Gln Lys 315 Lvs Pro Glu Ala Val 325

<210> 9924 <211> 426 <212> PRT

<213> Enterobacter cloacae

<400> 9924 Pro Ala Pro Val Gly Gly Glu Met Thr Thr Leu Glu Thr Asn Thr Ala 10 Pro Val Glu Ala Ser Gly Glu Gly Thr Arg Thr Pro Glu Lys Ala Val 25 Arg Trp Ala Ile Pro Leu Ser Leu Leu Ala Cys Val Leu Leu Ala Phe 4.0 45 Phe Asp Lys Ile Ser Ile Ala Ala Leu Phe Ser Asp Thr His Phe Gln 50 55 60 Gln Ala Met Gly Ile Asp Phe Asp Thr Thr Arg Leu Gly Ile Leu Met 70 75 Ser Ala Phe Leu Leu Ser Tyr Gly Phe Ser Ser Val Phe Leu Ser Gly 85 90 Leu Gly Asp Lys Ile Ala Pro Leu Arg Leu Leu Thr Gly Met Met Ala 100 105 Val Trp Cys Val Leu Met Val Ala Met Gly Phe Thr His Asn Tyr Thr 115 120 125 Leu Met Ile Val Leu Arg Ile Leu Leu Gly Val Ala Glu Gly Pro Leu 135 140 Phe Pro Leu Ala Phe Ala Ile Val Arg His Asn Phe Pro Gln His Leu 150 155 Gln Ala Arg Ala Thr Met Leu Trp Leu Leu Gly Thr Pro Val Gly Ala 165 170 175 Ala Ile Gly Phe Pro Leu Ser Leu Trp Leu Leu Asn Thr Phe Gly Trp 180 185 190 Gln Ser Thr Phe Phe Val Met Ala Met Leu Thr Val Pro Val Leu Ile 195 200 205 Leu Val Arg Ile Gly Leu Arg Gly Ile Arg Leu Glu Ala Lys Pro Gly 215 220 210 Thr Ser Gln Ala Ser Gln Asp Glu Arg Arg Ala Ala Arg Arg Glu Leu 230 235 Phe Val Ser Pro His Phe Trp Ile Ile Cys Ile Phe Asn Ile Ala Phe 245 250 255 Leu Thr Tyr Leu Trp Gly Ile Asn Gly Trp Leu Pro Gly Tyr Leu Ile 260 265 270 Lys Gly Lys Gly Ile His Leu Glu His Ala Gly Trp Leu Ser Ser Met 275 280 Pro Phe Ile Ala Met Leu Ala Gly Glu Val Ile Gly Ala Trp Leu Ser 295 Asp Arg Val Asp Lys Arg Ala Ala Ala Cys Phe Ile Ser Met Ala Gly

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310
                                315
Ala Ala Val Gly Leu Ala Ala Val Met His Leu Asp Thr Pro Leu Ala
            325
                    330
Ile Ile Ala Ala Met Ser Phe Ser Thr Phe Met Trp Gly Thr Gly Ala
         340
              345 350
Pro Asn Ile Phe Ala Leu Leu Ala Lys Ala Thr His Pro Arg Val Ser
    355 360 365
Ala Thr Ala Gly Gly Ile Phe Asn Gly Leu Gly Asn Phe Ala Gly Ala
 370 375 380
Leu Ser Pro Ala Val Met Gly Ala Leu Ile Ala Phe Thr His Ser Met
385 390 395 400
Asp Ser Gly Leu Ile Phe Leu Ala Val Met Ala Ala Val Gly Cys Val
         405 410
Leu Leu Leu Pro Leu Leu Arg Arg Tyr
<210> 9925
<211> 548
<212> PRT
<213> Enterobacter cloacae
<400> 9925
Ala Met Ser Glu Met Ile Thr Val Gly Asp Ala Ile Ala Arg Thr Leu
Glu Gln Tyr Gln Val Glu Ala Ile Tyr Gly Val Ile Ser Ile His Asn
                         25
Leu Pro Ile Ala Asp Ala Val Gly Gln Arg Gly Asn Ile Arg Phe Val
35
                    40
                                    45
Pro Ala Arg Gly Glu Ala Gly Ser Val Thr Met Ala Asp Ala His Gly
50 55
                                60
Arg Phe Ser Gly Leu Gly Val Ala Leu Thr Ser Thr Gly Ala Gly Ala
             70
                                75
Gly Asn Ala Val Gly Ala Leu Val Glu Ala Met Asn Ala Cys Thr Pro
            85
                            90
Leu Leu His Leu Thr Gly Gln Val Glu Lys Ala Trp Leu Asp Ala Asp
        100
                       105 110
Thr Gly Phe Ile His Glu Thr Arg Asp Gln Leu Thr Phe Leu Lys Ala
      115
                     120
                                      125
Ser Ser Lys Arg Ala Tyr Arg Ile Ser Asn Ala Asn Gln Ala Ile Ala
  130
                   135
                                   140
Ile Leu His Lys Ala Ile Gln Asp Ala Gln Thr Pro Pro Cys Gly Pro
                150
                                155
                                                160
Val Ser Val Glu Ile Pro Ile Asp Ile Gln Ser Ala Lys Ile Pro Leu
            165
                             170
Ser Leu Val Thr Ala Pro Ile Lys Pro Val Ser Ala Pro Ala Val Asp
         180 185
                                          190
Thr Gly Met Val Asp Ala Leu Trp Ala Gln Leu Lys Gln Ala Lys Gln
      195
                      200
                                      205
Pro Leu Leu Trp Leu Gly Gly Gly Ala Leu Gly Ser Ala Glu Ala Val
  210
                   215
                                   220
Lys Lys Leu Ala Asp Ala Gly Ile Thr Val Ile Ser Ser Thr His Ala
               230
                                235
Arg Gly Val Leu Pro Asp Asn His Arg Ala Ser Leu Arg Ala Phe His
            245
                            250
Asn Ser Pro Ser Val Glu Ala Leu Ile Ala Gln Cys Asp Phe Thr Leu
         260
                         265
                                         270
Val Ala Gly Ser Arg Leu Arg Ser Asn Glu Thr Arg Ser Trp Thr Leu
      275
                      280
                                      285
Glu Leu Pro Ser Pro Arg Val Gln Leu Asp Ile Asp Pro Ala Ala Ala
         295
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Ser Arg Asn Tyr Leu Met Asp Ser Thr Leu Ile Ala Asp Cys Ser Ala

310 315 Leu Leu Gly Ala Leu Ala Glu Lys Val Gln Gly Arg Glu Trp Gly Asn 325 330 Ala Gln Trp Asp Thr Gln Val Gln Gln Ala Val Gly Gln Ala Glu Gln 340 345 Gly Leu Arg Glu Gln Cys Gly Ala Tyr Ala Lys Leu Asn Asp Ala Ile 355 360 365 Glu Lys Ala Leu Pro Lys Asp Gly Leu Leu Val Arg Asp Ile Thr Val 375 380 Ser Gly Ser Leu Trp Gly Ser Arg Leu Phe Arg Ala Asn Gly Pro Leu 390 395 Met Asn Ile His Ser Leu Ala Gly Ala Ile Gly Met Gly Leu Pro Met 405 410 415 Ala Ile Gly Thr Ala Ile Ala Asn Pro Gln Arg Lys Val Val Gly Leu 420 425 430 Val Gly Asp Gly Gly Leu Ser Leu Asn Leu Gly Glu Leu Ala Thr Leu 435 440 445 Ala Gln Glu Lys Ala Asn Val Thr Leu Leu Ile Met Asn Asp Gly Gly 450 455 Tyr Gly Val Met Arg Gly Ile Gln Asp Lys Tyr Phe Gly Gly Arg Gln 470 475 Tyr Tyr Asn Ala Leu His Thr Pro Asp Phe Thr Leu Leu Ala Gln Ala 485 490 Ile Gly Leu Gln Ala Trp Ser Val Glu Gln Ala Glu Asp Phe Asp Ala 500 505 510 Val Met Met Glu Ala Leu Ala Met Pro Gly Pro Ser Val Val Glu Val 515 520 525 Arg Met Gly Gln Ile Gly Ala Leu Lys Phe Ala Gly Pro Pro Gln Lys 535 Thr Leu Tyr 545

<210> 9926 <211> 345 <212> PRT

<213> Enterobacter cloacae

<400> 9926 Leu Cys Arg Arg Ser Met Thr Val Arg Val Ala Ile Asn Gly Phe Gly 10 Arg Ile Gly Arg Asn Val Val Arg Ala Leu Tyr Glu Ser Gly Arg Arg 25 3.0 Ala Glu Ile Thr Val Val Ala Ile Asn Glu Leu Ala Asp Ala Ala Gly 4.0 Met Ala His Leu Leu Lys Tyr Asp Thr Ser His Gly Arg Phe Ala Trp 55 Asp Val Arg Gln Glu Arg Glu Gln Leu Phe Val Gly Asp Asp Ala Ile 75 70 Arg Val Leu His Glu Asn Ser Ile Glu Gly Leu Pro Trp Arg Glu Leu 90 Gly Val Asp Val Val Leu Asp Cys Thr Gly Val Tyr Gly Asn Arg Glu 100 105 His Gly Glu Ala His Leu Asn Ala Gly Ala Lys Lys Val Leu Phe Ser 115 120 125 His Pro Gly Ser Asn Asp Leu Asp Ala Thr Val Val Phe Gly Val Asn 130 135 140 Gln His Glu Leu His Ala Glu His Arg Ile Val Ser Asn Ala Ser Cys 150 155 Thr Thr Asn Cys Ile Ile Pro Val Ile Lys Leu Leu Asp Asp Ala Tyr 170 165 Gly Ile Glu Ser Gly Thr Val Thr Thr Ile His Ser Ala Met His Asp

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180
                           185
Gln Gln Val Ile Asp Ala Tyr His Pro Asp Leu Arg Arg Thr Arg Ala
      195
                        200
                                        205
Ala Ser Gln Ser Ile Ile Pro Val Asp Thr Lys Leu Ala Ala Gly Ile
   210
               215
                                     220
Thr Arg Ile Phe Pro Gln Phe Asn Asp Arg Phe Glu Ala Ile Ala Val
           230
                      235
Arg Val Pro Thr Ile Asn Val Thr Ala Ile Asp Leu Ser Val Thr Val
            245 250
Lys Lys Pro Val Lys Ala Cys Glu Val Asn Leu Leu Gln Lys Ala
        260
              265 270
Ala Gln Gly Ala Phe His Gly Ile Val Asp Tyr Thr Glu Leu Pro Leu
     275 280 285
Val Ser Val Asp Phe Asn His Asp Pro His Ser Ala Ile Val Asp Gly
 290 295
                           300
Thr Gln Thr Arg Val Ser Gly Ala His Leu Ile Lys Thr Leu Val Trp
305 310 315
Cys Asp Asn Glu Trp Gly Phe Ala Asn Arg Met Leu Asp Thr Thr Leu
        325
                              330
Ala Met Ala Ala Lys Gly Phe Arg
<210> 9927
<211> 393
<212> PRT
<213> Enterobacter cloacae
<400> 9927
Glu Val Ser His Ser Gly Ala Gly Lys Pro Ala Gln Phe Ser Ala Arg
                              1.0
Leu Ser Glu Leu Ala Pro Phe Leu Thr Ala Glu Asp Thr Gly Leu Ser
                          25
                                            3.0
Asn Met Ser Lys Ile Phe Asp Phe Val Lys Pro Gly Val Ile Thr Gly
                       40
                                         45
Asp Asp Val Gln Lys Val Phe Gln Val Ala Lys Glu Asn Asn Phe Ala
                    5.5
                            60
Leu Pro Ala Val Asn Cys Val Gly Thr Asp Ser Ile Asn Ala Val Leu
                 70
                                 75
Glu Thr Ala Ala Lys Val Lys Ala Pro Val Ile Val Gln Phe Ser Asn
             85
                              90
Gly Gly Ala Ala Phe Ile Ala Gly Lys Gly Val Lys Thr Asp Ile Pro
          100
                           105
                                            110
Gln Gly Ala Ala Ile Leu Gly Ala Ile Ser Gly Ala His His Val His
      115
                       120
Gln Met Ala Glu His Tyr Gly Val Pro Val Ile Leu His Thr Asp His
                    135
                                      140
Cys Ala Lys Lys Leu Leu Pro Trp Ile Asp Gly Leu Leu Asp Ala Gly
                150
                                  155
                                                 160
Glu Lys His Phe Ala Ala Thr Gly Lys Pro Leu Phe Ser Ser His Met
             165
                              170
Ile Asp Leu Ser Glu Glu Ser Leu Glu Glu Asn Ile Glu Ile Cys Ser
          180
                           185
Lys Tyr Leu Ala Arg Met Ser Lys Met Gly Met Thr Leu Glu Ile Glu
      195
                        200
                                         205
Leu Gly Cys Thr Gly Gly Glu Glu Asp Gly Val Asp Asn Ser His Met
  210
                    215
                                      220
Asp Ala Ser Ala Leu Tyr Thr Gln Pro Glu Asp Val Asp Tyr Ala Tyr
                230
                                  235
Thr Glu Leu Ser Lys Ile Ser Pro Arg Phe Thr Ile Ala Ala Ser Phe
                              250
Gly Asn Val His Gly Val Tyr Lys Pro Gly Asn Val Val Leu Thr Pro
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265 Thr Ile Leu Arg Asp Ser Gln Glu Tyr Val Ser Lys Lys His Asn Leu 275 280 285 Pro His Asn Ser Leu Asn Phe Val Phe His Gly Gly Ser Gly Ser Ser 295 300 Ala Gln Glu Ile Lys Asp Ser Val Ser Tyr Gly Val Val Lys Met Asn 305 310 315 Ile Asp Thr Asp Thr Gln Trp Ala Thr Trp Asp Gly Ile Leu Gln Tyr 325 330 335 Tyr Lys Thr Asn Glu Ala Tyr Leu Gln Gly Gln Leu Gly Asn Pro Lys 340 345 350 Gly Glu Asp Gln Pro Asn Lys Lys Tyr Tyr Asp Pro Arg Val Trp Leu 355 360 Arg Ala Ala Gln Thr Ser Met Ile Thr Arg Leu Glu Gln Ala Phe Lys 370 375 Glu Leu Asn Ala Val Asp Val Leu <210> 9928 <211> 644 <212> PRT <213> Enterobacter cloacae <400> 9928 Ile Pro His Ser Val Ser Ser Gly Met Thr Arg Ser Asn Cys Trp Ile 10 Gln Glu Thr Asp Met Leu Tyr Lys Gly Asp Thr Leu Tyr Val Asp Trp 20 25 Leu Glu Asp Gly Ile Ala Glu Leu Val Phe Asp Ala Pro Gly Ser Val 35 4.0 4.5 Asn Lys Leu Asp Thr Ala Thr Val Ala Ser Leu Gly Gln Ala Leu Asp 55 60 Val Leu Glu Lys Gln Ser Asp Leu Lys Gly Leu Leu Leu Arg Ser Asn 75 7.0 Lys Ala Ala Phe Ile Val Gly Ala Asp Ile Thr Glu Phe Leu Ser Leu 90 85 Phe Leu Val Pro Glu Glu Gln Leu Ser Gln Trp Leu His Phe Ala Asn 100 105 110 Ser Val Phe Asn Arg Leu Glu Asp Leu Pro Val Pro Thr Leu Ser Ala 115 120 Val Asn Gly Tyr Ala Leu Gly Gly Gly Cys Glu Cys Val Leu Ala Thr 135 140 Asp Tyr Arg Leu Ala Thr Pro Asp Leu Arg Ile Gly Leu Pro Glu Thr 145 150 155 Lys Leu Gly Ile Met Pro Gly Phe Gly Gly Ser Val Arg Met Pro Arg 165 170 Met Leu Gly Ala Asp Ser Ala Leu Glu Ile Ile Ala Ala Gly Lys Asp 180 185 190 Val Gly Ala Glu Gln Ala Gln Lys Ile Gly Leu Val Asp Gly Val Val 200 Lys Pro Glu Lys Leu Val Glu Gly Ala Leu Ala Ile Leu Arg Gln Ala 215 220 Ile Asn Gly Asp Leu Asp Trp Lys Ala Lys Arg Gln Pro Lys Leu Glu 230 235 Pro Leu Lys Leu Ser Lys Ile Glu Ala Thr Met Ser Phe Thr Ile Ala 245 250 Lys Gly Met Val Met Gln Thr Ala Gly Lys His Tyr Pro Ala Pro Ile 265 270 Thr Ala Val Lys Thr Ile Glu Ala Ala Ala Arg Leu Gly Arg Asp Asp 275 280

Ala Leu Lys Leu Glu Asn Gln Ser Phe Val Pro Leu Ala His Thr Asn

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295
Glu Ala Arg Ala Leu Val Gly Ile Phe Leu Asn Asp Gln Phe Val Lys
               310
                               315
Gly Lys Ala Lys Gln Leu Thr Lys Asn Val Glu Thr Pro Lys His Ala
            325
                   330 335
Ala Val Leu Gly Ala Gly Ile Met Gly Gly Gly Ile Ala Tyr Gln Ser
        340
              345 350
Ala Trp Lys Gly Val Pro Val Val Met Lys Asp Ile Asn Glu Lys Ser
     355 360
                          365
Leu Thr Leu Gly Met Thr Glu Ala Ser Lys Leu Leu Asn Lys Gln Leu
      375 380
Glu Arg Gly Lys Ile Asp Gly Leu Lys Leu Ala Gly Val Ile Ser Thr
      390 395
Ile Gln Pro Val Leu Glu Tyr Ser Gly Phe Asp Arg Val Asp Val Val
            405
                           410
Val Glu Ala Val Val Glu Asn Pro Lys Val Lys Lys Ala Val Leu Ala
         420 425 430
Glu Thr Glu Asp Lys Val Arg Pro Glu Thr Val Leu Ala Ser Asn Thr
                     440
                                     445
Ser Thr Ile Pro Ile Ser Glu Leu Ala Ser Val Leu Lys Arg Pro Glu
      455
                                  460
Asn Phe Cys Gly Met His Phe Phe Asn Pro Val His Arg Met Pro Leu
      470 475
Val Glu Val Ile Arg Gly Glu Lys Thr Ser Asp Glu Thr Ile Ala Lys
            485
                            490
Val Val Ala Trp Ala Ser Lys Met Gly Lys Thr Pro Ile Val Val Asn
                             510
         500 505
Asp Cys Pro Gly Phe Phe Val Asn Arg Val Leu Phe Pro Tyr Phe Ala
     515
                     520
                                    525
Gly Phe Ser Gln Leu Leu Arg Asp Gly Ala Asp Phe Arg Lys Ile Asp
                535
                                   540
Lys Val Met Glu Lys Gln Phe Gly Trp Pro Met Gly Pro Ala Tyr Leu
              550
                               555
545
Leu Asp Val Val Gly Ile Asp Thr Ala His His Ala Gln Ala Val Met
            565
                            570
                                           575
Ala Ala Gly Phe Pro Gln Arg Met Gln Lys Asp Tyr Arg Asp Ala Ile
         580
                         585
Asp Ala Leu Phe Asp Ala Asn Arg Phe Gly Gln Lys Asn Gly Leu Gly
      595
                     600
Phe Trp Arg Tyr Lys Glu Asp Ser Lys Gly Lys Pro Lys Lys Glu Glu
610 615
                                   620
Asp Ala Ala Val Asp Gly Pro Ala Gly Arg Arg Gln Ser Ala Glu Thr
               630
                               635
Arg Leu His
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<210> 9929
<211> 348
<212> PRT
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<213> Enterobacter cloacae

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Asn Gly Asn Glu Glu Thr Gln Met Ser Gln Ile Glu Asn Met Ile Asn
                          90
           85
Arg Gly Val Asp Val Leu Val Ile Ile Pro Tyr Asn Gly Gln Val Leu
        100
                       105
Ser Asn Val Val Lys Glu Ala Lys Gln Glu Gly Ile Lys Val Leu Ala
    115
              120
Tyr Asp Arg Met Ile Asn Asn Ala Asp Ile Asp Tyr Tyr Ile Ser Phe
 130
      135 140
Asp Asn Glu Lys Val Gly Glu Leu Gln Ala Lys Ser Leu Val Ala Lys
145
   150 155
Val Pro Gln Gly Asn Tyr Phe Leu Met Gly Gly Ser Pro Val Asp Asn
      165 170 175
Asn Ala Lys Leu Phe Arg Gln Gly Gln Met Lys Val Leu Lys Pro Tyr
      180 185 190
Ile Asp Glu Gly Lys Ile Lys Val Val Gly Asp Gln Trp Ala Asp Gly
 195 200 205
Trp Leu Pro Glu Asn Ala Leu Lys Ile Met Glu Asn Ala Leu Thr Ala
 210 215 220
Asn Asn Asn Lys Ile Asp Ala Val Val Ala Ser Asn Asp Ala Thr Ala
225 230
                           235
Gly Gly Ala Ile Gln Ala Leu Ser Ala Gln Gly Leu Ala Gly Lys Val
           245 250 255
Ala Ile Ser Gly Gln Asp Ala Asp Leu Ala Gly Val Lys Arg Ile Ile
            265 270
Ala Gly Thr Gln Thr Met Thr Val Tyr Lys Pro Ile Thr Glu Leu Ala
275 280
                        285
Asn Thr Ala Ala Glu Ile Ala Val Glu Leu Gly Asn Gly Gln Gln Pro
                295
Lys Ala Asp Ala Thr Leu Asn Asn Gly Leu Lys Asp Val Pro Ala Arg
             310 315
Leu Leu Thr Pro Ile Glu Val Asn Lys Glu Asn Ile Asp Ala Thr Val
         325
               330
Val Lys Asp Gly Phe His Lys Lys Ser Glu Leu
        340
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<210> 9930 <211> 538 <212> PRT

<213> Enterobacter cloacae

<400> 9930 Ser Ser Ala Ala Pro Ala Arg Gln Gly Arg Ile Asp Leu Pro Cys Thr 10 Ser Val Gly Pro Cys Gly Ala Val Met Ser Tyr Leu Leu Glu Met Lys 25 Ser Ile Thr Lys Ala Phe Gly Ala Val Lys Ala Val Asp Asn Val Ser 40 3.5 Leu Arg Leu Asn Pro Gly Glu Val Met Ser Leu Cys Gly Glu Asn Gly 55 Ser Gly Lys Ser Thr Leu Met Lys Val Leu Cys Gly Ile Tyr Pro His 70 Gly Ser Tyr Glu Gly Glu Ile Val Phe Ala Gly Glu Val Leu Gln Ala 8.5 90 Thr His Ile Arg Asp Thr Glu Arg Lys Gly Ile Ala Ile Ile His Gln 100 105 110 Glu Leu Ala Leu Val Lys His Leu Thr Val Leu Glu Asn Ile Phe Leu 120 Gly Ala Glu Leu Ser Arg His Gly Val Leu Asp Tyr Asp Thr Met Thr 140 135 Leu Arg Cys Glu Lys Leu Leu Ala Gln Val Ser Leu Ala Ile Ser Pro

```
150
Asp Thr Arg Val Gly Asp Leu Gly Leu Gly Gln Gln Gln Leu Val Glu
            165
                    170
Ile Ala Lys Ala Leu Asn Lys Gln Val Arg Leu Leu Ile Leu Asp Glu
        180
              185
Pro Thr Ala Ser Leu Thr Glu Gln Glu Thr Ala Val Leu Leu Asn Ile
     195
          200
                          205
Ile Arg Asp Leu Gln Asn His Gly Ile Ala Cys Ile Tyr Ile Ser His
  210 215 220
Lys Leu Asn Glu Val Lys Ala Ile Ser Asp Thr Ile Cys Val Ile Arg
    230 235
Asp Gly Gln His Ile Gly Thr Arg Glu Ala Glu Gly Met Ser Glu Asp
         245 250 255
Asp Ile Ile Thr Met Met Val Gly Arg Glu Leu Thr Ala Leu Tyr Pro
        260 265
Asn Glu Pro His Thr Ile Gly Glu Glu Leu Leu Arg Val Glu Asn Leu
275 280 285
Thr Ala Trp His Pro Val Asn Arg His Ile Lys Arg Val Asp Asn Leu
 290 295
                        300
Ser Phe Ser Leu His Arg Gly Glu Ile Leu Gly Ile Ala Gly Leu Val
               310
                               315
Gly Ala Gly Arg Thr Glu Ala Val Gln Cys Leu Phe Gly Val Trp Pro
            325
                            330
Gly Arg Trp Glu Gly Lys Ile Tyr Ile Asp Gly Gln Pro Val Lys Ile
         340
                         345 350
Asp Asn Cys Gln Gln Ala Ile Ala Lys Gly Ile Ala Met Val Pro Glu
     355
                      360
                                      365
Asp Arg Lys Lys Asp Gly Ile Val Pro Val Met Ala Val Gly Lys Asn
 370
                  375
                                   380
Ile Thr Leu Ala Ala Leu Ser Gln Phe Ser Gly Ala Leu Ser Ser Leu
               390
                                395
                                                400
Asp Asp Ala Ala Glu Gln Gln Cys Ile Leu Gln Ser Leu Ala Arg Leu
            4.05
                            410
                                            415
Lys Val Lys Thr Ser Ser Pro Glu Leu Ala Ile Gly Arg Leu Ser Gly
             425
         420
                                         430
Gly Asn Gln Gln Lys Ala Ile Leu Ala Arg Cys Leu Leu Leu Asn Pro
      435
                      440
                           445
Arg Ile Leu Ile Leu Asp Glu Pro Thr Arg Gly Ile Asp Ile Gly Ala
       455
                                   460
Lys Tyr Glu Ile Tyr Lys Leu Ile Asn Gln Leu Val Gln Gln Gly Ile
465 470
                             475
Ala Val Ile Val Ile Ser Ser Glu Leu Pro Glu Val Leu Gly Leu Ser
            485
                            490
Asp Arg Val Leu Val Met His Glu Gly Lys Leu Lys Ala Asn Leu Asn
         500
                         505
Asn Gln Asn Leu Thr Gln Glu Gln Val Met Glu Ala Ala Leu Arg Ser
                                      525
     515
                      520
Glu Arg His Val Glu Lys Gln Pro Val
   530
<210> 9931
<211> 528
<212> PRT
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<213> Enterobacter cloacae

<400> 9931

Pro Ser Pro Thr Gly Arg Gly Arg Lys Pro Asn Arg Arg Pro Gly Lys 10 Arg Ser Thr Arg Gln Leu Ser Glu Lys Lys Met Ser Glu Lys Glu Pro Phe Trp Leu Gly Ile Asp Cys Gly Gly Thr Tyr Leu Lys Ala Gly Leu

Tyr Asn Ser Gln Gly Lys Glu Val Cys Ile Glu Arg Arg Ser Val Ala 55 Thr Leu Ser Pro Arg Ala Gly Tyr Ala Glu Arg Asp Met His Gln Leu 7.0 7.5 Trp Gln His Cys His Ile Thr Val Ala Leu Leu Leu Lys Asn Ser Gly 85 90 Ala Asp Gly Gly Gln Ile Lys Gly Val Gly Ile Ser Ala Gln Gly Lys 100 105 Gly Leu Phe Leu Leu Asp Lys Gln Asp Arg Pro Leu Gly Asn Ala Ile 115 120 125 Leu Ser Ser Asp Arg Arg Ala Leu Glu Ile Val Gln Arg Trp Gln Gln 130 135 140 Asp Gly Ile Pro Glu Lys Leu Tyr Pro His Thr Arg Gln Thr Leu Trp 150 155 Thr Gly His Pro Ala Ser Leu Leu Arg Trp Val Lys Glu Asn Glu Pro 165 170 175 Gln Arg Tyr Gln Gln Ile Gly Ser Val Met Met Ala His Asp Tyr Leu 180 185 190 Arg Trp Cys Leu Thr Gly Val Lys Gly Cys Glu Glu Ser Asn Ile Ser 195 200 205 Glu Ser Asn Leu Tyr Asn Met Asn Thr Gly Gln Tyr Asp Pro Gln Leu 210 215 220 Thr Arg Trp Leu Gly Ile Ser Asp Ile Asp Gly Ala Leu Pro Ser Ile 225 230 235 Ile Gly Ser Ala Glu Ile Cys Gly Glu Ile Thr Ala Gln Ala Ala Ala 245 250 Leu Thr Gly Leu Thr Ala Gly Thr Pro Val Val Gly Gly Leu Phe Asp 260 265 Val Val Ser Thr Ala Ile Cys Ala Gly Leu His Asp Glu His Thr Leu 275 280 285 Asn Ala Val Met Gly Thr Trp Ala Val Thr Ser Gly Ile Ala His Gly 295 300 Ile Arg Asp Asn Glu Pro Phe Pro Tyr Val Tyr Gly Arg Tyr Val His 305 310 315 Pro Gln Gln Phe Ile Val His Glu Ala Ser Pro Thr Ser Ser Gly Asn 325 330 Leu Glu Trp Leu Thr Ala Gln Trp Gly Asp Met Ser Phe Asp Glu Ile 340 345 350 Asn His Ala Val Ala Ser Leu Pro Lys Ala Glu Ser Asp Val Phe Phe 355 360 365 Leu Pro Phe Leu Tyr Gly Ser Asn Ala Gly Leu Glu Met Thr Ser Gly 375 380 Phe Tyr Gly Leu Gln Ala Leu His Thr Arg Ala His Leu Leu Gln Ala 390 395 Val Tyr Glu Gly Val Val Phe Ser His Met Thr His Leu Asn Arg Met 405 410 Leu Glu Arg Phe Pro His Val Gln Ala Leu Arg Val Thr Gly Gly Pro 420 425 Thr His Ser Asp Val Trp Met Gln Met Leu Ala Asp Val Ser Gly Leu 440 445 Ala Ile Glu Leu Pro Gln Val Glu Glu Thr Gly Cys Ser Gly Ala Ala 450 455 460 Leu Ala Ala Leu Val Gly Thr Gly Leu Tyr Pro Asp Phe Tyr Ala Ala 470 475 Gln Arg Ala Leu Arg His Asp Ile Arg Met Ile Glu Pro Asp Met Arg 485 490 Ala His Ala Ala Tyr Gln Arg Lys Tyr His Arg Tyr Gln Leu Leu Ile 500 505 Ser Ala Leu Gln Gly Tyr His Ala Arg Val Lys Glu Tyr Asp Leu 515 520

<210> 9932

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<211> 241
<212> PRT
<213> Enterobacter cloacae
<400> 9932
Ser Pro Asn Ala Gly Arg Arg His Asp Met Leu Glu Gln Leu Lys Ala
                             1.0
Glu Val Leu Ala Ala Asn Leu Ala Leu Pro Ala His Gln Leu Val Thr
        20
                          25
Phe Thr Trp Gly Asn Val Ser Ala Val Asp Arg Ala Ser Gly Met Met
     35
                     4.0
                                    4.5
Val Ile Lys Pro Ser Gly Val Glu Tyr Asp Val Met Thr Ala Glu Asp
 50
                   55
                                   60
Met Val Val Val Asn Ile Ala Thr Gly Lys Val Val Glu Gly Ser Lys
            70 75
Lys Pro Ser Ser Asp Thr Pro Thr His Leu Ala Leu Tyr Arg Arg Tyr
          85
                90
Pro Glu Ile Gly Gly Ile Val His Thr His Ser Arg His Ala Thr Ile
         100 105 110
Trp Ser Gln Ala Gly Gln Asp Leu Pro Ala Trp Gly Thr Thr His Ala
                      120
Asp Tyr Phe Tyr Gly Ala Ile Pro Cys Thr Arg Leu Met Thr Thr Ala
 130 135
                                   140
Glu Ile Ala Gly Glu Tyr Glu Tyr Gln Thr Gly Val Val Ile Ile Lys
               150 155
Thr Phe Glu Glu Arg Asp Ile Ser Pro Met Gln Val Pro Ala Val Leu
            165 170 175
Val His Ser His Gly Pro Phe Ala Trp Gly Lys Asp Ala Ala Asp Ala
                       185
                              190
Val His Asn Ala Val Val Leu Glu Glu Cys Ala Tyr Met Gly Leu Phe
                      200
                                      205
Ser Arg Gln Leu Ala Pro Gln Leu Pro Val Met Gln Gln Glu Leu Leu
210 215
                       220
Glu Lys His Tyr Leu Arg Lys His Gly Ala Asn Ala Tyr Tyr Gly Gln
                230
                                235
```

<210> 9933 <211> 651 <212> PRT <213> Enterobacter cloacae

<400> 9933 Thr Ser Gly His Lys Pro Lys Arg Lys His Lys Lys Gly Cys Phe Met Ser Ser Asp Phe Lys Ile Lys Val Gln Ser Phe Gly Arg Phe Leu Ser 20 25 Asn Met Val Met Pro Asn Ile Gly Ala Phe Ile Ala Trp Gly Ile Ile 35 4.0 Thr Ala Leu Phe Ile Pro Thr Gly Trp Leu Pro Asn Glu Thr Leu Ala 55 Lys Leu Val Gly Pro Met Ile Thr Tyr Leu Leu Pro Leu Leu Ile Gly 70 75 Tyr Thr Gly Gly Arg Leu Val Gly Gly Asp Arg Gly Gly Val Val Gly 8.5 90 Ala Ile Thr Thr Met Gly Val Ile Val Gly Ala Asp Met Pro Met Phe 105 Leu Gly Ala Met Ile Ala Gly Pro Leu Gly Gly Trp Ala Ile Lys Lys

```
120
Phe Asp Val Trp Val Asp Gly Lys Ile Lys Ser Gly Phe Glu Met Leu
                  135
                                  140
Val Asn Asn Phe Ser Ala Gly Ile Ile Gly Met Ile Leu Ala Ile Leu
      150
                              155
Ala Phe Leu Gly Ile Gly Pro Ala Val Glu Val Leu Ser Lys Leu Leu
            165
                 170 175
Ala Ala Gly Val Asn Phe Met Val Ala His Asp Met Leu Pro Leu Ala
        180 185 190
Ser Ile Phe Val Glu Pro Ala Lys Ile Leu Phe Leu Asn Asn Ala Ile
     195 200 205
Asn His Gly Ile Phe Ser Pro Leu Gly Ile Gln Gln Ser His Asp Leu
 210 215 220
Gly Lys Ser Ile Phe Phe Leu Ile Glu Ala Asn Pro Gly Pro Gly Met
     230 235
Gly Val Leu Leu Ala Tyr Met Phe Phe Gly Arg Gly Ser Ala Lys Gln
         245 250 255
Ser Ala Gly Gly Ala Ala Ile Ile His Phe Leu Gly Gly Ile His Glu
        260
             265 270
Ile Tyr Phe Pro Tyr Val Leu Met Asn Pro Arg Leu Ile Leu Ala Val
   275 280 285
Ile Leu Gly Gly Met Thr Gly Val Phe Thr Leu Ser Val Leu Gly Gly
       295
Gly Leu Val Ser Pro Ala Ser Pro Gly Ser Ile Leu Ala Val Leu Ala
305 310 315
Met Thr Pro Lys Gly Ala Tyr Phe Ala Asn Ile Ala Ala Ile Cys Ala
           325
                           330
                                           335
Ala Met Ala Val Ser Phe Val Ala Ser Ala Ile Leu Leu Lys Thr Ser
         340
                        345
                                  350
Lys Val Lys Glu Asp Asp Asp Ile Glu Ala Ala Thr Arg Arg Met His
355 360
                                     365
Asp Met Lys Ala Glu Ser Lys Gly Ala Thr Pro Leu Ala Ala Gly Asp
370 375
                                  380
Val Ser Asn Asp Leu Ser His Val Arg Lys Ile Ile Val Ala Cys Asp
385 390 395
                                              400
Ala Gly Met Gly Ser Ser Ala Met Gly Ala Gly Val Leu Arg Lys Lys
            405
                            410
                                           415
Val Gln Asp Ala Gly Leu Thr Asn Ile Ser Val Thr Asn Ser Ala Ile
             425
         420
Asn Ser Leu Pro Pro Asp Val Asp Leu Val Ile Thr His Arg Asp Leu
     435 440
                                     445
Thr Glu Arg Ala Met Arg Gln Val Pro Gln Ala Gln His Ile Ser Leu
                  455
                                  460
Thr Asn Phe Leu Asp Ser Gly Leu Tyr Thr Ser Leu Thr Glu Arg Leu
                               475
              470
Val Ala Ala Gln Arg His Glu Asp Asn Glu Val Lys Val Arg Thr Ser
            485 490
                                           495
Leu Gln Asp Ser Phe Asp Glu Ser Asn Ala His Leu Phe Lys Leu Gly
         500
                        505
Ala Glu Asn Ile Phe Leu Gly Arg Thr Ala Thr Asn Lys Glu Glu Ala
                         525
                     520
Ile Arg Phe Ala Gly Glu Gln Leu Val Lys Gly Gly Tyr Val Gln Pro
                  535
Glu Tyr Val Glu Ala Met Leu Glu Arg Glu Lys Leu Thr Pro Thr Tyr
               550
                               555
Leu Gly Glu Ser Ile Ala Val Pro His Gly Thr Val Glu Ala Lys Asp
            565
                           570
Arg Val Leu Lys Thr Gly Val Val Phe Cys Gln Tyr Pro Asp Gly Val
         580
                        585
Arg Phe Gly Glu Glu Asp Asp Ile Ala Arg Leu Val Ile Gly Ile
                     600
```

Ala Ala Arg Asn Asn Glu His Ile Gln Val Ile Thr Ser Leu Thr Asn 610 620 620

Ala Leu Asp Asp Glu Thr Val Ile Glu Arg Leu Ala Asn Thr Thr Ser 625 630 630 635 640

Val Glu Glu Val Leu Ala Leu Leu Asn Lys 645 650

<210> 9934 <211> 592 <212> PRT

370

<213> Enterobacter cloacae

<400> 9934 Pro Phe Ile Ala Ile Asn Pro Thr Ser Gln Tyr Trp Lys Asp His Phe 10 Tyr Thr Lys Cys Asp Ala Glu Met Ser Arg Asp Ser Pro Asp Glu His 20 25 Pro Cys Gly Pro Gln Glu Thr Cys Met Ser Leu Trp Gln Gln Asn Tyr 40 Asp Pro Ala Gly Asn Ile Trp Leu Ser Ser Leu Ile Ala Ser Leu Pro 50 55 Ile Leu Phe Phe Phe Phe Ala Leu Ile Lys Leu Lys Leu Lys Gly Tyr 65 70 75 Leu Ala Ala Thr Tyr Thr Val Ala Ile Ala Leu Leu Val Ala Leu Phe 8.5 90 Phe Tyr Lys Met Pro Val Asp Arg Ala Leu Ala Ser Val Val Tyr Gly 100 105 Phe Phe Tyr Gly Leu Trp Pro Ile Ala Trp Ile Ile Ile Ala Ala Val 115 120 125 Phe Val Tyr Lys Ile Ser Val Lys Thr Gly Gln Phe Asp Ile Ile Arg 135 140 Ser Ser Ile Leu Ser Ile Thr Pro Asp Gln Arg Leu Gln Met Leu Ile 145 150 155 160 Val Gly Phe Ser Phe Gly Ala Phe Leu Glu Gly Ala Ala Gly Phe Gly 165 170 Ala Pro Val Ala Ile Thr Ala Ala Leu Leu Val Gly Leu Gly Phe Asn 180 185 190 Pro Leu Tyr Ala Ala Gly Leu Cys Leu Ile Val Asn Thr Ala Pro Val 195 200 205 Ala Phe Gly Ala Met Gly Ile Pro Ile Leu Val Ala Gly Gln Val Thr 215 220 Gly Leu Asp Ser Phe Glu Ile Gly Gln Met Val Gly Arg Gln Leu Pro 225 230 235 Phe Leu Thr Ile Ile Val Leu Phe Trp Ile Met Ala Ile Met Asp Gly 245 250 Trp Arg Gly Val Lys Glu Thr Trp Pro Ala Val Met Val Ala Gly Gly 265 260 270 Ser Phe Ala Ile Ala Gln Tyr Leu Ser Ser Asn Phe Leu Gly Gln Glu 280 285 Leu Pro Asp Ile Ile Ser Ser Leu Val Ser Leu Val Cys Leu Thr Leu 295 300 290 Phe Leu Lys Arg Trp Gln Pro Val Arg Ile Phe Arg Phe Ala Asp Met 305 310 315 Glv Ala Ser His Val Asp Gln Thr Leu Ala Arg Thr Glv Tvr Thr Ala 325 330 Gly Gln Ile Val Arg Ala Trp Ser Pro Phe Leu Phe Leu Thr Ala Thr 345 Val Thr Leu Trp Ser Ile Pro Pro Phe Lys Ala Leu Phe Ala Pro Gly 355 360 365 Gly Ala Leu Tyr Asp Met Val Ile Asn Ile Ser Val Pro Phe Leu Asp

375

```
Lys Met Val Ala Arg Met Pro Pro Val Val His Asp Ala Thr Pro Tyr
      390
                   395
Ala Ala Val Phe Lys Phe Asp Trp Phe Ser Ala Thr Gly Thr Ala Ile
          405
                      410 415
Leu Phe Ala Ala Ile Leu Ser Val Val Trp Leu Arg Met Lys Pro Ala
       420 425 430
Ala Ala Val Gln Thr Phe Ala Ala Thr Ile Lys Glu Leu Met Leu Pro
   435 440 445
Ile Tyr Ser Ile Gly Met Val Leu Ala Phe Ala Phe Ile Ser Asn Tyr
 450 455 460
Ser Gly Leu Ser Ser Thr Leu Ala Leu Ala Leu Ala His Thr Gly His
465 470 475 480
Ala Phe Thr Phe Phe Ser Pro Phe Leu Gly Trp Leu Gly Val Phe Leu
     485 490 495
Thr Gly Ser Asp Thr Ser Ser Asn Ala Leu Phe Ala Ala Leu Gln Ala 500 505 510
Thr Ala Ala Gln Gln Ile Gly Val Ser Asp Val Leu Leu Val Ala Ala
     515 520 525
Asn Thr Thr Gly Gly Val Thr Gly Lys Met Ile Ser Pro Gln Ser Ile
 530 535
                                540
Ala Ile Ala Cys Ala Ala Val Gly Leu Val Gly Lys Glu Ser Asp Leu
545 550 555
Phe Arg Phe Thr Val Lys His Ser Leu Ile Phe Thr Cys Met Val Gly
  565 570 575
Val Ile Thr Thr Leu Gln Ala Tyr Val Leu Thr Trp Met Ile Pro
         580
                        585
<210> 9935
<211> 175
<212> PRT
<213> Enterobacter cloacae
<400> 9935
Trp Arg Arg Ala Ser Arg Ser Ala Cys Arg Lys Thr Ile Ala Thr Pro
                        10
Leu Thr Pro Cys Ser Thr Pro Thr Ala Leu Val Arg Lys Thr Val Trp
         20
                 25
                                       30
Ala Ser Gly Ala Ile Lys Lys Thr Ala Lys Ala Asn Arg Lys Lys
 35
         4.0
                       4.5
Lys Met Arg Arg Trp Met Ala Leu Leu Ala Asp Val Ser Gln Pro Lys
 50 55 60
Arg Asp Phe Thr Asp Asp Glu Ile Ile Ala Arg Met Met Ile Pro Met
    70
                            75
Ile Asn Glu Val Val Arg Cys Leu Glu Glu Gly Ile Ile Ala Ser Pro
           85
                          90
Ala Glu Ala Asp Met Ala Leu Val Tyr Gly Leu Gly Phe Pro Pro Phe
        100 105
His Gly Gly Ala Phe Arg Trp Leu Asp Thr Leu Gly Ser Ala Arg Tyr
     115 120
Leu Asp Met Ala Gln Gln Tyr Gln His Leu Gly Pro Leu Tyr Glu Val
                135 140
 130
Pro Glu Gly Leu Arg Asn Lys Ala Arg His Asn Glu Pro Tyr Tyr Pro
              150
                             155
Ala Val Glu Pro Ala Arg Pro Val Gly Ala Leu Lys Thr Ala
            165
                           170
<210> 9936
```

<211> 391 <212> PRT

<213> Enterobacter cloacae

```
<400> 9936
Gly Val Thr Met Glu Lys Val Val Ile Val Asp Ala Ile Arg Thr Pro
                              10
Met Gly Arg Ser Lys Gly Gly Ala Phe Arg Asn Val Arg Ala Glu Asp
         20
                          25
Leu Ser Ala His Leu Met Arg Ser Leu Leu Ala Arg Asn Pro Ala Leu
     35
            40
                           4.5
Asp Pro Ala Ala Leu Asp Asp Ile Tyr Trp Gly Cys Val Gln Gln Thr
             55
Leu Glu Gln Gly Phe Asn Ile Ala Arg Asn Ala Ser Leu Leu Ala Glu
            70 75
Ile Pro His Ser Val Pro Ala Val Thr Val Asn Arg Leu Cys Gly Ser
            85
                          90
Ser Met Gln Ala Leu His Asp Ala Thr Arg Met Ile Met Thr Gly Asp
         100 105
Ala Gln Ala Cys Leu Val Gly Gly Val Glu His Met Gly His Val Pro
    115 120 125
Met Ser His Gly Val Asp Phe His Pro Gly Met Ser Arg Asn Val Ala
 130 135 140
Lys Ala Ala Gly Met Met Gly Leu Thr Ala Glu Met Leu Ser Arg Leu
    150 155
His Gly Ile Ser Arg Glu Met Gln Asp Ala Phe Ala Ala Arg Ser His
                             170 175
            165
Ala Arg Ala Trp Ala Ala Thr Gln Ser Gly Ala Phe Lys Asn Glu Ile
        180 185 190
Ile Pro Thr Gly Gly His Asp Ala Asp Gly Val Leu Lys Gln Phe Ser
                      200
                                       205
Tyr Asp Glu Val Ile Arg Pro Glu Thr Thr Val Glu Ala Leu Ser Thr
 210
                215
                                    220
Leu Arg Pro Val Phe Asp Pro Val Thr Gly Thr Val Thr Ala Gly Thr
             230
                                 235
Ser Ser Ala Leu Ser Asp Gly Ala Ala Ala Met Leu Val Met Ser Glu
            245
                             250
Ser Arg Ala Arg Glu Leu Gly Leu Thr Pro Arg Ala Arg Val Arg Ser
                         265
         260
Met Ala Val Val Gly Cys Asp Pro Ser Ile Met Gly Tyr Gly Pro Val
                      280
                                       285
Pro Ala Ser Lys Leu Ala Leu Lys Lys Ala Gly Leu Ser Ala Ser Asp
                   295
                                    300
Ile Asp Leu Phe Glu Met Asn Glu Ala Phe Ala Ala Gln Ile Leu Pro
305 310 315
Cys Ile Lys Asp Leu Gly Leu Met Asp Gln Ile Asp Glu Lys Ile Asn
            325
                              330
Leu Asn Gly Gly Ala Ile Ala Leu Gly His Pro Leu Gly Cys Ser Gly
         340
                          345
                                           350
Ala Arg Ile Ser Thr Thr Leu Ile Asn Leu Met Glu Arg Lys Asp Ala
                      360
Gln Phe Gly Leu Ala Thr Met Cys Ile Gly Leu Gly Gln Gly Ile Ala
                   375
                                    380
Thr Val Phe Glu Arg Val
                390
<210> 9937
<211> 380
<212> PRT
<213> Enterobacter cloacae
```

<400> 9937

Gln His Val Tyr Arg Leu Lys Ser Val Ile Leu Arg Ile Ser Pro Ala 1 10 15 Pro Tyr Lys Leu Ala Trp Leu Asn Ser Glu Phe Ser Lys Gly Lys Val

```
25
Leu Arg Asn Arg Ser His Thr Phe Phe Ile Arg Asn Thr Glu Glu Leu
                       40
Met Gln Ser Lys Ile Asn Trp Ile Asp Asn Leu Arg Gly Ile Ala Cys
                  55
Leu Met Val Val Met Ile His Thr Thr Thr Trp Tyr Val Thr Asn Ala
                7.0
                                 7.5
His Ser Ile Ser Pro Val Asn Trp Asp Val Ala Asn Val Leu Asn Ser
           85
                  90
Ala Ser Arg Val Ser Val Pro Leu Phe Phe Met Ile Ser Gly Phe Leu
         100 105 110
Phe Phe Gly Glu Arg Ser Ala Gln Pro Arg His Phe Ile Arg Ile Val
     115 120
                            125
Ser Cys Leu Leu Phe Tyr Ser Ala Ile Ser Leu Leu Tyr Ile Val Leu
  130 135 140
Phe Thr Ser Ile Asn Ala Glu Arg Ser Leu Leu Asn Leu Leu Gln Lys
       150 155
Pro Val Phe Tyr His Leu Trp Phe Phe Phe Ala Ile Ile Val Ile Tyr
            165 170 175
Leu Val Ser Pro Leu Ile Gln Val Lys Asn Val Asn Gly Lys Met Leu
              185
         180
                                           190
Leu Ala Leu Met Val Val Ile Gly Ile Val Ala Asn Pro Asn Thr Val
 195
                       200
                                       205
Ser Gln Lys Ile Asp Gly Phe Glu Trp Leu Pro Val Asn Leu Tyr Ile
                   215
                                     220
Thr Gly Asp Thr Phe Tyr Tyr Val Leu Tyr Gly Met Leu Gly Arg Ala
              230
                               235
Ile Gly Met Met Glu Thr Gln Lys Arg Gly Ile Asn Trp Leu Cys Ala
             245
                              250
Ala Ala Phe Leu Val Gly Val Phe Ile Ile Ser Arg Gly Thr Leu His
          260
                           265
                                            270
Glu Leu Gln Trp Arg Gly Asn Phe Ala Asp Thr Trp Tyr Leu Tyr Cys
          280
 275
                                         285
Gly Pro Met Val Phe Ile Cys Ala Ile Ser Leu Leu Thr Leu Val Lys
                  295
                                     300
Asn Thr Leu Asn Ala Arg Pro Leu Pro Val Leu Gly Phe Ile Ser Arg
                                  315
                310
His Ser Leu Gly Ile Tyr Gly Phe His Ala Leu Val Ile His Ala Leu
             325
                              330
                                               335
Arg Thr Arg Gly Val Glu Leu Lys Ser Trp Pro Val Leu Asp Ile Val
                       345
          340
                                           350
Trp Ile Phe Thr Val Thr Leu Val Val Ser Leu Leu Leu Ser Met Leu
                       360
Leu Gln Arg Ile Asp Thr Arg Arg Phe Val Ser
                    375
```

```
<210> 9938
<211> 398
<212> PRT
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<213> Enterobacter cloacae

Leu Arg Gln Thr Ala Ile Thr Gly Ile Leu Ala Val Gly Met Val Phe

```
Val Ile Ile Ser Ala Glu Ile Asp Leu Ser Val Gly Ser Met Met Gly
           85
                          90
Leu Leu Gly Gly Val Ala Ala Ile Phe Asp Val Trp Leu Gly Trp Pro
        100
                     105
Leu Pro Leu Thr Ile Ala Val Thr Leu Val Leu Gly Leu Leu Leu Gly
          120
 115
                        125
Ala Trp Asn Gly Trp Trp Val Ala Tyr Arg Lys Val Pro Ser Phe Ile
130 135 140
Val Thr Leu Ala Gly Met Leu Ala Phe Arg Gly Ile Leu Ile Gly Ile
145 150 155
Thr Asn Gly Thr Thr Val Ser Pro Thr Ser Ala Ser Met Ser Gln Ile
         165 170 175
Gly Gln Ser Tyr Leu Ser Asp Gly Val Gly Phe Thr Ile Gly Val Val
       180 185 190
Gly Leu Met Ala Phe Val Ala Trp Gln Trp Arg Gly Arg Met Arg Arg
   195 200 205
Gln Ala Leu Gly Leu Ala Ser Pro Ala Ser Thr Ser Val Val Gly Arg
 210 215 220
Gln Ala Leu Thr Ala Val Ile Val Leu Gly Ala Ile Trp Leu Leu Asn
225 230 235 240
Asp Tyr Arg Gly Val Pro Thr Pro Val Leu Leu Leu Ala Leu Leu Leu
      245 250 255
Leu Gly Gly Met Phe Met Ala Thr Arg Thr Ala Phe Gly Arg Arg Ile
       260 265 270
Tyr Ala Ile Gly Gly Asn Leu Glu Ala Ala Arg Leu Ser Gly Ile Asn
     275 280
                        285
Val Glu Arg Thr Lys Leu Ala Val Phe Ala Ile Asn Gly Leu Met Val
290 295
                                 300
Ala Ile Ala Gly Leu Ile Leu Ser Ser Arg Leu Gly Ala Gly Ser Pro
     310
                             315
Ser Ala Gly Asn Ile Ala Glu Leu Asp Ala Ile Ala Ala Cys Val Ile
          325
                          330
                                         335
Gly Gly Thr Ser Leu Ala Gly Gly Ile Gly Ser Val Ala Gly Ala Val
        340
                     345 350
Met Gly Ala Phe Ile Met Ala Ser Leu Asp Asn Gly Met Ser Met Met
                    360
     355
                                   365
Asp Val Pro Thr Phe Trp Gln Tyr Ile Val Lys Gly Ala Ile Leu Leu
370 375
                                 380
Leu Ala Val Trp Met Asp Ser Ala Thr Lys Arg Arg Ala
               390
```

<210> 9939 <211> 394 <212> PRT

<213> Enterobacter cloacae

<400> 9939

Ala Met Phe Glu Lys Arg His Arg Ile Thr Leu Leu Phe Asn Ala Asn 100 15 12 Lys Ala Tyr Asp Arg Gln Val Val Glu Gly Val Gly Glu Tyr Leu Gln 20 30 30 Ala Ser Gln Ser Glu Trp Asp 11e Phe Ile Glu Glu Asp Phe Arg Thr 35 Arg Leu Glu Asn Ile Lys Asp 7e Leu Gly Asp Gly Val Ile Ala Asp 5e Arg Leu Glu Asn Ile Lys Asp 7e Leu Gly Asp Gly Val Ile Ala Asp 5e Arg Leu Glu Asn Ile Lys Asp 7e Leu Gly Asp Gly Val Ile Ala Asp 6e Asp Asp 8e Asp 8e

```
105
                                     110
Leu His Leu Lys Glu Lys Gly Val His Arg Phe Ala Phe Tyr Gly Leu
   115
           120
                          125
Pro Ala Thr Ser Gly Lys Arg Trp Ala Met Glu Arg Glu Tyr Ala Phe
      135
                     140
Cys Gln Leu Val Ala Gln Glu Lys Tyr Arg Gly Val Val Tyr Gln Gly
    150 155
Leu Glu Thr Ala Pro Glu Asn Trp Gln His Ala Gln Asn Arg Leu Ala
      165 170 175
Asp Trp Leu Gln Thr Leu Pro Pro Gln Thr Gly Ile Ile Ala Val Thr
     180 185 190
Asp Ala Arg Ala Arg His Val Leu Gln Val Cys Glu His Leu His Ile
   195 200 205
Pro Val Pro Glu Lys Leu Cys Val Ile Gly Ile Asp Asn Glu Glu Leu
 210 215 220
Thr Arg Tyr Leu Ser Arg Val Ala Leu Ser Ser Val Ala Gln Gly Thr
225 230 235
Arg Gln Met Gly Tyr Gln Ala Ala Lys Leu Leu His Arg Leu Leu Asp
        245
               250 255
Asn Glu Ser Leu Pro Leu Gln Arg Leu Leu Val Pro Pro Val Arg Val
       260 265 270
Val Glu Arg Arg Ser Thr Asp Tyr Arg Ser Leu Asn Asp Pro Ala Val
275 280
Ile Gln Ala Met His Tyr Ile Arg Asn His Ala Cys Lys Gly Ile Lys
 290 295
                               300
Val Asp Gln Val Leu Asp Ser Val Gly Ile Ser Arg Ser Asn Leu Glu
           310
                          315
Lys Arg Phe Lys Glu Glu Val Gly Glu Thr Ile His Ala Val Ile His
          325 330
Ala Glu Lys Leu Glu Lys Ala Arg Ser Leu Leu Ile Ser Thr Ser Leu
                      345 350
Ser Ile Asn Glu Ile Ser Gln Met Cys Gly Tyr Pro Ser Leu Gln Tyr
355
                   360
                                  365
Phe Tyr Ser Val Phe Arg Lys Glu Tyr Asp Thr Thr Pro Lys Glu Tyr
370 375
Arg Glu Arg Tyr Ser Glu Val Leu Leu
```

<210> 9940

<211> 466

<212> PRT

<213> Enterobacter cloacae

<400> 9940

Gly Ala Phe Thr Arg Thr Ile His His Thr Asn Thr Asn Pro Pro His 10 Lys Thr Thr Asn Pro Thr Thr Ser Ala Asp Leu His Gln His Gly Ala 20 25 30 Gly Val Met Val Thr Ala Phe His Ile Lys Pro Asp Arg Ser Pro Ala 4.0 4.5 Met Thr Phe Ser Leu Phe Gly Asp Lys Phe Thr Arg His Ser Gly Ile 50 55 Thr Arg Leu Met Glu Asp Leu Asn Asp Gly Leu Arg Thr Pro Gly Ala 75 7.0 Ile Met Leu Gly Gly Gly Asn Pro Ala Gln Ile Pro Glu Met Asn Thr 90 85 Tyr Phe Gln Thr Leu Leu Ala Glu Met Leu Glu Asn Gly Lys Ala Thr 100 105 110 Asp Ala Leu Cys Asn Tyr Asp Gly Pro Gln Gly Lys Thr Glu Leu Leu 115 120 Thr Leu Leu Ala Ala Met Leu Arg Glu Ala Leu Gly Trp Asp Ile Glu

```
135
                                   140
Pro Gln Asn Ile Ala Leu Thr Asn Gly Ser Gln Ser Ala Phe Phe Tyr
             150
                                155
Leu Phe Asn Leu Phe Ala Gly Arg Arg Ala Asp Gly Thr Thr Lys Lys
          165
                    170
Val Leu Phe Pro Leu Ala Pro Glu Tyr Ile Gly Tyr Ala Asp Ala Gly
        180
             185
                              190
Leu Glu Glu Asp Leu Phe Val Ser Ala Arg Pro Asn Ile Glu Leu Leu
    195 200
                          205
Pro Glu Gly Gln Phe Lys Tyr His Val Asp Phe Glu His Leu His Ile
 210 215 220
Gly Glu Glu Thr Gly Met Ile Cys Val Ser Arg Pro Thr Asn Pro Thr
    230 235
Gly Asn Val Ile Thr Asp Asp Glu Leu Met Lys Leu Asp Ala Leu Ala
                 250 255
           245
Asn Gln His Gly Ile Pro Leu Val Ile Asp Asn Ala Tyr Gly Val Pro
         260 265 270
Phe Pro Gly Ile Ile Phe Ser Glu Ala Arg Pro Leu Trp Asn Pro Asn
     275 280 285
Ile Ile Leu Cys Met Ser Leu Ser Lys Leu Gly Leu Pro Gly Ser Arg
 290 295
Cys Gly Ile Ile Ile Ala Asn Glu Lys Ile Ile Thr Ala Ile Thr Asn 305 $\rm 310$ 315 320
Met Asn Gly Ile Ile Ser Leu Ser Pro Gly Gly Ile Gly Pro Ala Met
            325 330
Met Cys Glu Met Ile Arg Arg Asn Asp Leu Leu Arg Leu Ser Asn Glu
        340 345 350
Val Ile Lys Pro Phe Tyr Ser Gln Arg Val Gln Glu Thr Ile Ala Ile
                      360
                                      365
Leu Arg Arg Tyr Leu Pro Glu Glu Arg Cys Leu Ile His Lys Pro Glu
370
                  375
                       380
Gly Ala Ile Phe Leu Trp Leu Trp Phe Lys Asp Leu Pro Ile Thr Thr
      390
                               395 400
Glu Leu Leu Tyr Gln Arg Leu Lys Lys Arg Gly Val Leu Met Val Pro
            405 410
Gly Asp Tyr Phe Phe Pro Gly Leu Asp Lys Pro Trp Pro His Thr His
         420 425
Gln Cys Met Arg Met Asn Tyr Val Pro Asp Pro Glu Lys Ile Glu Ala
                     440
                                      445
Gly Val Lys Ile Leu Ala Glu Glu Ile Glu Asn Ala Trp Arg Glu Ala
                   455
Gly
465
<210> 9941
<211> 339
<212> PRT
<213> Enterobacter cloacae
<400> 9941
Lys Asn Arg Arg Thr Gly Met Lys Val Thr Phe Glu Glu Leu Lys Ala
Ala Phe Asn Arg Val Leu Leu Asp Arg Gly Val Lys Ala Asp Thr Ala
  20
                         25
                                          30
Asp Ala Cys Ala Glu Met Phe Ala Arg Thr Thr Glu Ser Gly Val Tyr
                      4.0
Ser His Gly Val Asn Arg Phe Pro Arg Phe Ile Gln Gln Leu Asp Ala
                  55
Gly Asp Ile Ile Pro Asp Ala Gln Pro Lys Arg Val Thr Thr Leu Gly
               70
                               75
```

Ala Ile Glu Gln Trp Asp Ala Gln Arg Ser Ile Gly Asn Leu Thr Ala

Lys Lys Met Met Asp Arg Ala Thr Glu Leu Ala Ser Asp His Gly Ile 100 105 Gly Leu Val Ala Leu Arg Asn Ala Asn His Trp Met Arg Gly Gly Ser 115 120 Tyr Gly Trp Gln Ala Ala Glu Lys Gly Tyr Ile Gly Ile Cys Trp Thr 130 135 140 Asn Ser Ile Ala Val Met Pro Ala Trp Gly Ser Lys Glu Cys Cys Ile 145 150 155 Gly Thr Asn Pro Leu Ile Val Ala Ile Pro Ser Asn Pro Ile Thr Met 165 170 175 Val Asp Met Ser Met Ser Met Phe Ser Tyr Gly Met Leu Glu Val Asn 180 185 190 Arg Leu Ala Gly Arg Glu Leu Pro Val Asp Gly Gly Phe Asp Asp Glu 195 200 205 Gly Asn Leu Thr Arg Glu Pro Gly Val Ile Glu Lys Asn Arg Arg Ile 210 215 220 Leu Pro Met Gly Tyr Trp Lys Gly Ser Gly Leu Ser Ile Val Leu Asp 225 230 235 Met Ile Ala Thr Leu Leu Ser Asp Gly Ala Ser Val Ala Glu Val Thr 245 250 Gln Asp Asn Ser Asp Glu Tyr Gly Val Ser Gln Ile Phe Ile Ala Val 265 260 Glu Val Asp Arg Leu Ile Asp Gly Pro Thr Arg Asp Ala Lys Leu Gln 275 280 285 Arg Ile Met Asp Phe Ile Thr Thr Ala Glu Arg Ala Asp Glu Asn Val 290 295 300 Ala Val Arg Leu Pro Gly His Glu Phe Thr Arg Leu Leu Glu Glu Asn 305 310 315 Arg Arg Asp Gly Ile Thr Ile Asp Asp Ser Val Trp Ala Lys Ile Gln 325 330 Ser Leu

<210> 9942 <211> 453 <212> PRT

<213> Enterobacter cloacae

<400> 9942 Arg Ile His Phe Pro Val Thr Phe Thr Glu Ile Leu Thr Met Asn Ile 10 Ser Ser Asn Ala Leu His Ala Asp Ile Pro Arg Gln Arg Trp Leu Arg 25 30 Ile Ile Pro Pro Ile Leu Ile Ala Cys Ile Ile Ser Tyr Met Asp Arg 35 40 Val Asn Ile Ala Phe Ala Met Pro Gly Gly Met Asp Glu Glu Leu Gly 60 50 55 Ile Ser Ala Thr Met Ala Gly Leu Ala Gly Gly Ile Phe Phe Ile Gly 75 80 70 Tyr Leu Phe Leu Gln Val Pro Gly Gly Lys Ile Ala Val His Gly Ser 85 90 Gly Lys Lys Phe Ile Gly Trp Ser Leu Val Ala Trp Ala Val Ile Ser 100 105 Val Leu Thr Gly Leu Val Thr Asn Gln Tyr Gln Leu Leu Val Leu Arg 120 115 Phe Leu Leu Gly Val Ala Glu Gly Gly Met Leu Ser Val Val Leu Thr 135 140 Met Ile Ser Asn Trp Phe Pro Asp Ala Glu Arg Gly Arg Ala Asn Ala 150 155 Ile Val Ile Met Phe Val Pro Ile Ala Gly Ile Ile Thr Ala Pro Leu

165 170 Ser Gly Trp Ile Ile Thr Ala Leu Asp Trp Arg Trp Leu Phe Ile Ile 180 185 Glu Gly Leu Met Ser Val Val Val Leu Val Leu Trp Ala Phe Thr Val 195 200 205 Tyr Asp Arg Pro Gln Glu Ala Arg Trp Ile Ser Glu Ala Glu Lys Asn 215 220 Tyr Leu Val Gln Thr Leu Ala Ala Glu Gln Gln Ala Ile Ala Gly Lys 230 235 Glu Val Lys Asn Ala Ser Leu Ser Ala Val Leu Ser Asp Lys Thr Met 245 250 255 Trp Gln Leu Ile Ala Leu Asn Phe Phe Tyr Gln Thr Gly Ile Tyr Gly 265 270 260 Tyr Thr Leu Trp Leu Pro Thr Ile Leu Lys Glu Leu Thr His Thr Ser 275 280 285 Ile Gly Gln Val Gly Met Leu Ala Ile Leu Pro Tyr Ile Gly Ala Ile 290 295 300 Ala Gly Met Phe Leu Phe Ser Ser Leu Ser Asp Arg Thr Gly Lys Arg 305 310 315 Lys Leu Phe Val Ser Leu Pro Leu Ile Gly Phe Ala Leu Cys Met Phe 325 330 Leu Ser Val Ala Leu Lys Glu His Thr Trp Leu Ala Tyr Ala Ala Leu 340 345 Val Gly Cys Gly Phe Phe Leu Gln Ser Ala Ala Gly Val Phe Trp Thr 355 360 365 Ile Pro Ala Arg Leu Phe Ser Ala Glu Met Ala Gly Gly Ala Arg Gly 370 375 380 Val Ile Asn Ala Leu Gly Asn Leu Gly Gly Phe Cys Gly Pro Tyr Ala 390 395 Val Gly Val Leu Ile Thr Leu Tyr Ser Lys Asp Ala Gly Val Tyr Cys 410 405 Leu Ala Val Ser Leu Ala Leu Ala Ser Leu Leu Ala Leu Leu Pro 420 425 Ala Lys Cys Asp Ala Gly Ala Glu Pro Asn Pro Thr Val Thr Pro His 435 440 Lys Arg Ala Ala

450 <210> 9943

<211> 307 <212> PRT

<213> Enterobacter cloacae

<400> 9943 Ser Ala Ala Gly Gly Thr Gly Ile Pro Phe Ala Asn Pro Arg His Leu Gly Arg Val Thr Met Arg Gln His Pro Leu Gly Ile Tyr Glu Lys Ala 20 25 Leu Pro Lys Asp Leu Ser Trp Pro Glu Arg Leu Val Leu Ala Lys Ser 40 45 Cys Gly Phe Asp Phe Val Glu Met Ser Val Asp Glu Thr Asp Glu Arg 55 Leu Ser Arg Leu Glu Trp Ser Thr Thr Gln Arg Ala Ser Leu Val Glu 70 7.5 Ala Met Leu Glu Thr Gly Val Ala Ile Pro Ser Met Cys Leu Ser Ala 90 His Arg Arg Phe Pro Phe Gly Ser Arg Asp Glu Ile Val Arg Glu Arg 105 110 Ala Arg Glu Ile Met Thr Lys Ala Ile Arg Leu Ala Arg Asp Leu Gly 120 Ile Arg Thr Ile Gln Leu Ala Gly Tyr Asp Val Tyr Tyr Glu Glu His

```
135
Asp Glu Gly Thr Gln Gln Arg Phe Ala Glu Gly Leu Ala Trp Ala Val
               150
                                155
Glu Gln Ala Ala Ala Gln Val Met Leu Ala Val Glu Ile Met Asp
           165
                     170
                                      175
Thr Ala Phe Met Asn Ser Ile Ser Lys Trp Lys Lys Trp Asp Asp Met
       180 185
                                         190
Leu Ala Ser Pro Trp Phe Ser Val Tyr Pro Asp Val Gly Asn Leu Ser
   195 200
                            205
Ala Trp Gly Asn Asp Val Thr Ala Glu Leu Thr Leu Gly Ile Asp Arg
 210
       215 220
Ile Ala Ala Ile His Leu Lys Asp Thr Arg Pro Val Thr Glu Gln Ser
225 230 235
Pro Gly Gln Phe Arg Asp Val Pro Phe Gly Glu Gly Cys Val Asp Phe
            245 250
Val Gly Val Phe Asn Thr Leu Asn Gln Leu Asn Tyr Arg Gly Ala Phe
         260 265
                                           270
Leu Ile Glu Met Trp Thr Glu Lys Ala Lys Glu Pro Val Leu Glu Ile
      275 280
Ile Gln Ala Arg Arg Trp Ile Glu Ala Arg Met Gln Glu Gly Gly Met
                    295
Thr Cys
305
<210> 9944
<211> 476
<212> PRT
<213> Enterobacter cloacae
<400> 9944
Lys Asn Arg Leu Ser Arg Ser Tyr Pro Met Thr Ser Thr Pro Ile Thr
                             10
Asp Ala Glu Val Ala Lys Gln Ala Ala Asp Glu Arg Leu Ser Val Arg
Glu Lys Ile Gly Tyr Gly Leu Gly Asp Ala Gly Gly Thr Val Ile Thr
35
                       4.0
                                        4.5
Cys Leu Ile Met Asn Phe Leu Thr Phe Phe Tyr Thr Asp Val Phe Gly
                   5.5
                                     60
Leu Thr Pro Ala Leu Val Gly Thr Leu Phe Ile Ala Leu Arg Val Phe
               70
                               75
Asp Ala Ile Ser Asp Pro Val Met Gly Val Ile Ala Asp Arg Thr Gln
             85
                              90
Ser Arg Trp Gly Arg Phe Arg Pro Trp Gln Leu Trp Val Ala Leu Pro
         100
                          105
                                           110
Ile Gly Ile Val Gly Val Leu Thr Phe Thr Val Pro Asp Ala Ser Met
      115
                       120
                                        125
Gly Val Lys Ile Ala Trp Ala Phe Gly Thr Tyr Leu Leu Leu Ser Val
   130
                    135
                                     140
Gly Tyr Thr Ala Ile Asn Val Pro Tyr Cys Ala Leu Ile Asn Thr Met
                150
145
                                 155
Thr Thr Arg His Asn Glu Val Ile Ser Cys Gln Ser Trp Arg Phe Val
             165
                              170
Leu Cys Gly Val Ala Gly Phe Leu Val Ser Val Gly Leu Pro Trp Leu
                   185
          180
                                        190
Val Ser Glu Leu Gly Gln Gly Asn Thr Ala Arg Gly Tyr Gln Leu Gly
                       200
      195
                                         205
Val Gly Val Leu Cys Ala Ile Ala Val Val Met Phe Leu Cys Cys Phe
  210
                    215
                                     220
Phe Trp Val Arg Glu Arg Val Pro Leu Ala Leu Met Gly Lys Phe Thr
```

230

235

Leu Arg Glu His Leu Ala Gly Leu Arg Lys Asn Asp Gln Leu Leu Leu

245 250 Met Leu Val Met Ser Phe Leu Leu Ile Asn Val Phe Asn Ile Arg Gly 260 265 Gly Gly Tyr Met Tyr Phe Ile Thr Tyr Val Leu Gln Gly Ser Thr Ala 280 285 Tyr Thr Ser Leu Phe Phe Thr Met Val Thr Phe Ala Ala Ile Leu Gly 295 300 Ala Val Ile Val Ser Pro Leu Ser Arg Arg Ile Asp Thr Val Lys Leu 305 310 315 Tyr Tyr Tyr Thr Asn Leu Val Leu Ala Ala Leu Ala Val Gly Met Trp 325 330 335 Phe Leu Pro Gly Gly Pro Ala His Gln Thr Leu Trp Leu Ile Val Ile 340 345 350 Leu Ser Asn Gly Val Ile Leu Gly Phe Thr Leu Pro Leu His Phe Ser 355 360 365 Leu Met Ala Phe Ala Asp Asp Tyr Gly Glu Trp Lys Thr Gly Val Arg 370 375 380 Ser Ser Gly Met Asn Phe Ala Phe Asn Leu Phe Phe Ile Lys Leu Ala 390 395 Trp Ala Ser Ser Ala Gly Ile Ile Ser Leu Val Phe Ile Ala Val Ala 405 410 Tyr Gln Pro Gly Ala Gly Asn Gln Thr Pro Ala Ser Leu Gln Gly Ile 425 Thr Ala Met Glu Thr Leu Leu Pro Ala Leu Phe His Leu Leu Leu Ala 435 440 445 Val Ala Ile Arg Trp Cys Arg Leu Asn Asn Pro Val Met Ser Arg Ile 450 455 Ala Thr Asp Leu Arg Gln Arg His Val Gln Ser

<210> 9945 <211> 210 <212> PRT

<213> Enterobacter cloacae

<400> 9945 Arg Ser Cys Gly Gly Gln Arg Ile Gln Arg Asn Gln Met Met Gln 10 Ser Pro Ala Gln Val Ser Leu Arg Pro Asn Asn Arg Leu Ser Asp Met 25 Gln Ala Ile Met Glu Gln Thr Gln Ala Phe Glu Asn Arg Val Leu Glu 4.0 Arg Leu Asn Ala Gly Lys Thr Val Arg Ser Phe Leu Ile Ala Ala Val 55 60 Glu Leu Leu Thr Glu Ala Val Asn Ile Leu Val Leu Gln Val Phe Arg 70 75 Lys Asp Asp Tyr Ala Val Lys Tyr Ala Val Glu Pro Leu Leu Asp Gly 85 90 Asp Gly Pro Leu Gly Asp Leu Ser Val Arg Leu Lys Leu Ile Tyr Gly 100 105 Leu Gly Val Leu Asn Arg Gln Glu Tyr Glu Asp Ala Glu Leu Leu Met 120 Ala Leu Arg Glu Glu Leu Asn His Asp Gly Asn Glu Tyr Thr Phe Thr 135 140 Asp Asp Glu Ile Leu Gly Pro Phe Gly Glu Leu His Cys Val Ser Ala 150 155 Leu Pro Pro Ala Pro Gln Phe Asp Asn Ser Asp Pro Glu Leu Tyr Ala 165 170 Met Gln Lys Leu Arg Tyr Gln Gln Val Val Arg Ser Thr Met Val Leu 185 Ser Leu Thr Glu Leu Ile Ser Lys Ile Ser Leu Lys Lys Ala Phe Gln

14

03

13

13

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200
                                          205
      195
Lys
   210
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<210> 9946 <211> 317 <212> PRT

<213> Enterobacter cloacae

<220> <221>UNSURE

<222>(293)

<400> 9946 Tyr Phe Gln Gly Glu Gln Ser Met Ile Ile Ser Ala Ala Ser Asp Tyr 1 10 Arg Ala Ala Ala Gln Arg Ile Leu Pro Pro Phe Leu Phe His Tyr Ile 25

Asp Gly Gly Ala Tyr Ala Glu Tyr Thr Leu Arg Arg Asn Val Glu Asp 40

Leu Ser Glu Val Ala Leu Arg Gln Arg Val Leu Lys Asn Met Ser Asp 50 55 60

Leu Ser Leu Glu Thr Lys Leu Phe Asn Glu Thr Leu Ser Met Pro Val 75 80 70 Ala Leu Ala Pro Val Gly Leu Cys Gly Met Tyr Ala Arg Arg Gly Glu

90 8.5 Val Gln Ala Ala Ala Ala Ala Asp Ala Lys Gly Ile Pro Phe Thr Leu 100 105 110

Ser Thr Val Ser Val Cys Pro Ile Glu Glu Val Ala Pro Thr Ile Lys 120 115 125

Arg Pro Met Trp Phe Gln Leu Tyr Val Leu Arg Asp Arg Gly Phe Met 130 135 140

Arg Asn Ala Leu Glu Arg Ala Lys Ala Ala Gly Cys Ser Thr Leu Val 145 150 155 160 Phe Thr Val Asp Met Pro Thr Pro Gly Ala Arg Tyr Arg Asp Ala His

170 175 165 Ser Gly Met Ser Gly Pro Asn Ala Ala Leu Arg Arg Tyr Trp Gln Ala

180 185 190 Val Thr His Pro Gln Trp Ala Trp Asp Val Gly Leu Asn Gly Arg Pro

195 200 205 His Asp Leu Gly Asn Ile Ser Ala Tyr Leu Gly Lys Pro Thr Gly Leu

210 215 220 Glu Asp Tyr Ile Gly Trp Leu Ala Asn Asn Phe Asp Pro Ser Ile Ser

230 235 Trp Lys Asp Leu Glu Trp Ile Arg Glu Phe Trp Asp Gly Pro Met Val

245 250 Ile Lys Gly Ile Leu Asp Pro Gly Arg Cys Pro Arg Arg Gly Ala Val

270 260 265 Leu Ala Pro Asn Gly Ile Val Val Ser Asn Gln Trp Gly Pro Pro Ser 280 285

Leu Asp Gly Gly Xaa Leu Leu Arg Pro Ala Pro Leu Arg Ala Ile Ala 295 300

Asp Ala Gly Glu Arg Gly Ile Leu Gly Thr Trp Ala Glu 310 315

<210> 9947

<211> 718 <212> PRT

<213> Enterobacter cloacae

<400> 9947

Leu Pro Asn Phe Ala Arg Asp His Ser Ser Leu Arg Val Leu Leu Ala 10 Glu Ser Arg Arg Gly Gly Val Phe Pro Leu Ser Arg Met Ala His Trp 25 Ser Lys Met Pro Arg Gln Glu Asn Gly Met Lys Arg Thr Ala Leu Ala 35 40 Val Leu Met Leu Pro Ala Phe Ala His Ala Asp Trp Ser Ser Pro Gly 55 Phe Asn Ala Phe Ser Ala Glu Gly Thr Gly Val Phe Thr Ser Gln Ala 75 7.0 Thr Leu Ala Lys Gly Thr Arg Pro Leu Thr Leu Ser Leu Asp Asn Ala 85 90 95 Cys Trp Gln Pro Thr Gly Ala Ile Lys Leu Asn Glu Met Leu Ser Leu 100 105 110 Lys Pro Cys Glu Gly Thr Pro Pro Gln Trp Arg Leu Phe Arg Asp Gly 115 120 125 Val Tyr Gln Met Arg Ile Asp Thr Arg Ser Gly Thr Pro Thr Leu Met 130 135 140 Leu Thr Val Gln Ser Ala Ala Pro Gln Pro Val Ala Asn Val Thr Arg 150 155 Gln Cys Pro Lys Trp Asp Gly Lys Pro Leu Thr Ile Asp Val Val Asn 165 170 175 Thr Phe Pro Glu Gly Thr Val Val Arg Asp Phe Tyr Ser Lys Gln Thr 180 185 190 Ala Thr Val Gln Asn Gly Lys Val Thr Leu Gln Pro Ala Ala Asn Ser 200 205 Asn Gly Leu Leu Leu Glu Arg Ala Glu Thr Asp Lys Pro Ala Pro 210 215 220 Phe Ser Trp Gln Asn Ala Thr Val Tyr Phe Val Leu Thr Asp Arg Phe 225 230 235 Val Asn Gly Asp Pro Thr Asn Asp Asn Ser Tyr Gly Arg His Lys Asp 245 250 Gly Met Gln Glu Ile Gly Thr Phe His Gly Gly Asp Leu Lys Gly Leu 260 265 270 Thr Ser Lys Leu Asp Tyr Leu Gln Gln Leu Gly Val Asn Ala Leu Trp 275 280 285 Ile Ser Ser Pro Leu Glu Gln Ile His Gly Trp Val Gly Gly Gly Thr 295 300 Lys Gly Asp Phe Pro His Tyr Ala Tyr His Gly Tyr Tyr Thr Gln Asp 310 315 Trp Thr Lys Leu Asp Ala Asn Met Gly Asn Glu Asp Asp Leu Arg Gln 325 330 335 Leu Val Asp Asp Ala His Arg Arg Gly Ile Arg Val Leu Phe Asp Ile 345 350 340 Val Met Asn His Ala Gly Tyr Ala Thr Leu Ala Asp Met Gln Glu Tyr 355 360 Gln Phe Gly Ala Leu Tyr Leu Gln Gly Asp Glu Leu Lys Lys Thr Leu 375 380 Gly Glu Arg Trp Thr Asp Trp Lys Pro Gly Ala Gly Gln Ser Trp His 390 395 Ser Phe Asn Asp Tyr Ile Asn Phe Ser Asp Lys Ala Ala Trp Glu Lys 405 410 Trp Trp Gly Lys Lys Trp Ile Arg Thr Asp Ile Gly Asp Tyr Asp Asn 420 425 Pro Gly Phe Asp Asp Leu Thr Met Ser Leu Ala Phe Leu Pro Asp Leu 440 445 Lys Thr Glu Ser Lys Ile Pro Ser Gly Leu Pro Asn Phe Tyr Gln His 455 460 Lys Pro Asp Thr Asn Ala Lys Val Met Thr Asn Phe Thr Pro Arg Asp 470 475 Tyr Leu Thr His Trp Leu Ser Gln Trp Val Arg Asp Tyr Gly Ile Asp

```
490
Gly Phe Arg Val Asp Thr Ala Lys His Val Glu Pro Glu Ala Trp Leu
       500
                505
Gln Leu Lys Asn Gln Ala Ser Gln Ala Leu Ala Ala Trp Lys Ala Ala
    515 520
                          525
Asn Pro Asp Lys Lys Leu Asp Asp Ala Pro Phe Trp Met Thr Gly Glu
 530 535 540
Ser Trp Gly His Gly Val Met Gln Ser Asp Tyr Tyr Arg His Gly Phe
   550 555
Asp Ala Met Ile Asn Phe Asp Tyr Gln Glu Gln Ala Ala Lys Ala Val
         565 570 575
Asp Cys Leu Ala Asp Met Asp Leu Thr Trp Gln Gln Met Ala Glu Lys
      580 585 590
Leu Gln Ser Phe Asn Val Leu Ser Tyr Leu Ser Ser His Asp Thr Arg
     595 600 605
Leu Phe Arg Glu Gly Gly Gln Arg Ala Ala Glu Leu Leu Leu Ala
610 615 620
Pro Gly Ser Val Gln Ile Tyr Tyr Gly Asp Glu Ser Glu Arg Pro Phe
625 630 635
Gly Pro Thr Gly Ser Asp Pro Leu Gln Gly Thr Arg Ser Asp Met Asn 645 \hspace{1cm} 650 \hspace{1cm} 655
Trp Gln Asp Val Thr Gly Lys Gln Ala Leu Thr Val Ala His Trp Gln
             665 670
Leu Leu Gly Gln Phe Arg Ala Arg His Pro Ala Val Gly Glu Gly Lys
675 680 685
Gln Thr Thr Leu Ser Met Lys Glu Gly Tyr Gly Phe Val Arg Glu His
690 695 700
Lys Gly Asp Lys Val Met Val Val Trp Ala Gly Asn Gln
               710
<210> 9948
<211> 105
<212> PRT
<213> Enterobacter cloacae
<400> 9948
Ala Gly Gly Val Tyr Ala Ala Gln Arg Val Gly Gly Thr Gly Phe Asp
                            1.0
Ala Gly Gly Thr Ala Leu Ala Met Arg Ala Gln Ile Thr Phe Gln Arg
                        25
Leu Asn Ala Ile Phe His Asp Pro Asn Leu His Cys Pro Glu Arg Ala
3.5
                     40
Arg His His Thr Ala Phe Ala Ala Asp Thr Ala Arg Leu Leu Asn Glu
                  55
                       60
Pro Gly Ser Arg Ser Ala Val Asn Gly Pro Arg Arg Ala Asp Ile Arg
            70
                             75
Ala Gly Arg Ile Phe Thr Leu Val Ala Ala His Cys Arg Gly Glu Gly
            85
                            90
Phe Pro Leu Asn His Ala Asp Pro
         100
<210> 9949
<211> 221
<212> PRT
<213> Enterobacter cloacae
```

<400> 9949

 Ser Thr Val Gln Pro Ala Met Pro Asn Tyr Ser Ala Ser Trp Thr Ser

 1
 5
 10
 15

 Ser Pro Pro Gln Asn Ala Leu Met Lys Met Ser Pro Ser Val Cys Leu

 20
 25
 30

```
Asp Met Asn Leu Leu Ala Cys Trp Lys Lys Thr Ala Gly Thr Ala Ser
                     4.0
Pro Ser Thr Thr Ala Cys Gly Arg Lys Ser Ser Leu Cys Lys Glu Trp
 5.0
                  55
Val Met Ile Phe Gly His Ile Ala Gln Pro Asn Pro Cys Arg Leu Pro
      70
                              75
Leu Ala Ile Glu Lys Ala Leu Asn Phe Leu Arg Thr Thr Asp Phe Thr
         85 90
Thr Leu Ala Pro Gly Val Ile Glu Ile Glu Gly Arg Asn Ile Phe Ala
       100
                       105 110
Gln Val Leu Asp Leu Thr Thr Lys Glu Gln His Glu Asn Arg Pro Glu
   115 120 125
Val His Arg Arg Tyr Leu Asp Ile Gln Phe Leu Ala Trp Gly Glu Glu
       135 140
Lys Ile Gly Ile Ala Ile Asp Thr Gly Asn Asn Lys Ile Ser Glu Ser
              150 155
Leu Leu Glu Gln Arg Asp Ile Ile Phe Tyr His Asp Ser Glu His Glu
                170 175
           165
Ser Phe Ile Glu Met Ile Pro Gly Ser Tyr Ala Ile Phe Phe Pro Gln
         180 185 190
Asp Val His Arg Pro Ala Cys Ile Lys Asn Lys Gly Ser Ala Ile Arg
   195 200 205
Lys Ile Val Val Lys Val Ala Ile Ser Glu Leu Asp
  210
                  215
```

<210> 9950 <211> 222 <212> PRT

<213> Enterobacter cloacae

<400> 9950 Gly Val Arg Pro Met Ser Arg Pro Leu Leu Gln Leu Ala Leu Asp His 15 1.0 Thr Ser Leu Gln Ala Ala Gln Arg Asp Val Ala Thr Leu Ser Asp His 30 20 25 Val Asp Ile Val Glu Ala Gly Thr Ile Leu Cys Leu Thr Glu Gly Leu 35 4.0 Asn Ala Val Arg Ala Leu Arg Ala Gln Cys Pro Asp Lys Ile Ile Val 55 60 Ala Asp Trp Lys Val Ala Asp Ala Gly Glu Thr Leu Ala Glu Gln Ala 7.0 75 Phe Gly Ala Gly Ala Asn Trp Met Thr Ile Ile Cys Ala Ala Pro Leu 85 90 Ala Thr Val Glu Arg Gly His Glu Val Ala Leu Arg Gly Gly Gly Glu 100 105 110 Ile Gln Met Glu Leu Phe Gly Asn Trp Thr Leu Asp Asp Ala Arg Ala 120 125 Trp His Arg Ile Gly Val Lys Gln Ala Ile Tyr His Arg Gly Arg Asp 135 Ala Gln Ala Ser Gly Gln Gln Trp Gly Glu Ala Asp Leu Ser Lys Met 150 155 Lys Ala Leu Ser Asp Ile Gly Leu Gln Leu Ser Ile Thr Gly Gly Ile 165 170 Thr Pro Ala Asp Leu Ser Leu Phe Lys Gln Ile Asn Val Lys Ala Phe 180 185 190 Ile Ala Gly Arg Ala Leu Ala Gly Ala Asp Asn Pro Pro Gln Val Ala 195 200 205 Gln Ala Phe His Ser Gln Ile Arg Asp Ile Trp Gly Glu 210 215

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<211> 669
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<212> PRT

<213> Enterobacter cloacae

<400> 9951 Cys Arg Ala Leu Pro Pro Ile Cys Ala Ser Val Met Tyr Ser Pro Glu 10 Glu Asn Asp Met Thr Ile Met Glu Ala Asp Leu His Gln Leu Lys Ile 25 Asn Asp Pro Phe Leu Gly Gln Tyr Gln Arg Leu Val Arg Asp Val Val 35 40 4.5 Ile Pro Tyr Gln Trp Asp Ala Leu Asn Asp Arg Val Ala Glu Ala Glu 55 Pro Ser His Ala Ile Ala Asn Phe Arg Ile Ala Ala Gly Leu Glu Gln 70 7.5 Gly Glu Phe Tyr Gly Met Val Phe Gln Asp Ser Asp Val Ala Lys Trp 85 90 Leu Glu Ala Val Ala Trp Ser Leu Cys Gln Lys Pro Asp Ala Glu Leu 100 105 110 Glu Lys Thr Ala Asp Glu Val Ile Glu Leu Val Ala Ala Ala Gln Cys 115 120 Glu Asp Gly Tyr Leu Asn Thr Tyr Phe Thr Val Lys Ala Pro Ala Glu 130 135 140 Arg Trp Thr Asn Leu Ala Glu Cys His Glu Leu Tyr Cys Ala Gly His 145 150 155 Met Ile Glu Ala Gly Val Ala Tyr Phe Gln Gly Thr Gly Lys Arg Arg 165 170 Leu Leu Asp Val Val Cys Arg Leu Ala Asp His Ile Asp Ser Val Phe 185 190 180 Gly Pro Gly Glu Asn Gln Leu His Gly Tyr Pro Gly His Pro Glu Ile 195 200 205 Glu Leu Ala Leu Met Arg Leu Tyr Asp Val Thr Gln Glu Pro Arg Tyr 210 215 220 Leu Asn Leu Val Lys Tyr Phe Ile Glu Glu Arg Gly Ala Gln Pro His 230 235 Phe Tyr Asp Ile Glu Tyr Glu Lys His Gly Arg Thr Ser Tyr Trp Asn 250 245 Thr Tyr Gly Pro Ala Trp Met Val Lys Asp Lys Ala Tyr Ser Gln Ala 265 260 His Leu Pro Leu Ala Ala Gln Gln Thr Ala Ile Gly His Ala Val Arg 280 285 Phe Val Tyr Leu Met Ala Gly Met Ala His Leu Ala Arg Leu Ser Asn 295 290 300 Asp Glu Gly Lys Arg Gln Asp Cys Leu Arg Leu Trp Asn Asn Met Ala 315 310 Gln Arg Gln Leu Tyr Ile Thr Gly Gly Ile Gly Ser Gln Ser Ser Gly 330 325 Glu Ala Phe Ser Ser Asp Tyr Asp Leu Pro Asn Asp Thr Val Tyr Ala 340 345 Glu Ser Cys Ala Ser Ile Gly Leu Met Met Phe Ala Arg Arg Met Leu 360 355 365 Glu Met Glu Ala Asp Gly His Tyr Ala Asp Val Met Glu Arg Ala Leu 375 380 Tyr Asn Thr Val Leu Gly Gly Met Ala Leu Asp Gly Lys His Phe Phe 390 395 Tyr Val Asn Pro Leu Glu Val His Pro Lys Thr Leu Ser Phe Asn His 405 410 Ile Tyr Asp His Val Lys Pro Val Arg Gln Arg Trp Phe Gly Cys Ala 425 Cys Cys Pro Pro Asn Ile Ala Arg Val Leu Thr Ser Leu Gly His Tyr 440

```
Ile Tyr Thr Val Arg Pro Asp Ala Leu Leu Ile Asn Leu Tyr Val Gly
 450
              455
Asn Asp Val Ala Ile Pro Val Gly Asp Asn Ile Leu Gln Leu Arg Ile
           470
                  475
Ser Gly Asn Tyr Pro Trp His Glu Gln Val Lys Ile Glu Ile Thr Ser
         485 490
Pro Val Pro Val Thr His Thr Leu Ala Leu Arg Leu Pro Asp Trp Cys
       500 505 510
Ala Glu Pro Ala Val Ser Leu Asn Gly Gln Ala Ile Thr Gly Glu Val
 515 520
                                  525
Ser Arg Gly Tyr Leu Tyr Leu Asn Arg Ser Trp Gln Glu Gly Asp Thr
530 535 540
Leu Thr Leu Thr Leu Pro Met Pro Val Arg Arg Val Tyr Gly Asn Pro
545 550 555 560
Gln Val Arg Gln Gln Ala Gly Lys Val Ala Leu Gln Arg Gly Pro Leu
           565 570
Ile Tyr Cys Leu Glu Glu Ala Asp Asn Gly Ala Asn Leu His Asn Leu
        580 585 590
Ser Leu Arg Gln Asp Ser Ala Phe Arg Val Phe Glu Gly Lys Gly Ile
                   600 605
 595
Phe Ala His Lys Met Leu Ile Gln Ala Glu Gly Ile Gly Cys Gln Ala
                 615 620
 610
Lys Asp Thr Asp Ala Leu Trp Gln Tyr Asp His Ser Pro Val Glu Arg
              630
                  635
Gln Pro Arg Thr Leu Thr Phe Ile Pro Trp Phe Ser Trp Ala Asn Arg
           645 650
Gly Glu Gly Glu Met Arg Ile Trp Val Asp Glu Ser
                       665
```

<210> 9952 <211> 164 <212> PRT

<213> Enterobacter cloacae

<400> 9952

Met Asp Ser Cys Thr Ser Ala Arg Leu Gly Gln Val Gln Thr Ser Pro 10 Trp Leu Asn Ala Asn Ser Ala Asn Pro Ser Ser Ala Leu Ser Lys Lys 20 25 Ala Ser Ser Ser Ser Ile Thr Ser Ala Lys Lys Met Phe Gly Asp Leu 35 40 4.5 Pro Pro Ser Ser Ser Val Thr Gly Met Met Phe Trp Val Ala Tyr Cys Met Ile Cys Trp Pro Thr Ser Val Glu Pro Val Asn Ala Thr Leu Ala 75 70 65 Ile Arg Phe Glu Val Ala Arg Tyr Ser Pro Ile Ser Pro Pro Ala Pro 90 85 Leu Thr Thr Leu Met Thr Pro Gly Gly Asn Arg Ser Pro Ile Thr Ser 100 105 Ile Ser Ser Ser Thr Glu Ser Gly Val Lys Arg Ala Gly Phe Ser Thr 120 125 115 Thr Gln Leu Pro Ala Ala Ser Ala Gly Ala Ile Phe Gln Leu Ala Ile 135 140 Ser Ser Gly Lys Phe His Gly Ile Ile Cys Pro Thr Thr Pro Ser Gly 150 155 Ser Trp Lys

<210> 9953 <211> 344 <212> PRT

<213> Enterobacter cloacae

```
<400> 9953
Val Tyr Asn Lys Gly Ser Ser Gly Trp Trp Phe Ser Arg Gln Ser Val
                             10
Thr Gly Leu Arg Ala Val Ser Arg Ile Thr Val Leu Tyr Val Ser Phe
       20
                   25
                                         30
Leu Pro Pro Glu Pro Tyr Leu Ile Ala Gln Gly Leu Met Arg Asn Asp
    35
                   40
                                    4.5
Ala Met Gln Leu Phe Ile Gly Phe Asp Val Gly Gly Thr His Ile Lys
       55
                                  60
His Gly Val Ile Asn Glu Asn Gly Glu Glu Leu Thr Ser Asp Glu Tyr
                               75
             7.0
Asp Thr Pro Asp Asp Glu Ser Thr Phe Lys Gln Lys Trp Lys Ala Val
           85 90
Val Asp Lys Tyr Arg Gln Glu His Glu Ile Val Gly Ile Gly Val Ser
         100 105
Phe Pro Gly His Ile Asn His His Thr Gly Glu Ala Ala Lys Ala Gly
     115 120 125
Ala Leu Asp Tyr Leu Asp Gly Glu Asn Leu Cys Glu Leu Phe Ala Gln
         135
                                  140
Leu Thr Asp Leu Pro Val Thr Thr Glu Asn Asp Ala Asn Cys Ala Ala
145 150
                      155
Leu Gly Glu Arg Trp Gln Gly Ala Gly Lys Asp Tyr Glu His Phe Val
                            170
            165
Cys Ile Thr Ile Gly Thr Gly Ile Gly Gly Ile Val Met Glu Gly
         180
                       185
                                          190
Asp Leu Tyr Arg Gly Ser His Tyr Arg Ala Gly Glu Phe Gly Val Leu
                      200
                                       205
      195
Pro Val Gly Asn Asn Gly Glu Pro Met His Glu Val Ala Ser Ala Ser
210
                  215
                                   220
Gly Leu Met Lys Ala Cys Arg Arg Ala Leu Ala Val Ser Glu Asp Glu
225 230 235
Met Pro Asp Gly Glu Glu Leu Phe Arg Arg Met Asp Ser Asp Val His
             245
                            250
Leu Arg Glu Ala Ile Glu Glu Trp Ala His Phe Leu Ser Arg Gly Ile
         260
                         265
                                         270
Tyr Ser Val Ile Ser Met Phe Asp Pro Gln Ala Val Leu Ile Gly Gly
                   280
Gly Ile Ser Glu Gln Glu Lys Ile Tyr Leu Leu Leu Asp Lys Tyr Leu
   290 295
                                   300
Gln Arg Phe Glu Glu Trp Glu Ala Leu Arg Val Pro Ile Leu Pro Cys
         310
                                                 320
                                315
Glu Leu Gly Asn Gln Ala Gly Arg Leu Gly Ala Val Trp Leu Ala Lys
                             330
             325
Gln Lys Gln Ala Arg Ser Ala
         340
```

<210> 9954 <211> 419

<212> PRT <213> Enterobacter cloacae

```
Phe Ala Asp Val Asn Gln Val Val Leu Asp Ala Leu Asn Ala Arg His
              70
                           7.5
Ser Tyr Gln Val His Val Val Gly Glu Asn Glu Gln Val Glu Thr Val
           85
                        90
Ser Gly Val Asn Ala Val Ser Ser Ile Gly Asp Asp Val Ile Asp Leu
        100 105 110
Ile Ala Ser Val Asp Leu Val Thr Thr Ala Val Gly Pro Val Val Leu
    115 120 125
Glu Arg Ile Ala Pro Ala Val Ala Lys Gly Leu Ala Lys Arg Lys Ala
 130 135 140
Arg Gly Thr Thr Gln Leu Lys Gly His Val Leu Thr Ala Val Ala Asp
           165 170 175
Glu Asp Lys Ala Trp Val Glu Ala His Val Gly Phe Val Asp Ser Ala
            185 190
Val Asp Arg Ile Val Pro Pro Ser Ala Ser Ala Thr Asn Asp Pro Leu
     195 200 205
Glu Val Thr Val Glu Thr Phe Ser Glu Trp Ile Val Asp Lys Thr Gln
                 215 220
Phe Lys Gly Ala Leu Pro Thr Ile Pro Gly Met Glu Leu Thr Asp Asn
             230 235
Leu Met Ala Phe Val Glu Arg Lys Leu Phe Thr Leu Asn Thr Gly His
           245 250 255
Ala Ile Thr Ala Tyr Leu Gly Lys Leu Ala Gly His Gln Thr Ile Arg
      260
             265
Asp Ala Ile Leu Asp Glu Asn Ile Arg Ala Val Val Lys Gly Ala Met
275 280
                                    285
Glu Glu Ser Gly Ala Val Leu Ile Lys Arg Tyr Gly Phe Asp Ala Asp
                 295
                                 300
Lys His Ala Ala Tyr Ile Gln Lys Ile Leu Gly Arg Phe Glu Asn Pro
305 310 315 320
Tyr Leu Lys Asp Asp Val Glu Arg Val Gly Arg Gln Pro Leu Arg Lys
            325
                          330 335
Leu Ser Ala Gly Asp Arg Leu Ile Lys Pro Leu Leu Gly Thr Leu Glu
        340
                       345
Tyr Gly Leu Pro His Ala Asn Leu Val Lys Gly Ile Ala Ala Ala Met
      355
                    360
                                    365
His Tyr Arg Ser Glu Gln Asp Pro Gln Ala Ile Glu Leu Ala Gln Leu
  370 375
                                380
Ile Asp Asp Lys Gly Ala Gln Ala Ala Leu Ala Gln Ile Ser Gly Leu
              390
                           395
Asp Ala Asn Ser Asp Val Val Ala Glu Ala Val Ser Ala Tyr Asn Ala
            405
                          410
Thr Lys
```

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<210> 9955
```

<211> 147

<212> PRT

<213> Enterobacter cloacae

<400> 9955

Lys Lys Arg Phe Arg Ser Lys Pro Ala His Ile Gly Val Ser Phe Pro 1 5 10 15 15 Val Asn Ser Pro Phe Ser Glu Leu Phe Val Met Lys Glu Val Glu Lys 20 25 30 30 Asn Glu Ile Lys Arg Leu Ser Asp Arg Leu Asp Met Ile Arg His Gln $\frac{35}{40}$ 40 45

Met Ala Gly Leu Ser Leu Val Asp Ser Ala Glu Lys Tyr Ala Glu Leu

```
Glu Lys Glu Ser Val Lys Leu Glu Ala Glu Ile Glu Arg Leu Arg Glu
                70
Val Lys Gly Gln Lys Leu Ser Lys Glu Ala Gln Lys Leu Met Asn Met
            8.5
                              90
Pro His Arg Arg Ala Ile Thr Lys Lys Glu Gln Ala Asp Met Gly Lys
         100
              105
Leu Lys Lys Ser Val Arg Gly Leu Val Val Val His Pro Met Thr Glu
   115 120
                              125
Leu Gly Arg Glu Met Gly Leu Lys Glu Met Thr Gly Phe Cys Lys Thr
          135
Ala Phe
145
<210> 9956
<211> 283
<212> PRT
<213> Enterobacter cloacae
<400> 9956
Thr Gln Pro Asp Ile Tyr Leu His Gly Gly Arg Asp His His Ile Ala
                              10
Gly Leu Cys Leu Asn Leu Asp Asp Ser Met Ile Val Met Pro Arg Arg
 20
                          25
Leu Ser Glu Glu Ile Ala Thr Arg Val Arg Ala Leu Ile Glu Glu Gln
35
                       40
Gln Leu Glu Ala Gly Met Arg Leu Pro Ala Glu Arg Gln Leu Ala Ala
 50
             55
                                    60
Gln Leu Gly Val Ser Arg Asn Ser Leu Arg Glu Ala Leu Ala Thr Leu
             70
                     7.5
Val Ser Glu Gly Val Leu Leu Ser Arg Arg Gly Gly Gly Thr Phe Val
             85
                              90
Arg Trp Gln His Asp Asp Trp Ser Glu Gln Asn Ile Val Gln Pro Leu
         100
                          105
Lys Thr Leu Met Glu Asn Asp Pro Asp Tyr Ser Phe Asp Ile Leu Glu
      115 120
                               125
Ala Arg His Ala Ile Glu Thr Ser Thr Ala Trp His Ala Ala Met Arg
                   135
                                     140
Ala Thr Asp Ala Asp Lys Glu Lys Leu Lys Ala Cys Phe Glu Ala Thr
                150
                               155
Gln Ser Ser Asp Pro Asp Ile Ala Ser Gln Ala Asp Val Arg Phe His
             165
                              170 175
Leu Ala Ile Ala Glu Ala Ser His Asn Val Val Leu Leu Gln Thr Met
                          185
                                           190
Arg Gly Phe Phe Asp Leu Leu Gln Ser Ser Val Lys Gln Ser Arg Gln
                       200
                                        205
      195
Arg Met Tyr Leu Val Pro Pro Val Phe Ala Gln Leu Thr Glu Gln His
                   215
                                     220
Glu Ala Val Leu Asn Ala Ile Leu Ala Gly Asp Ala Glu Ala Ala Arg
                 230
                                  235
Lys Ala Met Met Ala His Leu Gly Phe Val His Thr Thr Ile Lys Arg
             245
                              250 255
Phe Asp Glu Asp Gln Ala Arg Gln Ala Arg Ile Thr Arg Leu Pro Gly
              265
      260
Glu Ser Asp Ile Ser Arg Glu Asn Lys Ala
                       280
<210> 9957
<211> 275
<212> PRT
<213> Enterobacter cloacae
```

```
<400> 9957
Ile Ser Met Leu Glu Leu Ser Ile Ala Leu Pro Ile Arg Val Gln Asn
          5
Gly Gly Leu Phe Ile Ser Arg Gly Val Gly Arg His Pro Ala Arg Lys
       20
                          25
Leu Ser Ser Trp Glu Ile Ile Phe Val Glu Lys Gly Thr Leu Thr Ile
                       40
Gln Glu Glu Asn Thr Leu Phe Glu Val Asn Ala Gly Glu Ser Leu Leu
                                    60
  50 55
Leu Trp Pro Lys Arg Arg His Val Gly Val Glu Asp Phe Pro Gly Asp
                                 7.5
                70
Leu Lys Phe Tyr Trp Leu His Phe Glu Val Asp Glu Arg Leu Pro Val
                 90
                                   95
            85
Leu Pro Gly Ala Thr Pro Leu Ser Ile Glu Gln His Cys Ser Val Arg
         100 105 110
Asp Pro Gln Tyr Val Ile Ala Leu Phe Arg Gln Phe Leu Ser Glu Gln
      115
                       120 125
Glu Lys Leu Gln Arg Ser Gln Ala Leu Glu Ile Ile Leu Leu Leu Ile
  130 135
                                    140
Leu Gln Gln Ile Ser Leu Ser Pro Gly Tyr Glu Asp Lys Ala Asp Asp
                150
                               155
Ala Gly Ala Ala Met Ala Trp Lys Ala Lys Gln Leu Ile Arg Thr His
            165
                             170
Phe His Leu Pro Leu Ser Thr Ser Gln Leu Ala Lys Glu Leu His Cys
         180
                          185
                                          190
Asn Ala Asp Tyr Leu Gly Arg Val Phe Arg Arg Thr Phe His Leu Thr
                      200 205
      195
Leu Thr Glu Ala Ile His Arg Gln Arg Val Arg Ala Ala Glu Lys Leu
                 215
                                    220
 210
Leu Leu Asn Asp Ala Ala Ser Leu Thr Glu Val Ala Ala Arg Cys Gly
                230
                                 235
225
Phe Asn Asp Val Gly Tyr Phe Arg Gln Ile Phe Ser Lys His Thr Gly
                 250 255
             245
Leu Thr Pro Ala Val Trp Lys Arg Arg Tyr Cys Lys Glu His Ile Asn
                          265
          260
Ser Gly
      275
<210> 9958
<211> 89
<212> PRT
<213> Enterobacter cloacae
<400> 9958
Asn Gly Leu Ile Thr Ser Phe Asp Arg Arg Ser Arg Ser Leu Arg Leu
                             10
Ile Ile Ser His Ile Ile Ala Gly Pro Met Pro Pro Gly Glu Arg Leu
                                           30
                          25
          20
Ile Met Pro Phe Met Leu Val Met Ala Val Met Ile Phe Ser Leu Ala
                                        45
                       40
Met Ile Met Pro Gln Arg Leu Pro Gly Arg Pro Ser Leu Glu Arg Leu
                    55
Met Gln Arg Met Ile Phe Gly Phe His Ser Gly Arg Ala Ser Leu Lys
                                  75
                 70
Met Ile Pro Gly Asn Gly Thr Pro
```

<210> 9959 <211> 297 <212> PRT

<213> Enterobacter cloacae

```
<400> 9959
Asp Ser Ala Leu Lys Phe Leu Lys Lys Ile Arg Cys Trp Asn Val Tyr
                          10
Ile Arg Pro Gly Asp Leu Met Ile Ser Thr Pro Ile Arg Arg Tyr Gly
      20
               25
                                       30
Ala Ala Ile Leu Met Leu Leu Thr Met Ala Phe Ser Gly Glu Val Leu
     35
          40
                                  4.5
Ala Lys Thr His Thr Asp Thr Thr Ser Lys Lys Ala His Val Ile Lys
            55 60
Thr Thr Ser Ser Lys Val Ser Ser Lys Gln Glu Tyr Ser Arg Asn Ser
              70 75
Ala Lys Ser Ser Ser Leu Pro Asp Leu Arg Lys Tyr Pro Ser Gly Thr
           85 90
Pro Arg Lys Lys Ala Phe Leu Arg Thr Val Met Pro Tyr Ile Lys Ser
        100 105 110
Gln Asn Ala Ala Ile Thr Ala Asp Arg Asn Trp Leu Ile Ser Lys Gln
    115 120
Tyr Asp Ser Arg Trp Ser Pro Ser Glu Arg Thr Arg Leu Lys Asp Ile
      135
                                140
Ala Lys Arg Tyr Lys Val Lys Trp Ser Gly Asn Thr Arg Arg Val Pro
            150 155
Trp Asn Ser Leu Leu Glu Arg Val Asp Ile Ile Pro Gly Ser Met Val
         165 170
Ala Thr Met Ala Ala Ala Glu Ser Gly Trp Gly Thr Ser Lys Leu Ala
   180 185
                                      190
Arg Asn Asn Asn Leu Phe Gly Met Lys Cys Val Lys Gly Arg Cys
195
                  200
                                    205
Thr Asn Ala Pro Gly Lys Val Lys Gly Tyr Ser Gln Phe Glu Ser Val
 210
                 215
                                 220
Lys Asp Ser Val Asn Ala Tyr Val Val Asn Leu Asn Thr His Pro Ala
            230 235
225
Tyr Ser Ser Phe Arg Lys Ser Arg Ala Gln Leu Arg Lys Ala Asp Gln
                          250 255
           245
Glu Val Thr Ala Thr Ala Met Ile His Lys Leu Lys Gly Tyr Ser Thr
                     265 270
        260
Gln Gly Gln Arg Tyr Asn Asn Tyr Leu Phe Ser Met Tyr Gln Asp Asn
     275 280
                                    285
Gln Arg Leu Ile Ala Ala His Met
```

<210> 9960 <211> 215 <212> PRT <213> Enterobacter cloacae

<400> 9960

290

| Carrier | System |

```
105
Tyr Gly Gly Ile Leu Leu Gly Thr Gly Gly Leu Val Lys Ala Tyr Gly
     115
                  120
                                   125
Gly Gly Val Gln Gln Ala Leu Asn Leu Leu Ile Thr Thr Arg Lys Thr
           135
                                   140
Pro Leu Thr Glu Tyr Thr Leu Leu Cys Asp Tyr Ala Gln Leu Ser Gly
145 150 155
Ile Glu Ala Leu Leu Lys Gln Phe Asn Gly Val Ile Ala Gln Ser Asp
         165 170 175
Tyr Gln Ala Met Val Gln Leu Arg Val Ala Leu Pro Gln Ala Glu Leu
      180 185 190
Ala Ala Phe Ser Ala Lys Leu Ala Asp Phe Ser Arg Gly Ser Leu Gln
   195 200
Leu Leu Pro Ile Glu Glu
<210> 9961
<211> 221
<212> PRT
<213> Enterobacter cloacae
<400> 9961
Ser Pro Ile Cys Cys Leu Gly Val Leu Arg Ser Leu Arg Cys Trp Cys
                            10
Cys Leu Pro Gln His Ser Gly Val Ser Lys Glu Thr Leu Val Lys Thr
                         25
20
Leu Ile Leu Phe Ser Thr Arg Asp Gly Gln Thr Arg Glu Ile Ala Ser
35
                      40
Tyr Leu Ala Ser Glu Leu Lys Glu Leu Gly Ile Tyr Ser Asp Val Val
50
                   55
                                   60
Asn Leu Asn Arg Thr Glu Gln Ile Ala Trp Gln Asp Tyr Asp Arg Val
                70
                                75
Val Ile Gly Ala Ser Ile Arg Tyr Gly His Phe His Pro Ala Leu Asp
            8.5
                            90
Arg Phe Val Lys Lys His Thr Ala Glu Leu Ala Gln Leu Pro Gly Ala
         100
                         105
                                         110
Phe Tyr Ser Val Asn Leu Val Ala Arg Lys Ala Glu Lys Arg Thr Pro
     115
                      120 125
Gln Thr Asn Ser Tyr Thr Arg Lys Phe Leu Leu Ser Ser Pro Trp Gln
                   135
                                  140
Pro Asp Ile Cys Ser Val Phe Ala Gly Ala Leu Arg Tyr Pro Arg Tyr
                150
                                155 160
Arg Trp Tyr Asp Arg Phe Met Ile Arg Leu Ile Met Lys Met Thr Gly
            165
                            170 175
Gly Glu Thr Asp Thr Arg Lys Glu Val Val Tyr Thr Asp Trp Ala Gln
                         185 190
         180
Val Ala Ser Phe Ala Arg Glu Ile Ala His Leu Thr Asp Asp Ala Arg
   195
                     200
                             205
Val Val Phe Thr Arq Val Pro Val Pro Arg Tyr Val Lys
   210
                   215
<210> 9962
<211> 202
<212> PRT
<213> Enterobacter cloacae
<400> 9962
Phe Thr Glu Gly Lys Val Phe Gln Met Lys Ile Lys Asn Val Ala Leu
                        10
Ala Ile Ala Ala Ala Gly Leu Leu Ser Ser Gln Ser Val Leu Ala
         20
                         25
                                          30
```

Ser Ser Asp Ser Gly Val Asn Ala Ser Leu Asp Thr Gly Ala Gly Ser Gln Ser Thr Gly Gly Val Ile Asn Phe Thr Gly Lys Ile Thr Leu Ile Ser Cys Asp Ile Thr Pro Ala Ser Lys Asn Lys Thr Val Asp Leu Gly 70 Ala Trp Ala Lys Ser Tyr Phe Asp Asp His Asn Glu Thr Thr Pro Arg 8.5 90 Glu Phe Lys Ile Asn Val Glu Asn Cys Pro Glu Thr Val Glu Ser Val 100 105 110 Ala Val Leu Phe Asp Gly Thr Lys Asp Thr Val Asn Asp Thr Leu Leu 125 115 120 Gln Val Thr Pro Cys Glu Gly Met Ala Thr Gly Val Arg Val Lys Leu 130 135 140 Tyr Asn Ser Asp Arg Ser Thr Ala Ile Lys Pro Gly Thr Val Ser Glu 145 150 155 Thr Thr Ala Pro Asp Asp Glu Gly Asn Ala Glu Leu Thr Phe Tyr Ala 165 170 175 Ala Leu Asp Lys Asp Gly Thr Glu Ile Tyr Ala Gly Asp Val Asn Ala 180 185 Val Ser Asn Phe Leu Met Val Tyr Asn 195 200

<210> 9963 <211> 235

<212> PRT <213> Enterobacter cloacae

<400> 9963 Phe His Cys Gln Pro Pro Pro Glu Ile Ile Met Met Lys Arg Leu Ser 10 Tyr Ile Met Leu Thr Ala Leu Met Val Ser Ser Ala Ser Val Ser Ala 25 20 Gly Val Val Met Gly Gly Thr Arg Ile Val Tyr Pro Gln His Ser Lys 40 . 45 35 Glu Val Ala Phe Ser Val Ser Asn Met Glu Ser Ala Val Pro Tyr Leu 55 Ile Gln Ser Trp Val Glu Gly Asp Gly Gln Gly Lys Asn Asn Ala Ala 70 75 Pro Phe Ile Val Thr Pro Pro Leu Phe Arg Leu Asp Pro Glu Gln Thr 90 8.5 Asn Thr Leu Arg Ile Gln Tyr Thr Gly Ala Pro Leu Pro Thr Asp Arg 105 100 Glu Ser Val Phe Trp Leu Asp Ile Lys Ala Ile Ala Pro Lys Pro Lys 120 125 Glu Ser Ser Asn Glu Leu Gln Val Asn Val Lys Ser Lys Phe Lys Ile 135 140 Phe Tyr Arg Pro Asp Asn Leu Lys Gly Asp Ala Ala Thr Ala Trp Gln 150 155 Lys Ile Thr Phe Ser Arg Thr Gly Lys Gly Leu Lys Ala Ala Asn Pro 170 165 Thr Pro Tyr Tyr Val Ser Phe Tyr Arg Leu Thr Val Gly Gly His Lys 180 185 190 Ile Glu Gln Pro Gly Met Ile Gly Pro Gly Glu Thr Arg Glu Trp Pro 195 200 205 Val Ser Ala Ser Gly Gly Val Ser Trp Ser Ala Ile Asn Asp Phe Gly 215 220 Ala Ile Thr Ala Thr His Thr Gln Pro Leu 230

```
<211> 204
<212> PRT
```

<213> Enterobacter cloacae

<400> 9964 Ala Met Lys Leu Ile Gly Ser Tyr Thr Ser Pro Phe Val Arg Lys Ile 10 Ser Ile Leu Leu Glu Lys Gly Ile Glu Phe Glu Phe Val Asn Glu 30 25 Gln Pro Tyr Asn Ala Glu Asn Gly Val Ala Gln Tyr Asn Pro Leu Gly 40 Lys Val Pro Ala Leu Val Thr Asp Glu Gly Asp Tyr Trp Phe Asp Ser 55 Pro Ile Ile Ala Glu Tyr Ile Glu Leu Leu Gly Val Ala Pro Ala Met 70 75 Leu Pro Ala Asp Pro Lys Ala Ala Leu Ala Met Lys Gln Ile Glu Ala 85 90 Leu Ala Asp Gly Ile Met Asp Ala Ala Leu Thr Ser Val Arg Glu Gln 105 100 Ala Arg Pro Ala Ala Gln Gln Ser Glu Asn Glu Leu Leu Arg Gln Arg 115 120 Glu Lys Ile Ser Arg Ser Leu Asp Met Cys Glu Gln Leu Ile Arg Asp 130 135 Gly Lys Ile Gln Ser Asp Ser Leu Asn Leu Ala Thr Ile Ala Ile Ala 150 155 Cys Ala Ile Gly Tyr Leu Asn Phe Arg Arg Val Ser Pro Gly Trp Cys 170 175 165 Val Asp Arg Pro Leu Leu Val Lys Leu Ala Glu Thr Leu Phe Gln Arg 185 180 Glu Ser Phe Ala Arg Thr Glu Pro Pro Lys Ala

200

<210> 9965 <211> 622 <212> PRT

<213> Enterobacter cloacae

<400> 9965 Ser Ala Val Ser Gly Asp Asp Val Glu Met Ile Ile Ala Thr Ala Gly 10 His Val Asp His Gly Lys Thr Thr Leu Leu Gln Ala Ile Thr Gly Val 25 Asn Ala Asp Arg Leu Pro Glu Glu Lys Lys Arg Gly Met Thr Ile Asp 40 Leu Gly Tyr Ala Tyr Trp Pro Gln Pro Asp Gly Arg Val Leu Gly Phe 60 55 Ile Asp Val Pro Gly His Glu Lys Phe Leu Ser Asn Met Leu Ala Gly 75 70 Val Gly Gly Ile Asp His Ala Leu Leu Val Val Ala Cys Asp Asp Gly 90 Val Met Ala Gln Thr Arg Glu His Leu Ala Ile Leu Gln Leu Thr Gly 110 105 100 Asn Pro Gln Leu Thr Val Ala Leu Thr Lys Ala Asp Arg Val Asp Glu 120 125 115 Ala Arg Ile Asp Glu Val Arg Gln Glu Val Leu Ala Ala Leu Ser Glu 135 140 130 Tyr Gly Phe Lys Asp Val Ala Leu Phe Val Thr Val Ala Thr Glu Gly 150 155 Arg Gly Ile Asp Ala Leu Arg Asn His Leu Gln Gln Ile Pro Ser Arg 170 165 Glu Gln Ala Ser His His Arg Phe Arg Leu Ala Ile Asp Arg Ala Phe

```
185
Thr Val Lys Gly Ala Gly Leu Val Val Thr Gly Thr Ala Leu Ser Gly
   195
          200
                          205
Glu Val Asn Val Gly Asp Thr Leu Trp Leu Thr Gly Val Asn Lys Pro
 210 215 220
Met Arg Val Arg Gly Leu His Ala Gln Asn Gln Pro Val Glu Gln Ala
225 230 235 240
His Ala Gly Gln Arg Ile Ala Leu Asn Val Ala Gly Asp Ala Glu Lys
      245 250 255
Asp Gln Leu Asn Arg Gly Asp Trp Leu Leu Ala Asp Ala Pro Pro Glu
   260 265 270
Pro Ser Glu Arq Val Ile Val Ser Leu Gln Thr His Thr Pro Leu Thr
     275 280 285
Gln Trp Gln Pro Leu His Ile His His Ala Ala Ser His Ile Thr Gly
 290 295 300
Arg Val Ser Leu Leu Glu Asn Asp Leu Ala Glu Leu Val Phe Asp Ser
305 310 315 320
Pro Leu Trp Leu Ala Asp Asn Asp Arg Leu Val Leu Arg Asp Ile Ser
        325 330 335
Ala Arg Glu Thr Leu Ala Gly Ala Arg Val Val Met Leu Asp Pro Pro
 340 345 350
Arg Arg Gly Lys Arg Lys Pro Glu Tyr Leu Gln Trp Leu Ala Ala Leu
                                  365
355 360
Ala Gln Thr Arg Asp Asp Lys Ser Ala Leu Asp Ile His Leu Glu Arg
370 375 380
Gly Ala Val Asp Leu Ala Ala Phe Ala Trp Ala Arg Gln Leu Ser Gly
385 390
                            395 400
Glu Gly Leu Arg Leu Leu Thr Gln Glu Pro Gly Phe Ile Gln Ala Gly
           405
                          410
Asn Ser Leu Leu Asn Ala Pro Val Ala Ala Arg Trp Gln Arg Lys Val
 420 425 430
Leu Ser Thr Leu Ala Thr Tyr His Glu Gln His Gln Asp Glu Pro Gly
435 440 445
Pro Gly Arg Glu Arg Leu Arg Arg Met Ala Leu Pro Met Glu Asp Asp
                     460
450
        455
Ala Leu Val Leu Leu Ile Glu Asn Met Arg Glu Ser Gly Val Ile
                            475
            470
Ala Ser His His Gly Trp Leu His Leu Pro Glu His Lys Ala Gly Phe
           485 490
                                        495
Thr Ala Glu Gln Asp Ala Val Trp Gln Lys Val Ala Ala Leu Phe Gly
        500
                      505 510
Asp Glu Pro Trp Trp Val Arg Asp Leu Ala Arg Glu Thr Asn Thr Asp
     515
                    520
                                  525
Glu Gln Leu Met Arg Gln Val Leu Arg His Ala Ala Gln Gln Gly Met
                535
                                540
Ile Val Ala Ile Val Lys Asp Arg Tyr Tyr Arg Asn Asp Arg Ile Val
           550
                            555
Ala Phe Ala Asn Leu Ile Arg Glu Leu Asp Gln Ala Arg Gly Ser Thr
           565 570 575
Cys Ala Ala Asp Phe Arg Asp Arg Leu Asn Val Gly Arg Lys Leu Ala 580 585 590
Ile Gln Ile Leu Glu Tyr Phe Asn Arg Ile Gly Phe Thr Arg Arg Arg
                 600
                                  605
Glv Asn Asp His Val Leu Arg Asp Ala Gln Leu Phe Pro
                 615
```

<210> 9966

<211> 293 <212> PRT

<213> Enterobacter cloacae

```
<400> 9966
Asp Arg Glu Leu Lys His Thr Leu Arg Tyr His Gln Gly Ala Ile Asn
                                10
Arg Ser Tyr Leu Met Ser Ile Lys Glu Ser Glu Met Thr Gln Glu Lys
          20
                            25
Glu Arg Pro Ala Gly Ser Gln Ser Leu Phe Arg Gly Leu Met Leu Ile
      35
                        40
                                          4.5
Glu Ile Leu Ser Asn Tyr Pro Asn Gly Cys Pro Leu Ala His Leu Ser
                    55
                                     60
Glu Leu Ala Gly Leu Asn Lys Ser Thr Val His Arg Leu Leu Gln Gly
                                 75
               7.0
Leu Gln Ser Cys Gly Tyr Val Thr Pro Ala Pro Ala Ala Gly Ser Tyr
                         90
             8.5
Arg Leu Thr Thr Lys Phe Ile Ala Val Gly Gln Lys Ala Leu Ser Ser
               105
Leu Asn Ile Ile His Val Ala Ala Pro His Leu Glu Ala Leu Asn Ile
      115
              120
                              125
Ala Thr Gly Glu Thr Val Asn Phe Ser Ser Arg Glu Asp Asp His Ala
                     135
                                       140
Ile Leu Ile Tyr Lys Leu Glu Pro Thr Thr Gly Met Leu Arg Thr Arg
                  150
                                   155
Ala Tyr Ile Gly Gln His Met Pro Leu Tyr Cys Ser Ala Met Gly Lys
              165
                     170
Ile Tyr Met Ala Phe Gly His Gln Asp Tyr Val Ala Ser Tyr Trp Glu
                                    190
          180
                          185
Ser His Gln Glu Gln Ile Gln Pro Leu Thr Arg Asn Thr Ile Thr Glu
      195
                         200
                              205
Leu Ser Ala Met Tyr Asp Glu Leu Ala Glu Ile Arg Asp His Ser Met
                     215
                                       220
   210
Ala Met Asp Lys Glu Glu Asn Glu Leu Gly Val Ser Cys Ile Ala Val
                  230
                                    235
225
Pro Val Phe Asp Ile His Gly Arg Val Pro Tyr Ala Ile Ser Ile Ser
              245
                                250
Leu Ser Thr Ser Arg Met Lys Gln Val Gly Glu Lys Asn Leu Leu Lys
                           265
          260
Pro Leu Arg Asp Thr Ala Glu Ala Ile Ser Lys Glu Leu Gly Phe Asn
                         280
                                           285
       275
Val Arg Glu Ala
```

290 <210> 9967 <211> 153

<212> PRT

<213> Enterobacter cloacae

<400> 9967

Leu Met Asn Gln Phe Ile Leu Ala Asp Pro Glu Lys Cys Ile Gly Cys 10 Arg Thr Cys Glu Val Ala Cys Met Met Ser His Gln Ser Ser Ala Thr 25 30 Pro Val Ala Phe Thr Ser Arg Ile Arg Val Val Lys Gly Glu Thr Phe 4.0 Thr Thr Ala Val Gly Cys His Gln Cys Glu Asp Ala Pro Cys Ala Asn 55 Val Cys Pro Thr Gly Ala Ile His Arg Ala Ala Gly Ala Trp Leu Val 70 75 80 Lys Gln Ser Arg Cys Ile Gly Cys Lys Ser Cys Met Val Ala Cys Pro Phe Gly Ala Met Gln Val Arg Val Val Glu Asp Arg Val Gln Ala Leu 105 Lys Cys Asp Leu Cys Ala His Arg Glu Gly Gly Pro Ala Cys Val Glu

120 Ala Cys Pro Thr His Ala Leu Arg Cys Ile Asp Pro Ala Ser Leu Arg 130 135 Ala Glu Arg Leu Arg Asn Met Ala <210> 9968 <211> 506 <212> PRT <213> Enterobacter cloacae <400> 9968 Ile Thr Ala Phe Met Pro Gly Lys Arg Cys Ala Thr Gly His Phe Cys 10 Gln Arg Ser His His Met Tyr Ile Gly Ile Asp Leu Gly Thr Ser Gly Val Lys Ala Ile Leu Leu Ser Glu Gln Gly Asp Val Leu Ala Thr Gln 40 4.5 Thr Glu Lys Leu Gln Val Ser Arg Pro His Pro Leu Trp Ser Glu Gln 55 Asp Pro Glu Gln Trp Trp Gln Ala Thr Asp Arg Ala Met Thr Ala Leu 7.0 Gly Glu Gln His Ser Leu Arg Asp Val Lys Ala Leu Gly Ile Ala Gly 85 90 Gln Met His Gly Ala Thr Leu Leu Asp Ser Gln His Arg Val Leu Arg 100 105 Pro Ala Ile Leu Trp Asn Asp Gly Arg Cys Ala Glu Glu Cys Ala Ile 115 120 125 Leu Glu Glu Arg Val Pro Ala Ser Arg Glu Ile Thr Gly Asn Leu Met 135 140 Met Pro Gly Phe Thr Ala Pro Lys Leu Leu Trp Val Gln Arg His Glu 155 150 Pro Asp Ile Phe Arg Gln Val Ala Lys Val Leu Leu Pro Lys Asp Tyr 165 170 Leu Arg Phe Arg Met Thr Gly Asp Phe Ala Ser Asp Met Ser Asp Ala 180 185 190 Ala Gly Thr Met Trp Leu Asp Val Ala Lys Arg Asp Trp Ser Glu Ala 200 205 Met Leu Asp Ala Cys Gln Leu Thr Arg Asp His Met Pro Ala Leu Phe 210 215 220 Glu Gly Ser Glu Ile Thr Gly Ala Leu Gln Pro Ser Val Ala Glu Arg 230 235 Trp Asn Met Pro Ala Val Pro Val Ile Ala Gly Gly Gly Asp Asn Ala 245 250 Ala Gly Ala Val Gly Val Gly Met Val Glu Ala Gly Gln Ala Met Leu 265 Ser Leu Gly Thr Ser Gly Val Tyr Phe Ala Val Ser Asp Gly Tyr Arg 275 280 285 Ser Asn Pro Gly Ser Ala Val His Ser Phe Cys His Ala Leu Pro Gly 295 300 Lys Trp His Leu Met Ser Val Met Leu Ser Ala Ala Ser Cys Leu Asp 310 315 Trp Ala Ala Lys Leu Thr Gly Met Ala Asp Val Pro Ala Leu Ile Ala 325 330 Ala Ala Gln Gln Ala Asp Asp Asn Ala Gly Ala Val Trp Phe Leu Pro 345 350 Tyr Leu Ser Gly Glu Arg Thr Pro His Asn Asn Pro Glu Ala Lys Gly 360 Val Phe Phe Gly Leu Thr His Gln His Gly Pro Ala Glu Leu Ala Arg 375

Ala Val Leu Glu Gly Val Gly Tyr Ala Leu Ala Asp Gly Met Asp Val

385 390 Val His Asp Cys Gly Leu Thr Pro Ser Ser Ile Thr Leu Ile Gly Gly 405 410 Gly Ala Arg Ser Ser Tyr Trp Arg Gln Met Leu Ser Asp Ile Ser Gly 420 425 430 Leu Gln Leu Asp Tyr Arg Thr Gly Gly Asp Val Gly Pro Ala Leu Gly 440 445 Ala Ala Arg Leu Ala Gln Ile Ala Leu Asn Pro Asp Lys Pro Leu His 450 455 460 Gln Leu Leu Pro Gln Leu Ser Leu Glu Gln Gln His Arg Pro Asp Ala 465 470 475 Lys Asn His Ala Arg Tyr Ala Glu Arg Arg Asp Val Phe Arg Lys Ile 485 490 Tyr Arg Gln Leu Leu Pro Leu Met Ser

<210> 9969 <211> 313

<212> PRT <213> Enterobacter cloacae

<400> 9969 Asn His Thr Tyr Pro Ala Arg Asn Thr Met Gln Lys Phe Asp Thr Lys 10 Thr Phe Gin Gly Leu Ile Leu Thr Leu Gln Asp Tyr Trp Ala Ser Gln 20 25 Gly Cys Thr Ile Val Gln Pro Leu Asp Met Glu Val Gly Ala Gly Thr 40 Ser His Pro Met Thr Ser Leu Arg Ala Leu Gly Pro Glu Pro Met Ala 55 60 50 Thr Ala Tyr Val Gln Pro Ser Arg Arg Pro Thr Asp Gly Arg Tyr Gly 75 70 Glu Asn Pro Asn Arg Leu Gln His Tyr Tyr Gln Phe Gln Val Val Ile 90 85 Lys Pro Ser Pro Asp Asn Ile Gln Glu Leu Tyr Leu Gly Ser Leu Lys 105 110 100 Glu Leu Gly Met Asp Pro Thr Ile His Asp Ile Arg Phe Val Glu Asp 120 125 Asn Trp Glu Asn Pro Thr Leu Gly Ala Trp Gly Leu Gly Trp Glu Val 130 135 140 Trp Leu Asn Gly Met Glu Val Thr Gln Phe Thr Tyr Phe Gln Gln Val 150 155 Gly Gly Leu Glu Cys Lys Pro Ile Thr Gly Glu Ile Thr Tyr Gly Leu 165 170 175 Glu Arg Leu Ala Met Tyr Ile Gln Gly Val Asp Ser Val Tyr Asp Leu 190 180 185 Val Trp Ser Asp Gly Pro Leu Gly Lys Thr Thr Tyr Gly Asp Val Phe 200 205 195 His Gln Asn Glu Val Glu Gln Ser Thr Tyr Asn Phe Glu Tyr Ala Asp 210 215 220 Val Asp Phe Leu Phe Thr Cys Phe Glu Gln Tyr Glu Lys Glu Ala Gln 230 235 Gln Leu Leu Ala Leu Glu Thr Pro Leu Pro Leu Pro Ala Tyr Glu Arg 250 245 Ile Leu Lys Ala Ala His Ser Phe Asn Leu Leu Asp Ala Arg Lys Ala 270 260 265 Ile Ser Val Thr Glu Arg Gln Arg Tyr Ile Leu Arg Ile Arg Thr Leu 280 285 275 Thr Lys Ala Val Ala Glu Ala Tyr Tyr Ala Ser Arg Glu Ala Leu Gly 295 300 290 Phe Pro Met Cys Asn Arg Asn Lys

<210> 9970

<211> 693 <212> PRT

<213> Enterobacter cloacae

<400> 9970

Glu Ala Ala Met Ser Glu Lys Thr Phe Leu Val Glu Ile Gly Thr Glu 1 5 10 15
Glu Leu Pro Pro Lys Ala Leu Arg Ser Leu Ala Glu Ser Phe Ala Ala
20 25 30

Asn Val Thr Ala Glu Leu Asp Asn Ala Gly Leu Ala His Gly Lys Ile

35 40 45
Glu Trp Phe Ala Ala Pro Arg Arg Leu Ala Leu Lys Val Ala Asn Leu
50 60

Ala Ala Ser Gln Pro Asp Arg Glu Val Glu Lys Arg Gly Pro Ala Ile

Ala Gln Ala Phe Asp Ala Glu Gly Lys Pro Ser Lys Ala Ala Glu Gly 85 90 95

Trp Ala Arg Gly Cys Gly Ile Thr Val Asp Gln Ala Glu Arg Leu Thr

100 105 110
Thr Asp Lys Gly Glu Trp Leu Leu Tyr Arg Ala His Val Lys Gly Glu

115 120 125 Ser Ala Glu Ala Leu Leu Pro Asp Met Ile Ala Thr Ser Leu Ala Lys

130 135 140 Leu Pro Ile Pro Lys Leu Met Arg Trp Gly Ala Ser Asp Val His Phe

145 150 155 160 Val Arg Pro Val His Thr Val Thr Leu Leu Leu Gly Asp Thr Val Ile

165 170 175

Pro Ala Thr Ile Leu Gly Val Ala Ser Asp Arg Val Ile Arg Gly His

Arg Phe Met Gly Glu Pro Glu Phe Thr Ile Asp Asn Ala Asp Gln Tyr 195 200 205

Pro Gln Ile Leu Leu Glu Arg Gly Lys Val Ile Ala Asp Tyr Glu Gln 210 215 220

Arg Lys Ala Lys Ile Lys Ala Asp Ala Glu Glu Ala Ala Arg Lys Ile

225 230 235 240 Gly Gly Asn Ala Asp Leu Ser Asp Ser Leu Leu Glu Glu Val Thr Ser

245 250 255
Leu Val Glu Trp Pro Val Val Leu Thr Ala Lys Phe Glu Glu Lys Phe

260 265 270

Leu Ala Val Pro Ala Glu Ala Leu Val Tyr Thr Met Lys Gly Asp Gln 275 280 285

Lys Tyr Phe Pro Val Tyr Ala Asn Asp Gly Lys Leu Leu Pro Asn Phe 290 295 300

Ile Phe Val Ala Asn Ile Glu Ser Lys Asp Pro Ser Gln Ile Ile Ser 305 310 315

Gly Asn Glu Lys Val Val Arg Pro Arg Leu Ala Asp Ala Glu Phe Phe

325 330 335 Phe Asn Thr Asp Arg Lys Lys Arg Leu Glu Asp Asn Leu Pro Arg Leu

340 345 350
Gln Thr Val Leu Phe Gln Gln Gln Leu Gly Thr Leu Arg Asp Lys Thr

355 360 365 Asp Arg Ile Ala Glu Leu Ser Gly Trp Ile Ala Arg Glu Ile Gly Ala 370 375 380

Asp Val Asn His Ala Thr Arg Ala Gly Leu Leu Ser Lys Cys Asp Leu 385 390 400 Met Thr Asn Met Val Phe Glu Phe Thr Asp Thr Gln Gly Val Met Gly

405 410 415 Met His Tyr Ala Arg His Asp Gly Glu Ala Glu Asp Val Ala Val Ala

```
420
                       425
Leu Asn Glu Gln Tyr Gln Pro Arg Phe Ala Gly Asp Asp Leu Pro Ser
 435
            440
Asn Pro Val Ala Cys Ala Val Ala Ile Ala Asp Lys Met Asp Thr Leu
 450 455
                                460
Ala Gly Ile Phe Gly Ile Gly Gln His Pro Lys Gly Asp Lys Asp Pro
      470 475
Phe Ala Leu Arg Arg Ala Ala Leu Gly Val Leu Arg Ile Ile Val Glu
        485 490
Lys Asn Leu Asn Leu Asp Leu Gln Thr Leu Thr Glu Glu Ala Val Arg
       500 505 510
Leu Tyr Gly Asp Lys Leu Thr Asn Ala Lys Val Val Asp Asp Val Ile
     515 520 525
Asp Phe Met Leu Gly Arg Phe Arg Ala Trp Tyr Gln Asp Glu Gly Tyr
                       540
              535
Ser Val Asp Thr Ile Gln Ala Val Leu Ala Arg Arg Pro Thr Arg Pro
545 550 555
Ala Asp Phe Asp Ala Arg Met Lys Ala Val Ser His Phe Arg Thr Leu
           565 570 575
Glu Ala Ala Ser Ala Leu Ala Ala Ala Asn Lys Arg Val Ser Asn Ile
            585 590
        580
Leu Ala Lys Ser Asp Glu Thr Leu Asn Asp Arg Val Asn Ala Ala Thr
                  600 605
     595
Leu Lys Glu Pro Glu Glu Ile Ser Leu Ala Met Gln Val Val Leu
610 615 620
Arg Asp Lys Leu Glu Pro Tyr Phe Ala Glu Gly Arg Tyr Gln Glu Ala
      630 635
Leu Val Glu Leu Ala Glu Leu Arg Asp Val Ile Asp Ala Phe Phe Glu
               650
           645
Lys Val Met Val Asn Val Glu Asp Lys Glu Leu Arg Ile Asn Arg Leu
        660 665
Ser Met Leu Glu Lys Leu Arg Glu Leu Phe Leu Arg Val Ala Asp Ile
                   680
     675
Ser Leu Leu Gln
 690
```

<210> 9971 <211> 454 <212> PRT

<213> Enterobacter cloacae

<400> 9971 Leu Glu Val Lys Lys Thr Lys Gly Arg Met Met Asp Ser Leu Ala Ser 1.0 Leu Tyr Lys Asn His Ile Val Thr Leu Gln Glu Arg Thr Arg Asp Val 25 20 Leu Ala Arg Phe Lys Leu Asp Ala Leu Leu Ile His Ser Gly Glu Leu 45 35 40 Met Asn Thr Phe Leu Asp Asp His Ala Tyr Pro Phe Lys Val Asn Pro 55 60 Gln Phe Lys Ala Trp Val Pro Val Thr Gln Val Pro Asn Cys Trp Leu 75 70 Leu Val Asp Gly Val Asn Lys Pro Lys Leu Trp Phe Tyr Leu Pro Val 8.5 90 Asp Tyr Trp His Asn Val Glu Pro Leu Pro Thr Ser Phe Trp Thr Glu 105 100 110 Glu Ile Asp Val Ile Ala Leu Pro Lys Ala Asp Gly Ile Gly Ser Gln 125 115 120 Leu Pro Ala Ala Arg Gly Asn Ile Gly Tyr Ile Gly Pro Val Pro Glu 135 140 Arg Ala Leu Gly Leu Asp Ile Pro Ala Asp Lys Leu Asn Pro Lys Gly

```
150
Val Leu Asp Tyr Leu His Tyr Tyr Arg Ala Tyr Lys Thr Asp Tyr Glu
            165
                          170
Leu Tyr Cys Met Arg Glu Ala Gln Lys Thr Ala Val Asn Gly His Arg
         180
                         185
Ala Ala His Glu Ala Phe Gln Ser Gly Met Ser Glu Phe Asp Ile Asn
      195
                      200
                            205
Gln Ala Tyr Leu Thr Ala Thr Gly His Arg Asp Thr Asp Val Pro Tyr
   210
                215
Ser Asn Ile Val Ala Leu Asn Glu His Ala Ser Val Leu His Tyr Thr
             230 235
Lys Leu Asp His Gln Val Pro Ala Glu Met Arg Ser Phe Leu Leu Asp
            245 250
Ala Gly Ala Glu Tyr Asn Gly Tyr Ala Ala Asp Leu Thr Arg Thr Trp
      260 265
Ala Ala Asn Ala Asp Thr Asp Phe Ala Gln Leu Ile Lys Asp Val Asn
    275
          280 285
Asp Glu Gln Leu Ala Leu Ile Gly Thr Met Lys Ala Gly Thr Ser Tyr
  290 295
                       300
Val Asp Tyr His Ile Gln Phe His Gln Arg Ile Ala Lys Leu Leu Arg
               310
                               315
Lys His Gln Ile Ile Lys Asp Met Ser Glu Glu Ala Met Val Glu Asn
            325
                            330
                                            335
Asp Leu Thr Gly Pro Phe Met Pro His Gly Ile Gly His Pro Leu Gly
       340
                         345
Leu Gln Val His Asp Val Ala Gly Phe Met Gln Asp Asp Thr Gly Thr
355
                         365
                     360
His Leu Ala Ala Pro Ser Lys Tyr Pro Tyr Leu Arg Cys Thr Arg Val
                         380
  370 375
Leu Ala Pro Arg Met Val Leu Thr Ile Glu Pro Gly Ile Tyr Phe Ile
    390
                               395
Glu Ser Leu Leu Ala Pro Trp Arg Glu Gly Gln Phe Ser Lys His Phe
  405 410
Asn Trp Glu Lys Ile Glu Ala Leu Lys Pro Tyr Gly Gly Ile Arg Ile
 420 425
Glu Asp Asn Val Val Ile His Glu Asn Ser Ile Glu Asn Met Thr Arg
 435
                      440
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<210> 9972 <211> 848 <212> PRT <213> Enterobacter cloacae

Asp Leu Lys Leu Ala 450

<400> 9972

Ala Gly Arg Leu Leu Met Ile Leu Val Pro Ser Pro Pro Pro Thr Pro 10 Ser Leu Phe Lys Ile Met Pro Phe Arg Leu Phe Arg Tyr Ala Pro Leu 25 Ser Val Leu Leu Ser Phe Ser Arg Ala Gly Met Ala Glu Asp Tyr 40 Phe Asp Pro Ala Ala Leu Glu Leu Ser Ser Thr Glu Gln Lys Thr Ala 55 Asp Leu His Tyr Phe Ser Glu Lys Gly Gly Gln Met Pro Gly Thr Trp 7.0 75 Leu Val Thr Leu Glu Ile Asn Gly Arg Glu Glu Arg His Gln Glu Ile 8.5 90 Thr Phe Val Asn Glu Lys Gly Ser Leu Gln Pro Val Phe Ser Val Ser 100 105 Leu Leu Glu Ala Leu Ser Val Asn Val Gly Ala Ile Pro Ala Phe Ser

120 125 Arg Leu Gln Glu Gly Glu Thr Phe Thr His Leu Glu Asp Phe Ile Pro 135 140 Ala Ala Arg Thr Ser Tyr Asp Phe Asn Gln Gln Arg Leu Phe Leu Asn 150 155 160 Leu Pro Gln Ala Ala Met Lys His Arg Ser Arg Gly Tyr Val Pro Gln 165 170 175 Ser Gln Trp Asp Asp Gly Ile Pro Ala Ala Phe Thr Asp Tyr Ser Leu 180 185 190 Ser Gly Gly Gln Ala Arg His Gln Ser Gly Val Thr Thr Ser Ser Tyr 195 200 205 Leu Ser Leu Arg Asn Gly Ile Asn Leu Gly Ala Trp Arg Leu Arg Asn 210 215 220 Thr Ser Ala Trp Ser His Ser Asp Ala Gly Gly Asn His Phe Gln Ser 225 230 235 240 Gln Ser Ser Trp Leu Ser Arg Asp Ile Arg Arg Leu Asn Ser Gln Leu 245 250 255 Arg Ile Gly Asp Ala Trp Thr Ala Gly Asp Val Phe Asp Ser Val Ala 260 265 270 Phe Arg Gly Val Gln Leu Ser Ser Ser Glu Ser Met Leu Pro Asp Ser 275 280 285 Gln Arg Gly Phe Ala Pro Thr Ile Arg Gly Val Ala His Ser Phe Ala 290 295 300 Lys Val Ser Val Ser Gln Asn Gly Tyr Val Ile Tyr Glu Thr Trp Val 305 310 315 Ala Ala Gly Pro Phe Ile Ile Asn Asp Leu Phe Pro Gly Ala Gln Ser 325 330 Gly Asp Leu Gln Val Thr Val Thr Glu Ser Asp Gly Ser Thr Arg Val 340 345 350 Phe Thr Gln Pro Tyr Ser Ala Val Pro Phe Met Arg Arg Gln Gly Ser 360 365 Leu Lys Tyr Ser Leu Asn Ala Gly Arg Phe His Ser Gly Ser Gly Asp 370 375 380 Ala Arg Ser Pro Glu Phe Val Glu Gly Ala Phe Phe Tyr Gly Leu Leu 385 390 395 Ser Arg Met Thr Val Tyr Gly Gly Phe Arg Thr Ala Ser Asn Tyr Gln 405 410 Ala Gly Ala Ile Gly Ile Gly Arg Gly Phe Gly Ala Phe Gly Ser Leu 420 425 Gly Ile Asp Asp Thr Leu Ala Lys Ser His Leu Pro Asp Gly Lys Asn 435 440 Ala Ile Gly Gln Ala Trp Arg Ile Gln Tyr Gln Lys Asp Phe Ser Ala 455 460 Thr Gly Thr Ala Phe Asn Leu Ala Ser Tyr Arg Tyr Ala Ser Arg Asn 465 470 475 Tyr Tyr Glu Phe Ser Glu Leu Asn Gln Ser Asp Ser Gln Gln Leu Gln 485 490 Leu Asn Asn Arg Arg Ser Arg Ser Gln Val Thr Phe Ser Gln Thr Leu 500 505 Gly Gln Phe Gly Ser Leu Ser Val Ser Ala Trp Met Gln Asp Tyr Trp 515 520 His Thr Ser Gly Gln Asp Lys Thr Ile His Ile Gly Trp Tyr Thr Ser 535 540 Trp Arg Gly Ile Ser Trp Gly Ala Gly Tyr Asp Tyr Thr Asp Ser Ala 545 550 555 560Arg Glu Gln His Pro Asp Arg Thr Val Ser Phe Asn Val Asn Val Pro 565 570 Leu Gly His Trp Leu Pro Asp Ser Ser Val Ser Tyr Phe Ile Asn His 580 585 Asn Asn Arg Gly Met Thr Thr Gln Gln Met Ser Leu Asn Gly Ser Ala 600

Leu Ala Asn Arg Asn Leu Asn Tyr Ser Val Gln Gln Ser Lys Ala Ser 615 Glu Gly Gln Ala Asp Ser Thr Ser Leu Ala Leu Gln Tyr Asn Gly Gly 630 635 Tyr Gly Asn Val Ser Leu Gly Tyr Asp His Ser Arg Ser Gly Ser Asn 645 650 655 Ala Ser Leu Gly Leu Ala Gly Gly Val Ile Ala Thr Gln Tyr Gly Val 665 670 660 Thr Leu Ser Glu Pro Leu Gly Asp Thr Val Ala Leu Leu Arg Val Pro 675 680 685 Gly Ala Ala Asn Val Glu Pro Glu Gly Tyr Asn Gly Ile His Thr Asp 690 695 700 Ser Arg Gly Tyr Ala Val Met Pro Thr Leu Ser Ala Tyr Arg Lys Asn 710 715 Thr Val Ser Leu Asp Thr Ala Thr Leu Gly Glu Asn Val Asp Val Glu 725 730 Gln Ser Gly Leu Thr Leu Ile Pro Thr Ser Gly Ala Val Val Leu Ala 740 745 Asn Tyr Lys Thr His Ile Gly Tyr Arg Val Leu Phe Ser Leu Arg Tyr 755 760 765 His Gly Glu Pro Leu Pro Phe Gly Ala Gln Ala Glu Val Val Glu Gln 770 775 780 Asn Arg His Ser Ala Asn Arg Ser Met Val Ala Asp Gly Gly Gln Ala 790 795 Tyr Leu Ser Gly Val Pro Glu Arg Gly Thr Leu Arg Val Thr Trp Tyr 810 805 815 Glu Asn Gly Glu Gln Gln Cys Gln Thr Pro Phe Arg Leu Gly Lys 820 825 830 Ala His Met Ala Pro Gly Ile Ala Thr Leu Ser Leu Glu Cys His

840

<210> 9973

<211> 368 <212> PRT

<213> Enterobacter cloacae

<400> 9973

Arg Asn Ile Met Arg Arg Phe Ile His Trp Phe Phe Tyr Leu Ser Leu 10 Leu Ser Leu Phe Gly Met Leu Ser Phe His Ala His Ala Gln Thr Ser 25 20 Thr Cys Arg Thr Thr Arg Asp Gln Trp Val Val Gln Val Pro Tyr Ala 40 Ile Gly Tyr Ala Pro Gly Thr Ser Asp Trp Thr Pro Ile Ser Ala Pro 55 Ile Gln Ser Thr Gly Ala Asp Phe Tyr Ser Cys Asp Gly Gly Asn Asp 70 75 Pro Trp Arg Ser Ile Gly Phe Val Glu Leu Asp Asn Pro Val Gly Thr 85 90 Val Val Gly Glu Asp Gly Ala Ser Arg His Val Tyr Lys Thr Gln Ile 100 105 Asp Gly Ile Gly Tyr Ala Leu Gly Phe Arg Glu Gln Gln Tyr Cys Gly 115 120 125 Ala Asp Ala Val Arg Tyr Ile Asp Gly Thr Ser Pro Val Asp Gly Asn 135 140 Glu Ser Arg Arg Ile Cys Asp Ala Ser Gln Asn Pro Ala Phe Ala Ser 150 155 Ala Pro Thr Tyr Lys Leu Gln Phe Trp Val Val Phe Tyr Lys Ile Pro 165 170 Thr Thr Ser Pro Met Pro Asp Asp Asn Ala Asn Ser Gln Glu Gln Asn 180 185

```
Val Gly Ser Leu Ile Leu Gln Ala Gly Glu Asn Gln Ala Ser Ala Thr
       195
                       200
                                205
Asn Val Ala Thr Pro Val Gln Ile His Leu Ala Ser Phe Thr Val Arg
                    215
                            220
Arg Thr Ser Cys Ser Val Gly Ser Arg Ser Ile Leu Val Pro Met Gly
           230
                     235
Ser Val Ser Gln Arg Glu Phe His Gly Ile Gly Phe Arg Ala Gly Gly
           245 250 255
Gly Arg Phe Ser Ile Pro Val Thr Cys Glu Asn Asn Thr Ala Val Lys
        260 265 270
Met Gly Phe Phe Gly Asp Thr Thr Pro Gly Asn Asp Arg Ala Leu Ala
      275 280 285
Leu Thr Lys Gln Glu Asp Ser Ala Ser Gly Val Gly Ile Glu Leu Leu 290 295 300
Tyr Gly Asp Asn Thr Gly Ser Val Gln Gly Gln Val Val Pro Trp Asn
305 310
                                 315
Thr Pro Gln Val Ser Ala Leu Gly Gln Val Gly Asp Asn Gln Thr Gln
       325
                              330
Thr Phe Trp Phe Asp Ala His Tyr Ile Gln Thr Glu Ala Asn Val Thr
         340 345 350
Ala Gly Lys Ala Asp Ala Met Ala Thr Phe Asn Leu Ile Tyr Asn
                       360
                                        365
<210> 9974
<211> 548
<212> PRT
<213> Enterobacter cloacae
<400> 9974
Ile Trp Arg Arg Ser Pro Ser Pro Ala Pro Ser Ala Thr Ser Ile Ser
                            10
Ala Ala Ser Arg Arg Ala Gly Ala Trp Ile Val Arg Cys Trp Ser Asn
      20
                          25
                                           30
Trp Arg Arg Arg Ser Ser Ser Ala Lys Val Ser Pro Gly Leu Asn His
                      40
                               4.5
Gln Arg Leu Asp Ala Gly Tyr Asn Thr Ser Trp Arg Glu Ala Val Gln
Ser Pro His Met Leu Thr Pro Ser Pro Val Gly Arg Gly Glu Asp Ile
                               75
              7.0
Tyr Ser Pro Gly Ala Phe Met Thr Thr His His Ser Leu Tyr Ser Gln
             85
                             90
Ile Pro Ala Thr Asp Arg Leu Leu Arg Asp Pro Arg Ile Thr Ala Val
                          105
Leu Glu Gln Phe Gly His Thr Ala Thr Val Asp Met Leu Arg Gln Leu
     115
                       120
Gln Asp Asp Ala Arg Arg His Ile Gln Ala Glu Asn Ala Leu Pro Glv
                    135
                                     140
Trp Cys Glu Ala Trp Ala Gln Glu Val Glu Arg Arg Leu Ser Lys His
                150
                                 155
Ala Gln Ser Ala Leu Arg Pro Val Ile Asn Leu Thr Gly Thr Val Leu
             165
                              170
His Thr Asn Leu Gly Arg Ala Gln Gln Ala Glu Glu Ala Ile Asp Ala
         180
                          185
Val Thr Arg Ala Met Arg Ser Pro Val Thr Leu Glu Tyr Asp Leu Asp
                       200 205
      195
Gly Ala Gly Arg Gly His Arg Asp Arg Ala Leu Ala Asp Leu Leu Cys
                   215
                                    220
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Gln Ile Thr Gly Ala Glu Asp Ala Cys Ile Val Asn Asn Asn Ala Ala 230

Ala Val Leu Leu Met Leu Ala Ala Thr Ala Ser Gly Lys Glu Val Val

245

235

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Val Ser Arg Gly Glu Leu Val Glu Ile Gly Gly Ala Phe Arg Ile Pro
                         265
Asp Val Met Arg Gln Ala Gly Cys Thr Leu His Glu Val Gly Thr Thr
                      280
                                      285
Asn Arg Thr His Ala Lys Asp Tyr Arg Ala Ala Val Asn Glu Asn Thr
        295
                       300
Ala Leu Leu Met Lys Val His Thr Ser Asn Tyr His Ile Glu Gly Phe
    310 315
Thr Lys Thr Val Glu Glu Ala Glu Leu Ala Ala Ile Gly Arg Glu Leu
            325 330
Asn Val Pro Val Ile Ala Asp Leu Gly Ser Gly Ser Leu Val Asp Met
         340 345
Arg Gln Tyr Gly Leu Pro Lys Glu Pro Met Val Gln Glu Met Val Ala
     355 360 365
Ala Gly Val Ser Leu Val Ser Phe Ser Gly Asp Lys Leu Leu Gly Gly
 370 375
                                  380
Pro Gln Ala Gly Ile Ile Val Gly Arg Arg Glu Leu Ile Ala Gln Leu
               390
                               395
Gln Gln His Pro Leu Lys Arg Ala Leu Arg Ala Asp Lys Met Thr Leu
            405
                410
Ala Ala Leu Glu Ala Thr Leu Arg Leu Tyr Leu His Pro Glu Lys Leu
             425
        420
                                        430
Ala Asp Arg Leu Pro Thr Leu Arg Leu Leu Ser Arg Asp Ala Ala Ser
    435
          440
                                     445
Val Arg Ala Gln Ala Glu Ala Leu Leu Pro Gln Val Ala Pro His Tyr
                  455
                                  460
Pro Glu Phe Glu Val Arg Ile Glu Pro Cys Leu Ser Gln Ile Gly Ser
               470
                               475
Gly Ser Leu Pro Val Asp Arg Leu Pro Ser Glu Ala Leu Thr Phe Thr
            485
                            490
Pro Arg Asp Gly Arg Gly Ser Gln Leu Glu Ala Leu Ser Ala Arg Trp
         500
                         505
                                         510
Arg Ala Leu Pro Thr Pro Val Ile Gly Arg Ile Gly Asp Gly Arg Met
                     520
                                     525
Trp Leu Asp Leu Arg Cys Leu Glu Asp Glu Val Arg Phe Leu Glu Met
                  535
                                   540
Met Leu Lys
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<210> 9975 <211> 547 <212> PRT

545

<213> Enterobacter cloacae

<400> 9975 Ser Thr Val Ile Arg Asp Thr Ala Arg Lys Pro Val Thr Asp Trp Arg 10 Glu Asn His Gln Pro Glu Leu Pro Leu Leu Tyr Thr Tyr Cys Lys Glu 20 25 Thr Val Met Thr Asn Asn Pro Pro Ser Ser Arg Ile Gln Pro Gly Glu 4.0 Tyr Gly Phe Pro Leu Lys Leu Lys Pro Arg Tyr Asp Asn Phe Ile Gly 55 Gly Asp Trp Val Ala Pro Val Asp Gly Glu Tyr Tyr Ser Asn Leu Thr 65 70 75 Pro Val Thr Gly Gln Pro Leu Cys Glu Ile Ala Ser Ser Gly Lys Arg 85 90 Asp Ile Asp Leu Ala Leu Asp Ala Ala His Lys Ala Lys Asp Lys Trp 100 105 Gly Gln Thr Ser Val Gln Asp Arg Ala Ala Ile Leu Phe Lys Ile Ala 120

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Asp Arg Ile Glu Gln Asn Leu Glu Leu Leu Ala Thr Ala Glu Thr Tro
                 135
Asp Asn Gly Lys Pro Ile Arg Glu Thr Met Ala Ala Asp Val Pro Leu
145
           150 155
Ala Ile Asp His Phe Arg Tyr Phe Ala Ser Cys Ile Arg Ala Gln Glu
           165 170 175
Gly Gly Ile Ser Glu Val Asp Lys Asp Thr Val Ala Tyr His Phe His
        180 185 190
Glu Pro Leu Gly Val Val Gly Gln Ile Ile Pro Trp Asn Phe Pro Leu
   195 200
                        205
Leu Met Ala Ser Trp Lys Met Ala Pro Ala Leu Ala Ala Gly Asn Cys
 210 215 220
Val Val Leu Lys Pro Ala Arg Leu Thr Pro Leu Ser Val Leu Leu Leu
    230 235 240
Met Glu Val Ile Gly Asp Leu Leu Pro Pro Gly Val Ile Asn Val Val 245 $250$
Asn Gly Ala Gly Glu Ile Gly Glu Tyr Leu Ala Thr Ser Lys Arg
        260 265
Ile Ala Lys Val Ala Phe Thr Gly Ser Thr Glu Val Gly Gln Gln Ile
 275 280 285
Met Gln Tyr Ala Thr Gln Asn Ile Ile Pro Val Thr Leu Glu Leu Gly
                 295
                                300
Gly Lys Ser Pro Asn Ile Phe Phe Ala Asp Val Met Asp Glu Glu Asp
              310 315
Ala Phe Phe Asp Lys Ala Leu Glu Gly Phe Ala Leu Phe Ala Phe Asn
           325 330 335
Gln Gly Glu Val Cys Thr Cys Pro Ser Arg Ala Leu Val Gln Glu Ser
                       345
        340
                                      350
Ile Tyr Glu Arg Phe Met Glu Arg Ala Ile Arg Arg Val Glu Ser Ile
355 360
                        365
Arg Ser Gly Asn Pro Leu Asp Asn Val Thr Gln Met Gly Ala Gln Val
370 375
                                380
Ser His Gly Gln Leu Glu Thr Ile Leu Asn Tyr Ile Asp Ile Gly Lys
              390
                             395
Lys Glu Gly Ala Asp Val Leu Thr Gly Gly Arg Arg Lys Val Leu Gly
           405
                          410 415
Gly Asp Leu Gln Glu Gly Tyr Tyr Leu Glu Pro Thr Ile Leu Phe Gly
      420
                     425
                                      430
Lys Asn Asn Met Arg Val Phe Gln Glu Glu Ile Phe Gly Pro Val Leu
     435 440
                                   445
Ala Val Thr Thr Phe Lys Thr Met Asp Glu Ala Leu Glu Leu Ala Asn
                 455
                                 460
Asp Thr Gln Tyr Gly Leu Gly Ala Gly Val Trp Ser Arg Asn Gly Asn
              470
                             475
Leu Ala Tyr Lys Met Gly Arg Gly Ile Gln Ala Gly Arg Val Trp Thr
           485
                          490
                                         495
Asn Cys Tyr His Ala Tyr Pro Ala His Ala Ala Phe Gly Gly Tyr Lys
                       505
Gln Ser Gly Ile Gly Arg Glu Thr His Lys Met Met Leu Glu His Tyr
     515
                    520
                          525
Gln Gln Thr Lys Cys Leu Leu Val Ser Tyr Ser Asp Lys Pro Leu Gly
 530
                 535
                                 540
Leu Phe
545
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<210> 9976

<211> 89 <212> PRT

<213> Enterobacter cloacae

<400> 9976

Val Ala Ala Lys Asp Gly Tyr Ser Phe Leu Asn Ala Leu Arg Val Lys 10 Arg Leu Asn His Leu Ile Arg Gln Ala Gln Gln Val Val Thr Pro Asp 20 25 His Leu Ala His His Arg Arg Ala Asp Ala Ala Arg Arg Lys Ala Asp 35 40 4.5 Asn Ala Val His Val Gly Asn Gly Gly Asp Asp Phe Leu Val Ser Asn 5.5 60 Asp Asn Ala Ala Thr Ala Ala Arg Gln Ala Gln Leu Gly Glu Ala His 7.0 75 Ala Glu Asp Asp Ile Arg Val Pro 85

<210> 9977

<211> 123 <212> PRT

<213> Enterobacter cloacae

<400> 9977

Arg Thr Arg Phe Ala Glu Asp Asp Pro Arg Glu Arg Tyr Ala Ile Gly 10 Val Ile Asp His Gln Arg Asp Ala Val Leu Ile Arg Gln Arg Ile Gln 25 Leu His Gln Leu Val Val Gly Asp His Val Pro Arg Arg Val Gly Gly 35 4.0 45 Thr Arg Tyr Ala Asp His Ala Arg Leu Phe Thr Asp Met Gln Met Phe 55 Lys Ile Asp Val Ile Phe Glu Leu Ala Leu Trp Gln Gln Leu Asp Ile 70 7.5 Arg Thr Cys Gly Asn Lys Gln Val Phe Phe Glu Ala Gly Ile Gly Ile 85 90

Ala Asn Ile Leu Arg Cys Gln Arg Glu Gln His Phe Phe Arg Gly Ala 100 105 110

Val Gly Ala Ala Ser Gly Glu Gln Ile Glu

115

<210> 9978 <211> 470

<212> PRT

<213> Enterobacter cloacae

<400> 9978

Asn Asn Val Ile Glu Gln Pro Pro Met Ser Ile His Tyr Tyr Ser Arg 10 Ser Lys Thr Thr Pro His Thr Leu Ile Met Glu Leu Asn Met Gln Ala 3.0 Tyr Phe Asp Gln Leu Asp Arg Val Arg Phe Glu Gly Thr Lys Thr Thr 35 4.0 45 Asn Pro Leu Ala Phe Arg His Tyr Asn Pro Asp Glu Leu Val Leu Gly 55 Lys Arg Met Glu Asp His Leu Arg Phe Ala Ala Cys Tyr Trp His Thr 70 Phe Cys Trp Asn Gly Ala Asp Met Phe Gly Val Gly Ser Phe Asp Arg 85 90 Pro Trp Gln Gln Pro Gly Glu Ala Ile Glu Leu Ala Lys Arg Lys Ala 100 105 110 Asp Val Ala Phe Glu Phe Phe His Lys Leu Asn Val Pro Tyr Tyr Cys 120 135

Phe His Asp Val Asp Val Ser Pro Glu Gly Ala Ser Leu Lys Glu Tyr Leu Asn Asn Phe Ala Gln Met Val Asp Val Leu Ala Glu Lys Gln Gln

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150
Gln Ser Gly Val Lys Leu Leu Trp Gly Thr Ala Asn Cys Phe Thr Asn
          1.65
                           170
Pro Arg Tyr Gly Ala Gly Ala Ala Thr Asn Pro Asp Pro Glu Val Phe
         180
                        185 190
Ser Trp Ala Ala Thr Gln Val Val Thr Ala Met Asn Ala Thr His Gln
     195
            200
                          205
Leu Gly Gly Glu Asn Tyr Val Leu Trp Gly Gly Arg Glu Gly Tyr Glu
       215 220
Thr Leu Leu Asn Thr Asp Leu Arg Gln Glu Arg Glu Gln Ile Gly Arg
   230 235
Phe Met Gln Met Val Val Asp His Lys His Lys Ile Gly Phe Arg Gly
       245 250 255
Thr Leu Leu Ile Glu Pro Lys Pro Gln Glu Pro Thr Lys His Gln Tyr
   260 265 270
Asp Tyr Asp Val Ala Thr Val Tyr Gly Phe Leu Lys Gln Phe Gly Leu
    275 280 285
Glu Lys Glu Ile Lys Val Asn Ile Glu Ala Asn His Ala Thr Leu Ala
  290 295
                       300
Gly His Ser Phe His His Glu Ile Ala Ser Ala Ile Ala Leu Gly Ile
305 310 315
Phe Gly Ser Val Asp Ala Asn Arg Gly Asp Pro Gln Leu Gly Trp Asp
           325
                           330 335
Thr Asp Gln Phe Pro Asn Ser Val Glu Glu Asn Ala Leu Val Met Tyr
                        345
Glu Ile Ile Lys Ala Gly Gly Phe Thr Thr Gly Gly Leu Asn Phe Asp
     355
                     360
                                    365
Ala Lys Val Arg Arg Gln Ser Thr Asp Lys Tyr Asp Leu Phe Tyr Gly
 370 375
                                 380
His Ile Gly Ala Met Asp Thr Met Ala Leu Ala Leu Lys Val Ala Ala
385 390
                              395
Arg Met Ile Glu Asp Gly Glu Leu Asp Lys Arg Val Ala Lys Arg Tyr
           405 410
Ser Gly Trp Asn Ser Glu Leu Gly Gln Gln Ile Leu Lys Gly Gln Leu
       420 425
                                        430
Ser Leu Ala Glu Ile Ala Lys Tyr Ala Glu Gln His Gln Leu Ala Pro
                           445
                    440
Gln His Gln Ser Gly His Gln Glu Leu Leu Glu Asn Leu Val Asn His
                  455
Tyr Leu Phe Asp Lys
<210> 9979
<213> Enterobacter cloacae
<400> 9979
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<211> 491 <212> PRT

Ile Pro Lys Glu Ala Ala Glu Met His Phe Arg Ala Ile Thr Arg Ile Val Gly Leu Leu Val Ile Leu Phe Ser Gly Thr Met Ile Ile Pro Gly 20 Leu Val Ala Leu Ile Tyr Arg Asp Gly Ala Gly Arg Ala Phe Thr Gln 40 Thr Phe Phe Val Ala Leu Thr Ile Gly Ser Leu Leu Trp Trp Pro Asn 55 Arg Arg Glu Lys Gly Glu Leu Lys Ser Arg Glu Gly Phe Leu Ile Val 70 75 Val Leu Phe Trp Thr Val Leu Gly Ser Val Gly Ala Leu Pro Phe Ile Phe Ser Glu Gln Pro Asn Leu Thr Val Thr Asp Ala Phe Phe Glu Ser

```
100
                        105
                                       110
Phe Ser Gly Leu Thr Thr Gly Ala Thr Thr Leu Val Gly Leu Asp
   115
               120 125
Ser Leu Pro His Ala Ile Leu Phe Tyr Arg Gln Met Leu Gln Trp Phe
  130
       135 140
Gly Gly Met Gly Ile Ile Val Leu Ala Val Ala Ile Leu Pro Ile Leu
    150 155 160
Gly Val Gly Gly Met Gln Leu Tyr Arg Ala Glu Met Pro Gly Pro Leu
         165 170 175
Lys Asp Asn Lys Met Arg Pro Arg Ile Ala Glu Thr Ala Lys Thr Leu
      180 185 190
Trp Leu Ile Tyr Val Leu Leu Thr Val Ala Cys Ala Leu Ala Leu Trp
    195 200 205
Phe Ala Gly Met Pro Ala Phe Asp Ala Ile Gly His Ser Phe Ala Thr
 210 215 220
Ile Ala Ile Gly Gly Phe Ser Thr His Asp Ala Ser Val Gly Tyr Phe
              230 235
Asp Ser Pro Thr Ile Asn Thr Ile Ile Ala Ile Phe Leu Leu Ile Ser
         245
                           250 255
Gly Cys Asn Tyr Gly Leu His Phe Ser Leu Leu Ser Gly Arg Ser Leu
        260
                        265 270
Lys Val Tyr Trp Arg Asp Pro Glu Phe Arg Met Phe Ile Gly Val Gln
 275 280 285
Leu Thr Leu Val Ile Ile Cys Thr Leu Val Leu Trp Phe His Asp Val
               295 300
Tyr Asn Ser Ala Val Thr Thr Leu Asn Gln Ala Phe Phe Gln Val Val
305 310
                              315
Ser Met Ala Thr Thr Ala Gly Phe Thr Thr Asp Ser Ile Ala Arg Trp
                           330
            325
Pro Leu Phe Leu Pro Val Leu Leu Cys Ser Ala Phe Ile Gly Gly
      340
                       345
Cys Ala Gly Ser Thr Gly Gly Gly Leu Lys Val Ile Arg Ile Leu Leu
 355
                    360
                                    365
Leu Phe Lys Gln Gly Asn Arg Glu Leu Lys Arg Leu Val His Pro Asn
                 375
                                 380
Ala Val Tyr Ser Ile Lys Leu Gly Asn Arg Ala Leu Pro Glu Arg Ile
              390
                             395
Leu Glu Ala Val Trp Gly Phe Phe Ser Ala Tyr Ala Leu Val Phe Ile
           405
                           410
Val Ser Met Leu Ala Ile Ile Ala Thr Gly Val Asp Asp Phe Ser Ala
        420
                        425
Phe Ala Ser Val Val Ala Thr Leu Asn Asn Leu Gly Pro Gly Leu Gly
                     440
     435
                                    445
Val Val Ala Asp Asn Phe Ala Ser Met Asn Pro Val Ala Lys Trp Ile
  450 455
Leu Ile Ala Asn Met Leu Phe Gly Arg Leu Glu Val Phe Thr Leu Leu
465 470 475
Val Leu Phe Thr Pro Thr Phe Trp Arg Glu
            485
<210> 9980
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<211> 99

<212> PRT <213> Enterobacter cloacae

<400> 9980

Gly Gly Glu Met Gly Glu Leu Leu Asn Ser Gly Leu Leu Ser Ile Ala 1.0 Ser Leu Val Met Ser Leu Val Val Leu Val Val Gly Leu Val Leu Trp 25 Phe Phe Val Asn Arg Ala Ser Ser Arg Thr Asn Glu Gln Ile Glu Leu

5493 Leu Glu Ala Leu Leu Asp Gln Gln Lys Arg Gln Asn Ala Leu Leu Arg 55 Arg Leu Cys Glu Ala Asn Glu Pro Glu Glu Lys Ala Val Pro Lys Asp 70 75 Ala Val Ala Gln Gln Asp Glu Glu Asp Phe Ile Arg Leu Val Ala 90 Glu Arg <210> 9981 <211> 172 <212> PRT <213> Enterobacter cloacae <400> 9981 Thr His Ser Gln Gln Gln Ser Val Lys Pro Met Lys Tyr Asp Thr Ser Glu Leu Cys Asp Ile Tyr Gln Glu Asp Val Asn Val Val Glu Pro Leu 25 30 Phe Ser Asn Phe Gly Gly Arg Ser Ser Phe Gly Gly Gln Ile Ile Thr 35 40 Val Lys Cys Phe Glu Asp Asn Gly Leu Leu Tyr Asp Leu Leu Glu Glu 50 55 Asn Gly Arg Gly Arg Val Leu Leu Val Asp Gly Gly Gly Ser Val Arg 75 7.0 Arg Ala Leu Ile Asp Ala Asp Leu Ala Arg Leu Ala Val Gln Asn Glu 85 90 Trp Glu Gly Ile Val Val Tyr Gly Ser Val Arg Gln Val Asp Asp Leu 100 105 Glu Asp Leu Asp Ile Gly Ile Gln Ala Ile Ala Ala Ile Pro Val Gly 120 Ala Ala Gly Glu Gly Ile Gly Glu Ser Asp Val Arg Val Asn Phe Gly 135 140 Gly Val Thr Phe Phe Ser Gly Asp His Leu Tyr Ala Asp Asn Thr Gly 145 150 155 Ile Ile Leu Ser Glu Asp Ala Leu Asp Ile Glu 165 <210> 9982 <211> 234 <212> PRT <213> Enterobacter cloacae <400> 9982 Thr Met Asn Lys Ile Leu Leu Val Asp Asp Asp Arg Glu Leu Thr Ser Leu Leu Lys Glu Leu Leu Asp Met Glu Gly Phe Asn Val Leu Val Ala 25 His Asp Gly Glu Gln Ala Leu Ser Leu Leu Asp Asp Ser Ile Asp Leu 35 Leu Leu Leu Asp Val Met Met Pro Lys Lys Asn Gly Ile Asp Thr Leu Lys Glu Leu Arg Gln Thr His Gln Thr Pro Val Ile Met Leu Thr Ala 70 Arg Gly Ser Glu Leu Asp Arg Val Leu Gly Leu Glu Leu Gly Ala Asp 90 8.5 Asp Tyr Leu Pro Lys Pro Phe Asn Asp Arg Glu Leu Val Ala Arg Ile 100 105 Arg Ala Ile Leu Arg Arg Ser His Trp Ser Glu Gln Gln Gln Asn Thr

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Asp Asn Ser Ser Pro Thr Leu Glu Val Asp Ser Leu Ser Leu Asn Pro
             135 140
Gly Arg Gln Glu Ala Ser Phe Asp Gly Glu Thr Leu Glu Leu Thr Gly
         150 155
Thr Glu Phe Thr Leu Leu Tyr Leu Leu Ala Gln His Leu Gly Gln Val
     165 170 175
Val Ser Arg Glu His Leu Ser Gln Glu Val Leu Gly Lys Arg Leu Thr
       180 185 190
Pro Phe Asp Arg Ala Ile Asp Met His Ile Ser Asn Leu Arg Arg Lys
 195 200 205
Leu Pro Glu Arg Lys Asp Gly His Pro Trp Phe Lys Thr Leu Arg Gly
210 215 220
Arg Gly Tyr Leu Met Val Ser Ala Ser
```

230

<210> 9983 <211> 340

<212> PRT

<213> Enterobacter cloacae

<400> 9983 Glu Ile Phe Ala Lys Arg Gly Gly Asp Glu Glu Val Ser Leu Phe Arg 10 Lys Phe Gly Phe Pro Val Leu Ile Val Leu Ala Arg Ile Val Ala Gln 20 25 3.0 Arg Ala Ile Gly Pro Ala Val Asp Phe Leu Phe Ser Leu Leu Val Thr 40 4.5 35 Arg Lys Pro Glu Ile Gly Gln Arg Gln Leu Thr Val Asp Leu His Phe 50 55 Gly Asp Gly Thr Arg Ala Ala Ala Phe Val Leu Pro Tyr Leu Ala Cys 70 75 80 Lys His Ile His Arg Val Met His Leu His Ser Phe Arg Tyr Lys Lys 85 90 Ser Glu Ser Ser Asp Ser Leu Leu Thr Gly Val Asn Ala Thr Leu Phe 100 105 Phe Ser Gly Glu Thr Arg Cys Cys Phe Val Pro Val His His Val Pro 115 120 125 Glu Gly Phe Asp Val Val Arg Ala Thr Val Leu Glu Leu Gln Val Val 130 135 140 Ser Val Phe Pro His Val Gln Thr Gln Asn Trp Glu Ala Gly Cys Ala 150 155 Arg Asp Ser Phe Thr His Lys Arg Gly Ile Leu Val Ser Gly Arg Asn 170 165 Asp Arg Gln Phe Val Thr Phe Gln Asn Gln Pro Arg Pro Ala Arg Ala 190 180 185 Glu Thr Gly Cys Ser Gly Phe Phe Glu Phe Arg Phe Glu Val Val Asn 195 200 205 Gly Thr Glu Val Thr Leu Asp Ser Arg Phe Gln Val Ala Leu Lys Gly 215 220 Gly Ala Gly Phe Gln Ala Phe Pro Glu Gln Ala Val Val Ser Val Thr 225 230 235 Ala Arg Val Val Ala Gln His Gly Phe Leu Val Cys Trp Gln Leu Val 245 250 Gln Phe Gly Asp Gln Leu Phe Asn Arg Gln Ile Ser Glu Leu Trp Gln 265 260 Ala Phe Gln Arg Ser Ile Arg Val Val His Val Gly Leu Val Val Phe 275 280 285 Ser Val Met Asp Phe His Arg Leu Leu Val Glu Met Arg Phe Gln Cys 295 300 Val Val Gly Ile Arg Gln Gly Trp Gln Cys Ile Thr His Asn Pro Leu 315

```
His Tyr Cys Arg Ala Ala Gln Leu Leu Met Pro Arg Lys Gln Leu Val
His Tyr Ser
          340
<210> 9984
<211> 383
<212> PRT
<213> Enterobacter cloacae
<400> 9984
Leu Pro Phe Lys Thr Lys Val Arg Gln Pro Ser Glu Gly Ser Gln Thr
           - 5
                             10
Ala Ser Phe Leu His Ser Ser Ser Arg Arg Glu Ala Ser Gly Tyr Lys
       20
                25
Asn Asp Glu Asp Val Lys Met Asn His Ala Ile Thr Met Gly Ile Phe
             40
Trp His Leu Ile Gly Ala Ala Ser Ala Ala Cys Phe Tyr Ala Pro Phe
                  55
                                      60
Lys Lys Val Lys Gly Trp Ser Trp Glu Thr Met Trp Ser Val Gly Gly
                 7.0
                               75
Thr Val Ser Trp Leu Ile Leu Pro Trp Thr Ile Ser Ala Met Leu Leu
             8.5
                              90
Pro Asp Phe Trp Gly Tyr Phe Ser Ser Phe Asn Ala Ser Thr Leu Leu
      100 105 110
Pro Val Phe Leu Phe Gly Ala Met Trp Gly Ile Gly Asn Ile Asn Tyr
      115
                        120
Gly Leu Thr Met Arg Tyr Leu Gly Met Ser Met Gly Ile Gly Ile Ala
                  135
                                      140
Ile Gly Ile Thr Leu Ile Val Gly Thr Leu Met Thr Pro Ile Leu Asn
                150
                                  155
                                                    160
Gly Asn Phe Asp Val Leu Ile Asn Thr Gln Gly Gly Arg Met Thr Leu
             165
                               170
Leu Gly Val Leu Val Ala Val Ile Gly Val Gly Ile Val Thr Arg Ala
          180
                           185
Gly Gln Leu Lys Glu Arg Lys Met Gly Ile Lys Ala Glu Glu Phe Asn
      195
                        200
                                          205
Leu Lys Lys Gly Leu Leu Ala Val Met Cys Gly Ile Phe Ser Ala
        215
  210
                                      220
Gly Met Ser Phe Ala Met Asn Ala Ala Lys Pro Met His Asp Ala Ala
225 230
                                  235
                                                    240
Ala Ala Leu Gly Val Asp Pro Leu Tyr Val Ala Leu Pro Ser Tyr Val
             245
                               250
                                                 255
Val Ile Met Gly Gly Gly Ala Leu Val Asn Leu Gly Phe Cys Phe Ile
          260
                           265
                                             270
Arg Leu Ala Lys Val Asn Asn Leu Ser Val Lys Ala Asp Phe Ser Leu
   275
                       280
Ala Lys Pro Leu Ile Val Thr Asn Val Leu Leu Ser Ala Leu Gly Gly
  290
                     295
                                      300
Leu Met Trp Tyr Leu Gln Phe Phe Phe Tyr Ala Trp Gly His Ala Ser
              310
305
                                   315
Ile Pro Ala Gln Tyr Asp Tyr Met Ser Trp Met Leu His Met Ser Phe
              325
                               330
                                                 335
Tyr Val Leu Cys Gly Gly Leu Val Gly Leu Val Leu Lys Glu Trp Asn
          340
                            345
Asn Ala Gly Arg Arg Pro Val Gly Val Leu Ser Leu Gly Cys Val Val
      355
                        360
Ile Ile Ile Ala Ala Asn Ile Val Gly Leu Gly Met Ala Asn
   370
                    375
```

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<212> PRT
<213> Enterobacter cloacae
<400> 9985
Pro Met Gln Val Ser Arg Arg Gln Phe Phe Lys Ile Cys Ala Gly Gly
                               1.0
Met Ala Gly Thr Thr Ala Ala Ala Leu Gly Phe Ala Pro Gly Val Ala
                           2.5
          20
                                             30
Leu Ala Glu Thr Arg Gln Tyr Lys Leu Leu Arg Thr Arg Glu Thr Arg
     35
                                       4.5
                       4.0
Asn Thr Cys Thr Tyr Cys Ser Val Gly Cys Gly Leu Leu Met Tyr Ser
                    55
                                      60
Leu Gly Asp Gly Ala Lys Asn Ala Lys Ala Ser Ile Phe His Ile Glu
                70
                           75
Gly Asp Pro Asp His Pro Val Asn Arg Gly Ala Leu Cys Pro Lys Gly
                              90
             85
Ala Gly Leu Val Asp Phe Ile His Ser Glu Ser Arg Leu Lys Phe Pro
         100 105
Glu Tyr Arg Ala Pro Gly Ser Asp Lys Trp Gln Gln Ile Ser Trp Glu
      115
                     120
Glu Ala Phe Asp Arg Ile Ala Lys Leu Met Lys Glu Asp Arg Asp Ala
                    135
                                      140
Asn Phe Ile Ala Lys Asn Ala Glu Gly Thr Thr Val Asn Arg Trp Leu
                 150
                     155
Ser Thr Gly Met Leu Cys Ala Ser Ala Ser Ser Asn Glu Thr Gly Tyr
             165
                   170 175
Leu Thr Gln Lys Phe Thr Arg Ala Leu Gly Met Leu Ala Val Asp Asn
                           185
```

<211> 821 <212> PRT <213> Enterobacter cloacae

180

Gln Ala Arg Val 195 <210> 9986

<211> 197

<400> 9986 His Gly Pro Thr Val Ala Ser Leu Ala Pro Thr Phe Gly Arg Gly Ala Met Thr Asn His Trp Val Asp Ile Lys Asn Ala Asn Leu Ile Val Val 20 25 30 Met Gly Gly Asn Ala Ala Glu Ala His Pro Val Gly Phe Arg Trp Ala 40 Met Glu Ala Lys Ile His Asn Gly Ala Lys Leu Ile Val Ile Asp Pro 5.0 55 60 Arg Phe Thr Arg Thr Ala Ser Val Ala Asp Phe Tyr Thr Pro Ile Arg 70 75 Ser Gly Thr Asp Ile Thr Phe Leu Ser Gly Val Leu Leu Tyr Leu Met Thr Asn Glu Lys Tyr Asn Arg Glu Tyr Thr Glu Ala Tyr Thr Asn Ala 105 100 Ser Leu Ile Val Arg Glu Asp Tyr His Phe Glu Asp Gly Leu Phe Ser 120 125 Gly Tyr Asp Ala Glu Lys Arg Lys Tyr Asp Lys Thr Ser Trp Asn Tyr 135 140 Glu Leu Asp Glu Asn Gly Phe Ala Lys Arg Asp Thr Thr Leu Gln His 150 155 Pro Arg Cys Val Trp Asn Leu Leu Lys Glu His Val Ser Arg Tyr Thr 170 165 Pro Glu Val Val Glu Asn Ile Cys Gly Thr Pro Lys Ala Asp Phe Leu

185 Lys Val Cys Glu Leu Ile Ala Glu Thr Ser Ala Lys Asp Lys Thr Ala 200 205 Ser Phe Leu Tyr Ala Leu Gly Trp Thr Gln His Ser Ile Gly Ala Gln 215 220 Asn Ile Arg Thr Met Ala Met Val Gln Leu Leu Gly Asn Met Gly 230 235 Met Ala Gly Gly Gly Val Asn Ala Leu Arg Gly His Ser Asn Ile Gln 245 250 255 Gly Leu Thr Asp Leu Gly Leu Leu Ser Gln Ser Leu Thr Gly Tyr Met 260 265 270 Asn Leu Pro Ser Glu Lys Gln Thr Asp Leu Gln Thr Tyr Leu Thr Ala 275 280 285 Ser Thr Pro Lys Pro Leu Leu Glu Gly Gln Val Asn Tyr Trp Gly Asn 290 295 300 Tyr Pro Lys Phe Phe Val Ser Leu Met Lys Ala Phe Tyr Gly Asp Lys 305 310 315 Ala Thr Ala Glu Asn Ser Trp Gly Phe Asp Trp Leu Pro Lys Trp Asp 325 330 335 Lys Gly Tyr Asp Val Leu Gln Tyr Phe Glu Met Met His Gln Gly Gln 340 345 350 Val Asn Gly Tyr Ile Cys Gln Gly Phe Asn Pro Val Ala Ser Phe Pro 355 360 365 Asn Lys Asn Lys Val Val Glu Ser Leu Ser Lys Leu Lys Phe Leu Val 370 375 380 Thr Ile Asp Pro Leu Asn Thr Glu Thr Ser Thr Phe Trp Gln Asn His 390 395 Gly Glu Ser Asn Asp Val Asp Pro Ser Lys Ile Gln Thr Glu Val Phe 405 410 415 Arg Leu Pro Ser Thr Cys Phe Ala Glu Glu Asn Gly Ser Ile Val Asn 425 430 Ser Gly Arg Trp Leu Gln Trp His Trp Lys Gly Ala Asp Ala Pro Gly 435 440 445 Ile Ala Leu Asn Asp Gly Glu Ile Leu Ala Gly Ile Phe Leu Arg Leu 450 455 460 Arg Lys Met Tyr Ala Ser Glu Gly Gly Ala Thr Pro Glu Pro Val Leu 465 470 475 Asn Met Thr Trp Asn Tyr Ser Thr Pro Glu Asn Pro Ala Pro Glu Glu 485 490 Val Ala Met Glu Ser Asn Gly Lys Ala Leu Ala Asp Val Ile Asp Pro 500 505 510 Ala Thr Gly Ala Val Leu Ala Lys Lys Gly Asp Gln Leu Ser Thr Phe 515 520 525 Ala His Leu Arg Asp Asp Gly Thr Thr Ser Ser Gly Cys Trp Ile Phe 535 530 540 Ala Gly Ser Trp Thr Pro Lys Gly Asn Gln Met Ala Asn Arg Asp Asn 545 550 555 Ala Asp Pro Ser Gly Leu Gly Asn Thr Leu Gly Trp Ala Trp Ala Trp 565 570 Pro Leu Asn Arg Arg Ile Leu Tyr Asn Arg Ala Ser Ala Asp Pro Gln 590 580 585 Gly Asn Pro Trp Asp Pro Lys Arg Gln Leu Leu Lys Trp Asp Gly Ala 600 595 605 Lys Trp Gly Gly Val Asp Ile Pro Asp Tyr Ser Thr Ala Ala Pro Gly 615 Ser Asp Val Gly Pro Phe Ile Met Gln Pro Glu Gly Met Gly Arg Leu - 630 635 Phe Ala Ile Asp Lys Met Ala Glu Gly Pro Phe Pro Glu His Tyr Glu 650 Pro Phe Glu Thr Pro Leu Gly Thr Asn Pro Leu His Pro Asn Val Val 665

Ser Asn Pro Ala Ala Arg Ile Phe Lys Gly Asp Phe Glu Ala Leu Gly 680 Lys Lys Asp Lys Phe Pro Tyr Val Gly Thr Thr Tyr Arg Leu Thr Glu 695 700 His Phe His Tyr Trp Thr Lys His Ala Leu Leu Asn Ala Ile Ala Gln 710 715 Pro Glu Gln Phe Val Glu Ile Gly Glu Lys Leu Ala Asn Lys Leu Gly 725 730 Ile Ala His Gly Asp Thr Val Lys Val Ser Ser Asn Arg Gly Tyr Ile 740 745 750 Lys Ala Lys Ala Val Val Thr Lys Arg Ile Arg Thr Leu Asn Val His 755 760 765 Gly Gln Gln Val Asp Thr Ile Gly Ile Pro Ile His Trp Gly Tyr Glu 770 775 780 Gly Val Ala Lys Lys Gly Phe Ile Ala Asn Thr Leu Thr Pro Phe Val 785 790 795 Gly Asp Ala Asn Thr Gln Thr Pro Glu Phe Lys Ala Phe Leu Val Asn 810

Val Glu Lys Val 820

<210> 9987 <211> 305 <212> PRT

<213> Enterobacter cloacae

<400> 9987 Arg Arg Arg Leu Met Ala Tyr Gln Ser Gln Asp Ile Ile Arg Arg Ser 1.0 Ala Thr Asn Gly Phe Thr Pro Ala Pro Gln Ala Arg Asp His Gln Gln 20 25 Glu Val Ala Lys Leu Ile Asp Val Thr Thr Cys Ile Gly Cys Lys Ala 3.5 40 45 Cys Gln Val Ala Cys Ser Glu Trp Asn Asp Ile Arg Asp Glu Val Gly 55 60 His Asn Val Gly Val Tyr Asp Asn Pro Ala Asp Leu Thr Ala Lys Ser 70 7.5 Trp Thr Val Met Arg Phe Ser Glu Val Glu Gln Asn Asp Lys Leu Glu 85 90 Trp Leu Ile Arg Lys Asp Gly Cys Met His Cys Ala Asp Pro Gly Cys 100 105 Leu Lys Ala Cys Pro Ser Glu Gly Ala Ile Ile Gln Tyr Ala Asn Gly 115 120 125 Ile Val Asp Phe Gln Ser Glu Gln Cys Ile Gly Cys Gly Tyr Cys Ile 135 130 140 Ala Gly Cys Pro Phe Asp Val Pro Arg Met Asn Pro Glu Asp Asn Arg 150 155 Val Tyr Lys Cys Thr Leu Cys Val Asp Arg Val Asn Val Gly Gln Glu 165 170 Pro Ala Cys Val Lys Thr Cys Pro Thr Gly Ala Ile His Phe Gly Ser 180 185 190 Lys Glu Asp Met Lys Thr Leu Ala Ala Glu Arg Val Gly Glu Leu Lys 195 200 205 Thr Arg Gly Tyr Asp Asn Ala Gly Leu Tyr Asp Pro Ala Gly Val Gly 210 215 Gly Thr His Val Met Tyr Val Leu His His Ala Asp Lys Pro Asn Leu 230 235 Tyr His Gly Leu Pro Glu Asn Pro Glu Ile Ser Ala Thr Val Lys Phe 245 250 255 Trp Lys Gly Ile Trp Lys Pro Leu Ala Ala Val Gly Phe Ala Ala Thr 260 265

```
Phe Ala Ala Ser Ile Phe His Tyr Val Gly Val Gly Pro Asn Arg Ala
            280
Glu Glu Glu Asp Asp Asn Leu His Glu Glu Lys Asp Glu Val Arg Lys
   290
                  295
305
<210> 9988
<211> 293
<212> PRT
<213> Enterobacter cloacae
<400> 9988
Gly Met Thr Met Tyr Thr Leu Lys Asp Ile Thr Arg Pro Ser Gly Gly
                                10
Phe Ala Met Leu Ala Val Asp Gln Arg Glu Ala Met Arg Leu Met Phe
          20
                           25
Ala Ala Ala Gly Ala Pro Val Pro Val Thr Asp Gln His Leu Thr Asp
       35
                         40
                                          45
Phe Lys Val Asn Ala Ala Lys Ile Leu Ser Pro Tyr Ala Ser Ala Ile
  50
                      55
Leu Val Asp Gln Gln Phe Cys Tyr Arg Gln Ile Val Gly Gln Gln Ala
                   70
                                     75
Val Ala Lys Ser Cys Ala Met Ile Val Ala Ala Asp Glu Phe Ile Pro
              8.5
                                  90
Gly Asn Gly Ile Pro Val Asp Ser Val Ala Ile Asp Lys Asn Val Asp
           100
                             105
                                                110
Ala Gln Ala Val Lys Arg Asp Gly Gly Lys Ala Leu Lys Leu Leu Val
       115
                          120
                                             125
Leu Trp Arg Ser Asp Glu Asp Pro Gln Gln Arg Leu Glu Met Val Lys
 130
                     135
                                         140
Ala Phe Asn Thr Leu Cys His Asp Asn Gly Leu Leu Ser Ile Ile Glu
                 150
                                     155
                                                         160
Pro Val Val Arg Pro Pro Arg Arg Gly Ala Ala Phe Asn Arg Glu Gln
                                  170
                                                     175
               165
Ala Ile Ile Asp Ala Ala Lys Glu Leu Gly Asp Ser Gly Ala Asp Leu
                              185
                                                 190
           180
Tyr Lys Val Glu Met Pro Leu Phe Gly Lys Gly Thr Gln Glu Leu
                          200
                                             205
       195
Leu Ala Ala Ser Gln Lys Leu Asn Glu Asn Ile Ala Met Pro Trp Val
   210
                      215
                                          220
Ile Leu Ser Ser Gly Val Asp Asp Lys Leu Phe Pro Arg Ala Val Ser
225
                   230
                                      235
Val Ala Met Gln Ala Gly Ala Ser Gly Phe Leu Ala Gly Arg Ala Val
               245
                                  250
Trp Ser Ser Val Ile Gly Leu Pro Asp Thr Glu Leu Met Leu Arg Asp
                              265
           260
Ile Ser Val Pro Lys Leu Gln Arg Leu Gly Glu Ile Val Asp Glu Met
       275
                          280
                                             285
Met Ala Arg Arg
   290
```

<210> 9989

<211> 679

<212> PRT

<213> Enterobacter cloacae

<400> 9989

Asp Gly Val Phe Met Arg Thr Leu His Asn Ile Asp Leu Lys Asn Asn Glu Ser Gly Phe Thr Leu Arg Trp Gln Asp Arg Leu Ile Leu Ser His

Thr Ala Asp Ala Pro Cys Leu Trp Ile Gly Ala Gly Glu Ala Asp Ile 35 40 Glu Met Phe Arg Gly Asn Phe Ser Ile Lys Asp Lys Leu Asn Glu Lys 55 Ile Ala Leu Thr Asn Ala Thr Val Thr Gln Gln Ser Ala Gly Trp Ala 70 75 Ile Arg Phe Thr Arg Gly Asp Ala Val Ser Ala Thr Leu Leu Val Gly 85 90 95 Val Asp Ala Glu Gly Arg Leu Glu Leu Lys Leu Lys Asn Asp Ala Pro 100 105 110 Gly His Asn Arg Ile Trp Leu Arg Leu Ala Ala Gln Pro Glu Asp His 115 120 125 Ile Tyr Gly Cys Gly Glu Gln Phe Ser Tyr Phe Asp Leu Arg Gly Lys 130 135 140 Pro Phe Pro Leu Trp Thr Ser Glu Gln Gly Val Gly Arg Asn Lys Gln 145 150 155 Thr Tyr Val Thr Trp Gln Ala Asp Cys Lys Glu Asn Ala Gly Gly Asp 165 170 175 Tyr Tyr Trp Thr Phe Phe Pro Gln Pro Thr Phe Val Ser Thr Gln Lys 180 185 190 Tyr Tyr Cys His Val Asp Asn Ser Cys Tyr Met Asn Phe Asp Phe Ser 195 200 205 Ala Pro Asp Phe His Glu Leu Ala Phe Trp Glu Asp Asn Ala Thr Leu 210 215 220 Arg Phe Glu Cys Ala Glu Thr Tyr Val Asp Leu Leu Glu Lys Leu Thr 225 230 235 240 Gly Leu Leu Gly Arg Gln Pro Glu Leu Pro Asp Trp Val Tyr Asp Gly 245 250 255 Val Thr Leu Gly Ile Gln Gly Gly Thr Glu Val Cys Gln Gln Lys Leu 260 265 Asp Thr Met Arg Asn Gly Gly Val Lys Val Asn Gly Ile Trp Ala Gln 275 280 285 Asp Trp Ser Gly Ile Arg Met Thr Ser Phe Gly Lys Arg Val Met Trp 290 295 300 Asn Trp Lys Trp Asn Ser Ala Leu Tyr Pro Gln Leu Asp Thr Arg Ile 315 310 Ala Gln Trp Lys Glu Glu Gly Val Gln Phe Leu Ser Tyr Ile Asn Pro 325 330 Tyr Val Ala Ser Asp Lys Asp Leu Cys Glu Glu Ala Ala Lys Arg Gly 340 345 350 Tyr Leu Thr Lys Asn Ala Asp Gly Lys Asp Tyr His Val Glu Phe Gly 360 365 Glu Phe Tyr Ala Gly Val Ile Asp Leu Thr Asn Pro Ala Ala Tyr Asp 380 375 Trp Tyr Lys Glu Val Ile Lys Lys Asn Leu Ile Glu Leu Gly Cys Gly 390 395 385 Gly Trp Met Ala Asp Phe Gly Glu Tyr Leu Pro Thr Asp Thr Phe Leu 410 405 His Asn Gly Val Ser Ala Glu Ile Met His Asn Ala Trp Pro Ala Leu 425 420 Trp Ala Lys Cys Asn Tyr Glu Ala Leu Glu Glu Thr Gly Lys Leu Gly 435 440 445 Glu Ile Leu Phe Phe Met Arg Ala Gly Tyr Thr Gly Ser Gln Lys His 455 Ser Val Met Met Trp Ala Gly Asp Gln Asn Val Asp Trp Ser Leu Asp 470 475 Asp Gly Leu Ala Ser Val Val Pro Ala Ala Leu Ser Leu Ala Met Thr 485 490 Gly His Gly Leu His His Ser Asp Ile Gly Gly Tyr Thr Thr Leu Phe 500 505



Glu Met Lys Arg Ser Lys Glu Leu Leu Leu Arg Trp Cys Asp Phe Ser 515 520 525 Ala Phe Thr Pro Met Met Arg Thr His Glu Gly Asn Arg Pro Gly Asp 535 540 Asn Trp Gln Phe Asp Gly Asp Ala Glu Thr Ile Ala His Phe Ala Arg 550 555 560 Met Thr Thr Val Phe Thr Thr Leu Lys Pro Tyr Thr Lys Ala Ala Val 565 570 575 Ala Gln Asn Ala Lys Ser Gly Leu Pro Val Met Arg Pro Leu Phe Leu 580 585 590 His Tyr Glu Asp Asp Ala Arg Ala Tyr Thr Leu Lys Tyr Gln Tyr Leu 600 605 595 Phe Gly Arg Asp Leu Leu Val Ala Pro Val His Glu Lys Gly Arg Arg 610 615 620 Asp Trp Ser Leu Tyr Leu Pro Gln Asp Thr Trp Val Asn Ala Trp Thr 630 635 Gly Glu Thr Cys Gln Gly Gly Asp Ile Thr Val Asp Ala Pro Leu Gly 645 650 Lys Pro Pro Val Phe Tyr Arg Gln Gln Ser Glu Trp Ala Asp Leu Phe 660 665 Ser Thr Leu Arg His Ile

<210> 9990 <211> 475

<212> PRT <213> Enterobacter cloacae

<400> 9990 Gly Ser Pro Ala Gly Lys Pro Ala Gly Arg Arg Arg Thr Ile Met Ser 10 Gln His Thr Ser Asp Pro Ala Thr Leu Arg Leu Pro Phe Lys Glu Lys 25 Leu Ala Tyr Gly Met Gly Asp Leu Gly Ser Asn Ile Leu Leu Asp Ile 40 4.5 Gly Thr Leu Tyr Leu Leu Lys Phe Tyr Thr Asp Val Leu Gly Leu Pro 55 Gly Thr Tyr Gly Gly Ile Ile Phe Leu Ile Ala Lys Phe Phe Thr Ala 75 7.0 Phe Thr Asp Met Gly Thr Gly Ile Met Leu Asp Ser Arg Arg Lys Ile 85 90 Gly Pro Lys Gly Lys Phe Arg Pro Phe Val Leu Tyr Ala Ala Phe Pro 100 105 Val Thr Leu Leu Ala Ile Ala Asn Phe Val Gly Thr Pro Phe Glu Ile 120 Thr Gly Lys Thr Val Met Ala Thr Val Leu Phe Met Leu Tyr Gly Leu 130 135 140 Phe Phe Ser Met Met Asn Cys Ser Tyr Gly Ala Met Val Pro Ala Ile 145 150 155 Thr Lys Asn Pro Asp Glu Arg Ala Ser Leu Ala Ala Trp Arg Gln Gly 165 170 Gly Ala Thr Leu Gly Leu Leu Cys Thr Val Gly Phe Val Pro Val 180 185 190 Met Asn Leu Ile Glu Gly Asn Asp Gln Leu Gly Tyr Ile Phe Ala Ala 195 200 205 Thr Leu Phe Ser Leu Phe Gly Leu Phe Phe Met Trp Trp Cys Tyr Lys 210 215 220 Gly Val Thr Glu Arg Tyr Val Glu Thr Gln Pro Ala Asn Pro Ala Gln 225 230 235 Lys Pro Gly Leu Leu Gln Ser Phe Arg Ala Ile Ala Gly Asn Arg Pro 245 250

```
Leu Phe Ile Leu Cys Ile Ala Asn Leu Cys Thr Leu Gly Ala Phe Asn
        260
                       265
Val Lys Leu Ala Ile Gln Val Tyr Tyr Thr Gln Tyr Val Leu Asn Asp
     275
                    280
                        285
Pro Ile Leu Leu Ser Tyr Met Gly Phe Phe Ser Met Gly Cys Ile Phe
  290 295 300
Ile Gly Val Phe Met Met Pro Gly Ala Val Arg Arg Phe Gly Lys Lys
      310 315
Lys Val Tyr Ile Ser Gly Leu Met Ile Trp Val Ala Gly Asp Leu Leu
        325 330 335
Asn Tyr Phe Phe Gly Gly Gly Ser Val Ser Phe Val Ala Phe Ser Cys
 340 345
Leu Ala Phe Phe Gly Ser Ala Phe Val Asn Ser Leu Asn Trp Ala Leu
 355
                    360 365
Val Ser Asp Thr Val Glu Tyr Gly Glu Trp Arg Thr Gly Val Arg Ser
 370 375 380
Glu Gly Thr Val Tyr Thr Gly Phe Thr Phe Phe Arg Lys Val Ser Gln
              390 395
Ala Leu Ala Gly Phe Phe Pro Gly Ile Met Leu Thr Gln Ile Gly Tyr
           405
                          410 . 415
Val Pro Asn Val Val Gln Ser Ala Gly Thr Val Glu Gly Leu Arg Gln
 420
                       425
                                      430
Leu Ile Phe Ile Tyr Pro Ser Leu Leu Ala Val Ile Thr Ile Val Ala
                    440
                        445
Met Gly Cys Phe Tyr Asn Leu Asn Glu Lys Met Tyr Val Arg Ile Val
450 455
                                460
Glu Glu Ile Glu Leu Arg Lys Arg Thr Ala
```

<212> PRT <213> Enterobacter cloacae

<210> 9991 <211> 261

<400> 9991

470

Ser Val Ser Ser His Phe Ile Thr Ile Asn Pro Ala Thr Met Ser Phe 10 Leu Phe Ile Arg Arg Glu Ala Phe Leu Tyr Leu Ile His Gly Gln Ile 25 30 Met Lys Arg Ile Ile Thr Val Leu Ile Val Ser Ser Val Ser Cys Pro 3.5 40 4.5 Val Phe Ala Gly Ala Tyr Val Glu Thr Arg Glu Ala Tyr Asn Thr Ala 55 Ser Glu Leu His Glu Val Ile Leu Arg Ala Gly Tyr Asn Phe Asp Met 70 75 Gly Ala Gly Leu Met Phe Thr Asn Ala Tyr Asn Val Gly Lys Trp Asp 8.5 90 Glu Leu Lys His Ser Tyr Asn Glu Ile Glu Gly Trp Tyr Pro Leu Phe 100 105 Lys Pro Thr Asp Lys Leu Thr Phe Gln Pro Gly Gly Leu Ile Asn Asp 120 125 Ser Ser Ala Gly Ser Gly Gly Ala Val Tyr Leu Asp Thr Asn Tyr Lys 135 140 Phe Thr Asp Trp Phe Asn Leu Thr Phe Arg Tyr Arg Tyr Asn His Asn 150 155 Asn Tyr Asp Thr Pro Asp Tyr Asn Gly Gln Met Asp Lys Asn Asp Thr 165 170 175 His Glu Phe Ala Asn Tyr Trp Asn Phe Lys Val Thr Asp Ala Phe Phe

Tyr Thr Phe Glu Pro His Phe Phe Gln Arg Val Asn Asp Tyr His Ser

190

Lys Asn Gly Lys Asp His His Trp Glu Ile Thr Asn Lys Phe Ser Tyr Lys Ile Asp Arg Asn Trp Leu Pro Tyr Leu Glu Leu Gln Trp Leu Asp Arg Trp Asn Asp Tyr Asn Arg Glu Gln Tyr Arg Ile Arg Leu Gly Leu Arg Tyr Ser Phe <210> 9992 <211> 485 <212> PRT <213> Enterobacter cloacae <400> 9992 Arg Pro Arg Tyr His Asp Asp Asp Gln Ser Gly Glu Leu Ser Met Ser Ala Glu His Val Leu Thr Met Leu Asn Glu His Glu Val Lys Phe Val Asp Leu Arg Phe Thr Asp Thr Lys Gly Lys Glu Gln His Val Thr Ile Pro Ala His Gln Val Asn Ala Glu Phe Phe Glu Glu Gly Lys Met Phe Asp Gly Ser Ser Ile Gly Gly Trp Lys Gly Ile Asn Glu Ser Asp 7.5 Met Val Leu Met Pro Asp Ala Thr Thr Ala Leu Ile Asp Pro Phe Tyr Glu Glu Pro Thr Leu Ile Ile Arg Cys Asp Ile Leu Glu Pro Gly Thr Leu Gln Gly Tyr Asp Arg Asp Pro Arg Ser Ile Ala Lys Arg Ala Glu Glu Tyr Leu Arg Ser Thr Gly Ile Ala Asp Thr Val Leu Phe Gly Pro 130 135 Glu Pro Glu Phe Phe Leu Phe Asp Asp Ile Arg Phe Gly Ala Ser Ile 145 150 Ser Gly Ser His Val Ala Ile Asp Asp Ile Glu Gly Ala Trp Asn Ser 165 170 Ser Thr Lys Tyr Glu Gly Gly Asn Lys Gly His Arg Pro Gly Val Lys Gly Gly Tyr Phe Pro Val Pro Pro Val Asp Ser Ser Gln Asp Ile Arg Ser Thr Met Cys Leu Ile Met Glu Glu Met Gly Leu Val Val Glu Ala His His His Glu Val Ala Thr Ala Gly Gln Asn Glu Ile Ala Thr Arg Phe Asn Thr Met Thr Lys Lys Ala Asp Glu Ile Gln Ile Tyr Lys Tyr Val Val His Asn Val Ala His Arg Phe Gly Lys Thr Ala Thr Phe Met Pro Lys Pro Met Phe Gly Asp Asn Gly Ser Gly Met His Cys His Met Ser Leu Ser Lys Asn Gly Thr Asn Leu Phe Ser Gly Asp Lys Tyr Ala Gly Leu Ser Glu Gln Ala Leu His Tyr Ile Gly Gly Val Ile Lys His Ala Lys Ala Ile Asn Ala Leu Ala Asn Pro Thr Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly Tyr Glu Ala Pro Val Met Leu Ala Tyr Ser Ala

Arg Asn Arg Ser Ala Ser Ile Arg Ile Pro Val Val Ala Ser Pro Lys

```
Ala Arg Arg Ile Glu Val Arg Phe Pro Asp Pro Ala Ala Asn Pro Tyr
                  375
                                 380
Leu Cys Phe Ala Ala Leu Leu Met Ala Gly Leu Asp Gly Ile Lys Asn
              390
                              395
Lys Ile His Pro Gly Glu Ala Met Asp Lys Asn Leu Tyr Asp Leu Pro
            405 410 415
Pro Glu Glu Ala Lys Glu Ile Pro Gln Val Ala Gly Ser Leu Glu Glu
     420 425 430
Ala Leu Gln Ala Leu Asp Ala Asp Arg Glu Phe Leu Thr Ala Gly Gly
   435 440 445
Val Phe Thr Asp Glu Ala Ile Asp Ala Tyr Ile Ala Leu Arg Thr Glu
 450 455 460
Glu Asn Asp Arg Val Arg Met Thr Pro His Pro Val Glu Phe Glu Leu
               470
                              475
Tyr Tyr Ser Val
<210> 9993
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<210> 9993 <211> 309 <212> PRT <213> Enterobacter cloacae

<400> 9993 Ile Thr Met Thr Asp Ile Ser Arg Thr Gln Ala Trp Leu Glu Ser Leu 1.0 Arg Pro Lys Thr Leu Pro Leu Ala Phe Ala Ala Ile Ile Val Gly Thr 20 Thr Leu Ala Trp Trp Gln Gly His Phe Asp Pro Leu Val Ala Gly Leu 40 Ala Leu Val Thr Ala Gly Leu Leu Gln Ile Leu Ser Asn Leu Ala Asn 55 Asp Tyr Gly Asp Ala Val Lys Gly Ser Asp Lys Pro Asp Arg Ile Gly 7.0 75 65 Pro Leu Arg Gly Met Gln Lys Gly Val Ile Thr Gln Ala Gln Met Lys 85 Arg Ala Leu Ile Ile Thr Val Val Leu Ile Cys Leu Ser Gly Leu Ala 105 100 110 Leu Val Thr Val Ala Ser Lys Thr Thr Ser Asp Phe Ile Gly Phe Leu 120 115 Val Leu Gly Leu Leu Ala Ile Ile Ala Ala Ile Thr Tyr Thr Val Gly 130 135 Thr Arg Pro Tyr Gly Tyr Ile Gly Leu Gly Asp Ile Ser Val Leu Val 150 155 Phe Phe Gly Trp Leu Ser Val Met Gly Ser Trp Tyr Leu Gln Ala His 165 170 Thr Val Ile Pro Ala Leu Phe Leu Pro Ala Thr Ala Cvs Glv Leu Leu 180 1.85 190 Ala Thr Ala Val Leu Asn Ile Asn Asn Leu Arg Asp Ile Asp Ser Asp 200 195 205 Arg Glu Asn Gly Lys Asn Thr Leu Ala Val Arg Leu Gly Pro Val Asn 210 215 220 Ala Arg Arg Tyr His Ala Phe Leu Leu Ile Gly Ala Leu Val Cys Leu 230 235 Ala Leu Phe Asn Leu Ile Ser Leu His Gly Leu Trp Gly Trp Leu Phe 245 250 255 Val Leu Ala Ala Pro Leu Leu Ile Lys Gln Ala Arg Tyr Val Met Arg 265 Glu Leu Ser Pro Ala Ala Met Pro Pro Met Leu Glu Arg Thr Val Lys 280 285 Gly Ala Leu Leu Thr Asn Leu Leu Phe Val Ile Gly Ile Val Leu Ser

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Gln Thr Leu Ser
305
<210> 9994
<211> 291
<212> PRT
<213> Enterobacter cloacae
<400> 9994
Thr Leu Leu Phe Cys Arg Ile Pro Ile Met Ser Gln Thr Ser Thr Leu
            5
                              10
Lys Gly Gln Cys Ile Ala Glu Phe Leu Gly Thr Gly Leu Leu Ile Phe
         20
                           25
Phe Gly Val Gly Cys Val Ala Ala Leu Lys Val Ala Gly Ala Ser Phe
                        40
                                       4.5
Gly Gln Trp Glu Ile Ser Ile Ile Trp Gly Leu Gly Val Ala Met Ala
                            60
                    5.5
Ile Tyr Leu Thr Ala Gly Val Ser Gly Ala His Leu Asn Pro Ala Val
                70
                        75
Thr Ile Ala Leu Trp Leu Phe Ala Cys Phe Asp Gly Arg Lys Val Val
            85
                             90
                                                 95
Pro Phe Ile Ile Ser Gln Phe Ala Gly Ala Phe Cys Ala Ala Ala Leu
          100 105
Val Tyr Gly Leu Tyr Tyr Asn Leu Phe Ile Asp Phe Glu Gln Thr His
   115 120 125
His Met Val Arg Gly Ser Val Glu Ser Leu Asp Leu Ala Gly Ile Phe
                  135
                                      140
Ser Thr Tyr Pro Asn Pro His Ile Asn Phe Val Gln Ala Phe Ala Val
        150
                                                    160
                                  155
Glu Met Val Ile Thr Ala Ile Leu Met Gly Val Ile Met Ala Leu Gly
             165 170
                                                 175
Asp Asp Gly Asn Gly Ile Pro Arg Gly Pro Leu Ala Pro Leu Leu Ile
       180
                           185
                                             190
Gly Leu Leu Ile Ala Val Ile Gly Ala Ser Met Gly Pro Leu Thr Gly
   195
                       200
                                         205
Phe Ala Met Asn Pro Ala Arg Asp Leu Gly Pro Lys Thr Phe Ala Phe
                    215
                                      220
Phe Ala Gly Trp Gly Asp Val Ala Phe Thr Gly Gly Lys Asp Ile Pro
                 230
                                  235
Tyr Phe Leu Val Pro Leu Phe Gly Pro Ile Val Gly Ala Ala Leu Gly
             245
                               250
Ala Phe Gly Tyr Arg Lys Leu Ile Gly Arg His Leu Pro Cys Asp Thr
                                270
          260
                           265
Cys Val Glu Glu Glu Lys Glu Thr Thr Ser Thr Thr Gln Gln Lys Ala
                        280
                                          285
Ser Leu
   290
<210> 9995
<211> 510
<212> PRT
<213> Enterobacter cloacae
<400> 9995
Ser Asp Tyr Gly Thr His Thr Met Thr Glu Lys Lys Tyr Ile Val Ala
                               10
                                                 15
Leu Asp Gln Gly Thr Thr Ser Ser Arg Ala Val Val Met Asp His Asp
         20
                           25
Ala Asn Ile Val Ser Val Ser Gln Arg Glu Phe Glu Gln Ile Tyr Pro
                       40
Arg Pro Gly Trp Val Glu His Asp Pro Met Glu Ile Trp Ala Ser Gln
```

```
55
Ser Ser Thr Leu Val Glu Val Leu Ala Lys Ala Asp Ile Ser Ser Asp
         70
                      75
Gln Ile Ala Ala Ile Gly Ile Thr Asn Gln Arg Glu Thr Thr Val Val
          85
                      90
Trp Glu Arg Glu Thr Gly Lys Pro Ile Tyr Asn Ala Ile Val Trp Gln
 100 105 110
Cys Arg Arg Thr Ser Glu Ile Cys Glu Gln Leu Lys Arg Asp Gly Met
115 120 125
Glu Glu Tyr Val Arg Ser Ala Thr Gly Leu Val Val Asp Pro Tyr Phe
130 135 140
Glu Arg Ala Arg Arg Gly Glu Leu Leu Phe Gly Thr Val Asp Thr Trp
          165 170 175
Leu Ile Trp Lys Met Thr Gln Gly Arg Val His Val Thr Asp Tyr Thr
      180 185 190
Asn Ala Ser Arg Thr Met Leu Phe Asn Ile Asn Thr Leu Glu Trp Asp
195 200 205
Asp Lys Met Leu Asp Ala Leu Asp Ile Pro Arg Ala Met Leu Pro Asp 210 215 220
Val Arg Lys Ser Ser Glu Val Tyr Gly Gln Thr Asn Ile Gly Gly Lys
225 230 235 240
Gly Gly Thr Arg Ile Pro Ile Ala Gly Ile Ala Gly Asp Gln Gln Ala
        245 250 255
Ala Leu Phe Gly Gln Leu Cys Val Lys Glu Gly Met Ala Lys Asn Thr
 260 265 270
Tyr Gly Thr Gly Cys Phe Met Leu Met Asn Thr Gly Glu Lys Ala Val
275 280 285
Lys Ser Glu Asn Gly Leu Leu Thr Thr Ile Ala Cys Gly Pro Arg Gly
290 295 300
Glu Val Asn Tyr Ala Leu Glu Gly Ala Val Phe Met Ala Gly Ala Ser
305 310 315
Ile Gln Trp Leu Arg Asp Glu Met Lys Leu Ile Ser Asp Ala Phe Asp
        325 330
Ser Glu Tyr Phe Ala Thr Lys Val Lys Asp Thr Asn Gly Val Tyr Val
        340 345
                                   350
Val Pro Ala Phe Thr Gly Leu Gly Ala Pro Tyr Trp Asp Pro Tyr Ala
355 360
                                 365
Arg Gly Ala Ile Phe Gly Leu Thr Arg Gly Val Asn Ser Asn His Ile
370 375
                              380
Ile Arg Ala Thr Leu Glu Ser Ile Ala Tyr Gln Thr Arg Asp Val Leu
     390
                           395
Glu Ala Met Gln Ala Asp Ser Gly Ile Arg Leu His Ala Leu Arg Val
                        410
          405
Asp Gly Gly Ala Val Ala Asn Asn Phe Leu Met Gln Phe Gln Ser Asp
       420
                     425
Ile Leu Gly Thr Arg Val Glu Arg Pro Glu Val Arg Glu Val Thr Ala
                440
                                 445
Leu Gly Ala Ala Tyr Leu Ala Gly Leu Ala Val Gly Phe Trp Gln Asn
                     460
450 455
Leu Asp Glu Leu Gln Glu Lys Ala Val Ile Glu Arg Glu Phe Arg Pro
                 475
     470
Gly Ile Glu Thr Thr Glu Arg Asn Tyr Arg Tyr Ser Gly Trp Lys Lys
          485
                        490
Ala Val Lys Arg Ala Leu Ala Trp Glu Glu His Asp Glu
        500
                      505
```

<210> 9996 <211> 342 <212> PRT

<213> Enterobacter cloacae

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<400> 9996
Leu Tyr Glu Tyr Leu Met Lys Arg Glu Leu Ala Ile Glu Phe Ser Arg
                                10
Val Thr Glu Ala Ala Ala Leu Ala Gly Tyr Lys Trp Leu Gly Arg Gly
        20
                            25
                                             3.0
Asp Lys Asn Thr Ala Asp Gly Ala Ala Val His Ala Met Arg Ile Val
    35
                        4.0
                                          45
Leu Asn Gln Val Asn Ile Asp Gly Thr Ile Val Ile Gly Glu Gly Glu
                    55
Ile Asp Glu Ala Pro Met Leu Tyr Ile Gly Glu Lys Val Gly Thr Gly
                                   75
              7.0
Lys Gly Asp Ala Val Asp Ile Ala Val Asp Pro Ile Glu Gly Thr Arg
           85
                               90
Met Thr Ala Met Gly Gln Ala Asn Ala Leu Ala Val Leu Ala Val Gly
        100 105
Asp Lys Gly Cys Phe Leu Asn Ala Pro Asp Met Tyr Met Glu Lys Leu
      115 120
                                        125
Ile Val Gly Pro Gly Ala Lys Gly Ala Ile Asp Leu Ser Leu Pro Leu
        135 140
Asp Ala Asn Leu Arg Asn Ile Ala Ala Ala Leu Gly Lys Ala Leu Ser
     150 155
Glu Leu Thr Val Thr Ile Leu Ala Lys Pro Arg His Asp Ala Thr Ile
              165
                            170
                                                 175
Ala Tyr Leu Gln Thr Leu Gly Val Arg Val Phe Ala Ile Pro Asp Gly
         180
                            185
                                              190
Asp Val Ala Ala Ser Ile Leu Thr Cys Met Pro Asp Ser Glu Val Asp
                        200
                                          205
Val Leu Tyr Gly Ile Gly Gly Ala Pro Glu Gly Val Val Ser Ala Ala
                     215
                                       220
Val Ile Arg Ala Leu Asp Gly Asp Met Gln Ala Arg Leu Leu Pro Arg
                230 235
His Glu Val Lys Gly Asp Ser Asp Glu Asn Leu Arg Ile Gly Ala Asp
             245 250
Glu Leu Ala Arg Cys Ala Ala Met Gly Ile Glu Ala Asn Lys Val Leu
          260
                           265
                                            270
Ala Leu Asn Glu Met Ala Arg Ser Asp Asn Val Val Phe Ser Ala Thr
                        280
                                          285
Gly Ile Thr Lys Gly Asp Leu Leu Asp Gly Ile Thr Arg Lys Gly Asn
                    295
                                      300
Met Ala Thr Thr Glu Thr Leu Leu Ile Arg Gly Lys Ser Arg Thr Ile
              310
                                  315
Arg Arg Ile Lys Ser Ile His Tyr Leu Asp Arg Lys Asp Pro Asp Val
              325
                               330
Gln Thr His Ile Leu
          340
<210> 9997
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<211> 258

<212> PRT <213> Enterobacter cloacae

<400> 9997

Lys Arg Glu Thr Ala Gln Glu Lys Ile Met Ala Asp Trp Val Thr Gly Lys Val Thr Lys Val Gln Phe Trp Thr Asp Ala Leu Phe Ser Leu Thr 20 25 Leu His Ala Pro Val His Pro Phe Thr Ala Gly Gln Phe Ala Lys Leu

Gly Leu Asp Ile Asp Gly Glu Arg Val Gln Arg Ala Tyr Ser Tyr Val

55 Asn Ala Pro Asp Asn Pro Asp Leu Glu Phe Tyr Leu Val Thr Val Pro 70 75 Asp Gly Lys Leu Ser Pro Arg Leu Ala Ala Leu Lys Pro Gly Asp Glu 85 90 Val Gln Ile Val Ser Asp Ala Ala Gly Phe Phe Val Leu Asp Glu Ile 105 110 100 Pro Asp Cys Asp Thr Leu Trp Met Leu Ala Thr Gly Thr Ala Ile Gly 115 120 125 Pro Tyr Leu Ser Ile Leu Gln Tyr Gly Lys Asp Leu Glu Arg Phe Lys 130 135 140 Asn Ile Val Leu Val His Ala Ala Arg Tyr Ala Ala Asp Leu Ser Tyr 150 155 Leu Pro Gln Met Gln Ala Leu Glu Gln Arg Tyr Gly Gly Lys Leu Lys 165 170 Ile Gln Thr Val Val Ser Arg Glu Thr Ala Ala Gly Ser Leu Thr Gly 180 185 Arg Val Pro Ala Leu Ile Glu Ser Gly Ala Leu Glu Glu Ala Val Gly 195 200 205 Leu Pro Met Asn Thr Glu Thr Ser His Val Met Leu Cys Gly Asn Pro 210 215 220 Gln Met Val Arg Asp Thr Gln Gln Leu Leu Lys Asp Thr Arg Gln Met 225 230 235 Thr Lys His Leu Arg Arg Arg Pro Gly His Met Thr Ala Glu His Tyr 245 250

<210> 9998 <211> 424 <212> PRT

<213> Enterobacter cloacae

<400> 9998 Gly Ala Leu Arg Met Thr Thr Gln Leu Glu Gln Ala Trp Asp Leu Ala 10 Lys Gln Arg Phe Ala Ala Val Gly Val Asp Val Glu Glu Ala Leu Arg 25 Gln Leu Asp Arg Leu Pro Val Ser Met His Cys Trp Gln Gly Asp Asp 3.5 40 45 Val Ala Gly Phe Glu Asn Pro Gly Gly Ser Leu Thr Gly Gly Ile Gln 55 Ala Thr Gly Asn Tyr Pro Gly Lys Ala Arg Asn Ala Thr Glu Leu Arg 70 75 Ala Asp Leu Glu Leu Ala Leu Ser Leu Ile Pro Gly Pro Lys Arg Leu 8.5 90 Asn Leu His Ala Ile Tyr Leu Glu Ser Asp Glu Pro Val Ala Arg Asn 100 105 110 Glu Ile Lys Pro Glu His Phe Thr Asn Trp Val Ala Trp Ala Lys Ala 115 120 125 Asn Arg Leu Gly Leu Asp Phe Asn Pro Ser Cys Phe Ser His Pro Leu 135 140 Ser Ala Asp Gly Phe Thr Leu Ala His Ala Asn Asp Glu Ile Arg Gln 150 155 Phe Trp Ile Asp His Val Lys Ala Ser Arg Arg Val Ser Ala Tyr Phe 165 170 175 Gly Glu Gln Leu Gly Thr Pro Ser Val Met Asn Ile Trp Ile Pro Asp 185 190 Gly Met Lys Asp Ile Thr Val Asp Arg Leu Ala Pro Arg Gln Arg Leu 195 200 205

Leu Ala Ala Leu Asp Glu Ala Ile Ser Glu Lys Leu Asp Pro Ala His

```
215
His Ile Asp Ala Val Glu Ser Lys Leu Phe Gly Ile Gly Ala Glu Ser
        230
                     235 240
Tyr Thr Val Gly Ser Asn Glu Phe Tyr Met Gly Tyr Ala Thr Ser Arg
           245 250 255
Gln Thr Ala Leu Cys Leu Asp Ala Gly His Phe His Pro Thr Glu Val
      260 265 270
Ile Ser Asp Lys Ile Ser Ala Ala Met Leu Tyr Val Pro Arg Leu Leu
   275 280 285
Leu His Val Ser Arg Pro Val Arg Trp Asp Ser Asp His Val Val Leu
 290 295 300
Leu Asp Asp Glu Thr Gln Ala Ile Ala Ser Glu Ile Ile Arg His Asn
    310 315
Leu Phe Asp Arg Val His Ile Gly Leu Asp Phe Phe Asp Ala Ser Ile 325 \hspace{1.5cm} 330 \hspace{1.5cm} 335
Asn Arg Ile Ala Ala Trp Val Ile Gly Thr Arg Asn Met Lys Lys Ala
            345 350
        340
Leu Leu Arg Ala Leu Leu Glu Pro Val Ala Ala Leu Lys Gln Leu Glu
 355
                    360 365
Glu Asn Gly Asp Tyr Thr Ala Arg Leu Ala Leu Leu Glu Glu Gln Lys
               375 380
Ser Leu Pro Trp Gln Ala Val Trp Glu Met Tyr Cys Gln Arg His Asp
385 390 395
Ala Pro Ala Gly Ser Gln Trp Leu Asp Asn Val Arg Ala Tyr Glu Lys
           405
                          410
Glu Val Leu Ala Ala Arg Gln
        420
```

<210> 9999 <211> 309 <212> PRT

<213> Enterobacter cloacae

<400> 9999 Lys Thr Ser Pro Gly Gly Ala Leu Leu Ala Gly Pro Thr Asp Lys Thr 1.0 Arg Pro Gly Lys Arg Asn Ala Thr Arg His Phe Gln Arg Asn Tyr Ser 20 25 Met Gln Thr Ile Thr Thr Ser Trp Phe Val Gln Gly Met Ile Lys Ala 4.0 Thr Ser Asp Ala Trp Leu Lys Gly Trp Asp Glu Arg Asn Gly Gly Asn 55 60 Leu Thr Leu Arg Leu Asp Asp Ala Asp Ile Glu Pro Phe Ala Ser Asp 75 70 Phe His Gln Lys Pro Arg Tyr Ile Ala Leu Ser Gln Pro Met Pro Leu 85 90 Leu Ala Asn Thr Pro Phe Ile Val Thr Gly Ser Gly Lys Phe Phe Arg 100 105 Asn Val Gln Leu Asp Pro Glu Ala Asn Leu Gly Val Val Lys Val Asp 115 120 Ser Asp Gly Ala Gly Tyr His Ile Leu Trp Gly Leu Thr Asp Asp Ala 130 135 140 Val Pro Thr Ser Glu Leu Pro Ala His Phe Leu Ser His Cys Glu Arg 150 155 Ile Lys Ala Thr Asn Gly Lys Asp Arg Val Ile Met His Cys His Ala 165 170 Thr Asn Leu Ile Ala Leu Thr Tyr Val Leu Glu Asn Asn Ser Asp Phe 185 190 Phe Thr Arg Lys Leu Trp Glu Gly Ser Thr Glu Cys Leu Val Val Phe 200 Pro Asp Gly Val Gly Ile Leu Pro Trp Met Val Pro Gly Thr Asp Glu

215 Ile Gly Gln Ala Thr Ala Thr Asp Met Gln Lys His Ser Leu Val Leu 230 235 Trp Pro Phe His Gly Val Phe Gly Ser Gly Pro Thr Leu Asp Glu Thr 245 250 Phe Gly Leu Ile Asp Thr Ala Glu Lys Ser Ala Glu Val Leu Val Lys 260 265 270 Val Tyr Ser Met Gly Gly Met Lys Gln Thr Ile Thr Arg Glu Glu Leu 275 280 285 Ile Ala Leu Gly Lys Arg Phe Gly Val Thr Pro Met Gln Ser Ala Leu 290 295 Asp Leu Tyr Gln 305 <210> 10000 <211> 424 <212> PRT <213> Enterobacter cloacae <400> 10000 Ile Ala Gly Gly Gly Ser Leu Arg Asp Trp Arg Asp Gln His His Gly 1.0 Arg His Arg Pro Arg Ala Arg Leu Ser Val Arg Gly Ala Val Pro Trp 25 Arg His Gln Gln Arg Pro Ala Gly Asp Arg Arg Leu Pro Val Leu Ala 40 Asp Gly Asp Phe Arg Leu Gly His Cys His Arg Cys Ala Ala Glu Arg 5.5 Ala Arg Gln Gln Ala Gln Arg Gln Ala Asp Pro Ala Arg Arg Gly Ala 7.0 75 Gly Thr Ser Glu Thr Gly Gly Glu Thr Met Ser Lys Met Met Thr Ser 85 90 Glu Glu Phe Lys Pro Thr Ser Ala Pro Gly Ile Phe Gln Arg Leu Leu 100 105 110 Cys Trp Glu Gly Phe Leu Leu Ala Val Thr Leu Ala Val Phe Val Val 115 120 Asn Ala Leu Ala Ser Pro Tyr Phe Leu Asn Ile Trp Asn Leu Ser Asp 135 140 Ala Thr Phe Asn Phe Thr Glu Lys Ala Ile Ile Val Leu Pro Met Ala 150 155 Met Leu Ile Ile Ala Arg Glu Ile Asp Leu Ser Val Ala Ser Thr Ile 165 170 Ala Leu Ser Ser Thr Val Met Gly Phe Cys Ala Ala Ala Gly Val Asp 180 185 Thr Pro Leu Leu Val Cys Val Gly Leu Gly Val Gly Leu Leu Cys Gly 200 205 Leu Phe Asn Gly Ile Leu Val Thr Arg Phe Asn Leu Ser Ser Ile Val 215 220 Ile Thr Ile Gly Thr Met Ser Leu Tyr Arg Gly Ile Thr Tyr Ile Leu 230 235 Leu Gly Asp Gln Ala Leu Asn Ser Tyr Pro Glu Ser Phe Ala Trp Phe 245 250 255 Gly Gln Gly Tyr Val Trp Gly Ala Leu Ser Phe Glu Phe Ala Leu Phe 265 270 Ile Val Leu Ala Ala Leu Phe Ala Phe Val Leu His Arg Thr Asn Phe 280 285 Gly Arg Arg Thr Tyr Ala Ile Gly Asn Asn Pro Thr Gly Ala Trp Tyr 295 300 Ser Gly Ile Asn Val Lys Arg His Asn Leu Ile Leu Phe Ala Leu Val 315 310 Gly Leu Met Ser Gly Leu Ala Ser Val Leu Leu Thr Ser Arg Leu Gly

130

5511 325 330 335 Ser Thr Arg Pro Thr Ile Ala Met Gly Trp Glu Leu Ala Val Val Thr 345 340 350 Met Ala Val Leu Gly Gly Val Asn Ile Leu Gly Gly Ser Gly Ser Met 355 360 365 Val Gly Val Ile Ile Ala Ala Phe Leu Met Gly Leu Val Thr Phe Gly 370 375 380 Leu Ser Leu Leu Asn Val Pro Gly Ile Val Met Ser Val Ile Ile Gly 385 390 395 400 Ala Met Leu Ile Val Val Ile Ser Leu Pro Ile Ile Thr Arg Arg Ile 405 410 Met Gln Arg Arg Arg Ile Ser 420 <210> 10001 <211> 114 <212> PRT <213> Enterobacter cloacae <400> 10001 Gly Pro Arg Ala Val Pro Gly Gly Phe Met Ile Arg Lys Ala Phe Val 10 Met Gln Val Asn Pro Asp Ala His Glu Glu Tyr Ala Arg Arg His Asn 20 25 Pro Ile Trp Pro Glu Leu Glu Ala Val Leu Lys Ala His Gly Ala His 35 40 His Tyr Ala Ile Tyr Leu Asp Lys Ala Arg Asn Leu Leu Phe Ala Thr 50 55 Val Glu Ile Glu Ser Glu Glu Arg Trp Asn Ala Val Ala Asn Thr Asp 7.0 75 Val Cys Gln Arg Trp Trp Lys His Met Ala Asp Val Met Pro Ser Asn 85 90 Pro Asp Asn Ser Pro Val Ser Ala Ala Leu Asn Glu Val Phe Tyr Leu 100 105 Asp <210> 10002 <211> 310 <212> PRT <213> Enterobacter cloacae <400> 10002 Met Ser Ile Arg Ile Ile Pro Gln Asp Glu Leu Gly Ser Ser Glu Lys 1.0 Arg Thr Ala Glu Tyr Ile Pro Pro Leu Leu Phe Pro Arg Leu Lys Asn 20 2.5 Leu Tyr Asn Arg Arg Ala Glu Arg Leu Arg Glu Leu Ala Glu Asn Asn 40 Pro Leu Gly Asp Phe Leu Arg Phe Ala Ala Leu Val Ala His Ala Gln 55 Glu Val Val Leu Tyr Asp His Pro Leu Gln Met Asp Leu Thr Ala Arg 65 70 75 Ile Lys Glu Ala Asn Glu Gln Gly Lys Pro Pro Leu Asp Ile His Val Leu Pro Arg Asp Lys His Trp His Lys Leu Leu His Ser Leu Ile Ala 100 110 105 Glu Leu Lys Pro Glu Met Ser Gly Thr Ala Leu Ala Val Ile Glu Asn 115 120 125 Leu Glu Lys Ala Ser Glu Gln Glu Leu Glu Glu Met Ala Ser Ala Leu

```
Phe Ala Ser Asp Phe Ser Leu Val Ser Ser Asp Lys Ala Pro Phe Ile
                  155
      150
Trp Ala Ala Leu Ser Leu Tyr Trp Ala Gln Met Ala Ser Leu Ile Pro
         165 170
Gly Lys Ala Arg Ala Glu Tyr Gly Glu Ala Arg Gln Phe Cys Pro Val
     180 185 190
Cys Gly Ser Met Pro Val Ser Ser Met Val Gln Ile Gly Thr Thr Gln
    195 200 205
Gly Leu Arg Tyr Leu His Cys Asn Leu Cys Glu Thr Glu Trp His Val
Val Arg Val Lys Cys Ser Asn Cys Glu Gln Thr Arg Asp Leu Asn Tyr
225 230 235 240
Trp Ser Leu Glu Asn Glu Asp Ala Ala Val Lys Ala Glu Ser Cys Gly
      245 250 255
Asp Cys Gly Thr Tyr Leu Lys Ile Leu Tyr Gln Glu Lys Asp Pro Lys
       260 265
Val Glu Ala Val Ala Asp Asp Leu Ala Ser Leu Ile Leu Asp Ala Lys
 275 280 285
Met Glu Gln Glu Gly Phe Ala Arg Ser Ser Ile Asn Pro Phe Leu Phe
290 295
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Pro Gly Glu Gly Glu 305 31

<210> 10003

<211> 318 <212> PRT

<213> Enterobacter cloacae

<400> 10003 Ser Cys Thr Phe Ile Gln Leu Lys Gly Val Phe Met Ala Leu Glu Lys 10 Gly Ile Glu Arg Leu Val Gln Gly Phe Ile Ala Ala Gly Arg Pro Ser 25 20 3.0 Ser Arg Arg Gln Thr Ile Glu Val Arg Arg Ala Gly Tyr Ile Ala Ser 35 40 Thr Glu Leu Ala Gly Lys Thr Glu Thr Arg Val Gln Leu Glu Thr Leu 55 Val Leu Glu Gly Leu Thr Ile Arg Val Phe Ser Pro Leu Asn Ala Pro 75 65 70 Glu Ile Leu Pro Ala Ala Ile Tyr Tyr His Gly Gly Cys Phe Ile Ser 90 8.5 Gly Gly Phe Asp Thr His Asp Asn Gln Leu Arg Gln Leu Ala Tyr Tyr 105 100 110 Gly Asn Cys Arg Val Ile Ala Ile Gln Tyr Arg Leu Ala Pro Glu His 115 120 125 Thr Phe Pro Ala Ala His Asp Asp Ala Glu Arg Gly Ala Asn Leu Val 135 140 Trp Gln Tyr Ala Asp Glu Leu Gly Val Asp Lys Asn Arg Leu Thr Leu 150 155 Cys Gly Asp Ser Ala Gly Gly His Leu Ala Leu Val Thr Ser Leu Arg 165 170 Leu Lys Ala Lys Gly Leu Trp Asp Pro Ala Gln Leu Ile Leu Ile Tyr 180 185 190 Pro Met Leu Asp Ala Thr Ala Ser Leu Glu Ser Tyr Thr Leu Asn Gly 195 200 205 Met Asp Tyr Val Ile Thr Arg Asp Thr Leu Leu Ser Gly Tyr Glu Met 215 220 Tyr Leu Ala Gly Ala Asp Arg Gln His Pro Glu Val Ser Pro Leu Trp 230 235 225 Arg Asn Asp Phe Ser Gly Leu Pro Lys Val His Ile Val Thr Ala Glu 250

```
Tyr Asp Pro Leu Arg Asp Glu Gly Glu Ala Leu Tyr Gln Arg Leu Thr
                265
          260
                                     270
Ala Gln Gly Val Lys Cys Thr Ala Gln Gln Trp Arg Gly Val Ile His
      275
                       280
                              285
Gly Phe Phe Gln Leu Gly Gly Ile Ser Gln Ser Ala Arg Asp Ile Met
  290 295 300
Arg Asp Ile Ala Trp Arg Ile Asn His Ala Gly Arg Glu
                 310
<210> 10004
<211> 301
<212> PRT
<213> Enterobacter cloacae
<400> 10004
Gln Glu Arg Gly Met Ser Ala Ile Ala Phe Ile Gly Leu Gly Gln Met
                                10
Gly Ala Pro Met Ala Lys Asn Leu Leu Lys Gln Gly His Gln Leu Asn
          20
                             25
Val Phe Asp Val Asn Pro Gln Ala Ile Gln Ala Leu Val Glu Ser Gly
       35
                         40
                                            45
Ala Arg Ala Ala Ala Thr Pro Ala Gln Ala Ala Thr Asp Ala Glu Phe
 50
                      55
Val Ile Thr Met Leu Pro Asn Gly Asp Leu Val Arg Ser Val Leu Phe
                  70
                                    75
                                                       8.0
Gly Glu His Gly Val Cys Glu Gly Leu Ser Arg Asp Ala Leu Val Ile
              8.5
                                 90
Asp Met Ser Thr Ile His Pro Leu Gln Thr Asp Ala Leu Ile Arg Asp
                             105
           100
                                                110
Met Ala Glu Gln Gly Phe Ser Leu Met Asp Val Pro Val Gly Arg Thr
                         120
       115
Ser Asp His Ala Ile Ala Gly Thr Leu Leu Leu Ala Gly Gly Thr
                      135
 130
                                        140
Ala Gln Gln Val Glu Arg Ala Thr Pro Val Leu Met Ala Met Gly Asn
                  150
                                     155
Glu Leu Ile Asn Ala Gly Gly Pro Gly Met Gly Ile Arg Val Lys Leu
              165
                                 170
Ile Asn Asn Tyr Met Ser Ile Ala Leu Asn Ala Leu Ser Ala Glu Ala
          180
                             185
                                  190
Ala Val Leu Cys Glu Ala Leu Gly Leu Ser Phe Asp Val Ala Leu Lys
                          200
       195
                                            205
Val Met Ser Gly Thr Pro Ala Gly Lys Gly His Phe Thr Thr Ser Trp
   210
                      215
                                         220
Pro Asn Lys Val Leu Lys Gly Asp Leu Ser Pro Ala Phe Met Ile Asp
                  230
                                     235
                                                        240
Leu Ala His Lys Asp Leu Gly Ile Ala Leu Asp Val Ala Asn Gln Leu
              245
                                 250
His Val Pro Met Pro Leu Gly Ala Ala Ser Arg Glu Val Tyr Asn Gln
           260
                             265
Ala Arg Ala Ala Gly Arg Gly Arg Glu Asp Trp Thr Ala Ile Leu Glu
       275
                          280
                                            285
Gln Val Arg Ala Ser Ala Gly Leu Lys Lys Ser His
   290
                      295
<210> 10005
<211> 478
<212> PRT
<213> Enterobacter cloacae
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<400> 10005

Gly Ser Thr Met Thr His Asn Thr Asp Pro Leu Thr Leu Lys Leu Ser

Leu Arg Glu Lys Cys Ala Tyr Gly Met Gly Asp Phe Gly Ser Asn Leu 25 Met Leu Cys Ile Gly Thr Leu Tyr Leu Leu Lys Phe Tyr Thr Asp Glu 40 Leu Gly Met Pro Ala Phe Tyr Gly Gly Ile Ile Phe Leu Val Ala Lys 55 Phe Phe Thr Ala Phe Thr Asp Met Leu Thr Gly Val Leu Leu Asp Ser 70 75 Arg Arg Asn Ile Gly Ala Arg Gly Lys Phe Arg Pro Phe Ile Leu Tyr 90 8.5 Ala Ser Val Pro Val Ala Leu Val Ala Thr Ala Gln Phe Met Ala Asn 100 105 110 Asp Phe Ser Leu Thr Val Lys Thr Ala Leu Ala Thr Val Leu Phe Met 115 120 125 Met Phe Gly Leu Cys Tyr Ser Leu Met Asn Cys Ala Tyr Gly Ala Met 130 135 140 Val Pro Ala Ile Thr Lys Asn Pro Asn Glu Arg Ala Gln Leu Ala Ala 145 150 155 160 Trp Arg Gln Gly Gly Ala Thr Val Gly Leu Leu Leu Cys Thr Val Gly 165 170 175Phe Met Pro Ile Gln Ala Leu Phe Val Ser Gln Pro Ser Leu Gly Tyr 180 185 Leu Val Ala Ala Leu Val Phe Val Thr Gly Gly Leu Phe Cys Met Trp 195 200 205 Trp Cys Tyr Ser Gly Val Lys Glu Arg Tyr Val Glu Leu Thr Pro Asp 210 215 His His Lys Pro Gly Ile Leu Lys Ser Phe Cys Ala Ile Phe Arg Asn 225 230 235 Pro Pro Leu Leu Val Leu Cys Ile Ala Asn Leu Cys Thr Leu Ala Ala 245 250 255 Phe Asn Ile Lys Leu Ala Ile Gln Val Tyr Tyr Thr Gln Tyr Val Leu 260 265 270 Asn Asp Val His Leu Leu Ser Trp Met Gly Phe Phe Ser Met Gly Cys 275 280 Ile Leu Ile Gly Val Phe Leu Val Pro Gly Ala Val Lys Arg Phe Gly 290 295 300 Lys Lys Pro Val Tyr Leu Gly Gly Leu Thr Leu Trp Ala Val Gly Asp 305 310 315 Val Leu Asn Phe Val Trp Gly Thr Ser Ser Leu Leu Phe Val Leu Phe 325 330 Ser Cys Met Ala Phe Phe Gly Thr Ala Phe Val Asn Ser Leu Asn Trp 350 340 345 Ala Leu Val Pro Asp Thr Val Asp Tyr Gly Glu Trp Lys Thr Gly Ile 360 365 Arg Ala Glu Gly Ser Val Tyr Thr Gly Tyr Thr Phe Ser Arg Lys Ile 375 Ser Ala Ala Leu Ala Gly Phe Leu Pro Gly Ile Met Leu Thr Gln Ile 385 390 395 400 Gly Tyr Val Pro His Ala Val Gln Ser Ala Gly Thr Leu Leu Gly Leu 405 410 Arg Gln Leu Ile Phe Leu Trp Pro Cys Gly Leu Ala Ile Val Ala Ala 425 Val Thr Met Gly Leu Phe Tyr Lys Leu Asn Glu Ala Arg Phe Ala Phe 435 440 Ile Ile Glu Glu Ile Gly Lys Arg Lys Lys Gln Thr Ala Asn Thr Pro 455 460 Glu Ile Thr Thr Asn Asn Lys Ala Ser Ala Val Thr Leu 470

385

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<211> 477
<212> PRT
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<213> Enterobacter cloacae

<400> 10006 Lys Ile Lys Val Thr Phe Met Gln Arg Gly Ile Val Trp Val Val Asp 1.0 Asp Asp Ser Ser Ile Arg Trp Val Leu Glu Arg Ala Leu Thr Gly Ala 20 25 Gly Leu Ser Cys Thr Thr Phe Glu Ser Gly Ser Glu Val Leu Asp Ala 35 40 45 Leu Thr Thr Lys Thr Pro Asp Val Leu Leu Ser Asp Ile Arg Met Pro 5.5 Gly Met Asp Gly Leu Ala Leu Leu Lys Gln Ile Lys Gln Arg His Pro 70 75 Met Leu Pro Val Ile Ile Met Thr Ala His Ser Asp Leu Asp Ala Ala 85 90 95 Val Ser Ala Tyr Gln Gln Gly Ala Phe Asp Tyr Leu Pro Lys Pro Phe 100 105 110 Asp Ile Asp Glu Ala Val Ala Leu Val Glu Arg Ala Ile Ser His Tyr 115 120 125 Gln Glu Gln Gln Pro Arg His Ala Pro Asp Phe Gly Pro Thr Thr 130 135 140 Asp Ile Ile Gly Glu Ala Pro Ala Met Gln Asp Val Phe Arg Ile Ile 150 155 Gly Arg Leu Ser Arg Ser Ser Ile Ser Val Leu Ile Asn Gly Glu Ser 165 170 Gly Thr Gly Lys Glu Leu Val Ala His Ala Leu His Arg His Ser Pro 180 185 190 Arg Ala Lys Ala Pro Phe Ile Ala Leu Asn Met Ala Ala Ile Pro Lys 200 205 Asp Leu Ile Glu Ser Glu Leu Phe Gly His Glu Lys Gly Ala Phe Thr 215 220 Gly Ala Asn Thr Ile Arg Gln Gly Arg Phe Glu Gln Ala Asp Gly Gly 230 235 240 Thr Leu Phe Leu Asp Glu Ile Gly Asp Met Pro Leu Asp Val Gln Thr 245 250 Arg Leu Leu Arg Val Leu Ala Asp Gly Gln Phe Tyr Arg Val Gly Gly 260 265 270 Tyr Ala Pro Val Lys Val Asp Val Arg Ile Ile Ala Ala Thr His Gln 275 280 285 Asn Leu Glu Leu Arg Val Gln Glu Gly Lys Phe Arg Glu Asp Leu Phe 295 300 His Arg Leu Asn Val Ile Arg Val His Leu Pro Pro Leu Arg Glu Arg 310 315 Arg Glu Asp Ile Pro Arg Leu Ala Arg His Phe Leu Gln Val Ala Ala 325 330 Arg Glu Leu Gly Val Glu Ala Lys Gln Leu His Gln Glu Thr Asp Ala 340 345 Ala Leu Thr Arg Leu Ala Trp Pro Gly Asn Val Arg Gln Leu Glu Asn 355 360 365 Thr Cys Arg Trp Leu Thr Val Met Ala Ala Gly Gln Glu Val Leu Ile 370 375 380

Gln Asp Leu Pro Ala Glu Leu Phe Glu Ala Thr Val Pro Glu Ser Thr

Ala Gly His Ala Leu Pro Asp Ser Trp Ala Thr Leu Leu Ala Gln Trp

Ala Asp Arg Ala Leu Arg Ser Gly His Gln Asn Leu Leu Ser Glu Ala

425 Gln Pro Glu Met Glu Arg Thr Leu Leu Thr Thr Ala Leu Arg His Thr 440

395

410

390

405

Gln Gly His Lys Gln Glu Ala Ala Arg Leu Leu Gly Trp Gly Arg Asn 450 455 460 Thr Leu Thr Arg Lys Leu Lys Glu Leu Gly Met Glu 465 470

<210> 10007 <211> 101 <212> PRT

<213> Enterobacter cloacae

<400> 10007

Cys Ala Asp Leu Ser Ser Ser Arg Gly Gly Arg His Lys Ala Leu Met 1 $$ 5 $$ 10 $$ 15

Ala Thr Glu Gly Val Asn Ile Glu Phe Thr Asp Asp Gly Ile Lys Arg 20 25 30 Ile Ala Gln Ala Ala Trp Gln Val Asn Glu Thr Thr Glu Asn Ile Gly

35 40 45 Ala Arg Arg Leu His Thr Val Leu Glu Arg Leu Met Glu Asp Ile Ser

50 55 60 774 Asp Ala Ser Asp Leu Asn Gly Gln Ser Ile Thr Ile Asp Ala Asp 65 70 75 80 75 80 75 Yet Ala Asp Gly Lys His Leu Asp Ala Leu Val Ala Asp Glu Asp Leu Ser

Arg Phe Ile Leu

100

<210> 10008 <211> 205

<211> 203

<213> Enterobacter cloacae

<400> 10008

Solution and the Set of the Fire Arg Ala II as an Eys of U Ash Pro Ser Leu Pro Leu Gly Glu Phe Arg Ala IIe Asp Ser Ala Arg Asp Thr 65 70 75 80 Pro Thr Leu Thr Arg Ala Ala Ser Lys IIe Ash Glu Ash Leu Tyr Ala 85 85 85

Ser Thr Ala Leu Glu Arg Gly Thr Leu Lys Ile Lys Ser Met Gln Ile 100 105 110 110 Thr Trp Leu Pro Ile Gln Gly Pro Glu Gln Lys Ala Ala Lys Ala Lys

115 120 125 Ala Leu Glu Tyr Met Ser Ala Ile Leu Arg Ala Phe Thr Pro Thr Phe

130 135 140 Thr Lys Ala Gln Ser Gln Gln Lys Leu Gln Lys Leu Leu Thr Ala Gly 145 150 155 160

Lys Asn Lys Arg Tyr Tyr Ala Asp Thr Glu Gly Ala Val Arg Tyr Val 165 170 175

Val Ala Asp Asn Gly Glu Lys Gly Leu Thr Phe Ala Val Glu Pro Ile 185 190 Lys Leu Ala Leu Ser Asp Ala Leu Glu Gly Ala Asn

195 200

<210> 10009 <211> 261

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<212> PRT
<213> Enterobacter cloacae
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20 25 30
Lys Glu Leu Ala Gly Val Thr Gly Cys Ala Val Ala Ile Ala Pro Pro
35 40 45

Asp Met Tyr Leu Asp Leu Ala Lys Arg Ala Ala Asp Gly Ser His Ile 50~60~ fle Leu Gly Ala Gln Asn Val Asp Val Asn Leu Ser Gly Ala Phe Thr

65 70 75 80 Gly Glu Thr Ser Ala Glu Met Leu Lys Asp Ile Gly Ala Lys Tyr Ile

85 90 95

Ile Ile Gly His Ser Glu Arg Arg Thr Tyr His Lys Glu Ser Asp Glu
100 105 110

Phe Ile Ala Lys Lys Phe Ala Val Leu Lys Glu Glu Gly Leu Ile Pro
115 120 125
Val Leu Glu Glu Glu Glu Ala Glu Al

Val Leu Cys Ile Gly Glu Thr Glu Ala Glu Asn Glu Ala Gly Lys Thr 130 135 140

Glu Glu Val Cys Ala Arg Gln Ile Asp Ala Val Leu Lys Thr Gln Gly 145 155 160 Ala Ala Ala Phe Glu Gly Ala Val Ile Ala Tyr Glu Pro Val Trp Ala

\$180\$ Lys Phe Ile Arg Asp His Ile Ala Lys Ala Asp Ala Lys Val Ala Glu

195 200 205 Gln Val Ile Ile Gln Tyr Gly Gly Ser Val Asn Ala Ser Asn Ala Ala 210 215 220 220

Glu Leu Phe Thr Gln Pro Asp Ile Asp Gly Ala Leu Val Gly Gly Ala 225 230 235 240

225 230 235 240

Ser Leu Lys Ala Asp Ala Phe Ala Val Ile Val Lys Ala Ala Glu Ala
245 250 255

Ala Lys Gln Ala 260

<210> 10010 <211> 478 <212> PRT

<213> Enterobacter cloacae

<400> 10010

Arg Arg Ser Ser Leu Val Gln Asn Pro Ala Trp Ser Trp Leu Ser Asp 1 5 10 15 Gly Phe Arg Phe Met Ile Gly Ser Leu Thr Ala Arg Ile Phe Ala Ile 20 25 30

Phe Trp Leu Thr Leu Ala Leu Val Leu Met Leu Val Leu Met Leu Pro 35 40 45 Lys Leu Asp Ser Arg Gln Met Thr Glu Leu Asp Ser Glu Gln Arg

50 55 Gln Gly Val Met Ile Glu Gln His Val Glu Ala Glu Leu Ala Asn Asp 65 70 75 80

Pro Pro Asn Asp Leu Met Trp Trp Arg Arg Leu Phe Arg Ala Ile Asp 85 90 95

Lys Trp Ala Pro Pro Gly Gln Arg Leu Leu Leu Val Thr Ser Glu Gly
100 105 110
Arg Val Ilo Gly Ala App Arg Ang Clu Wet Cla Ila Ila Arg Arg The

Arg Val Ile Gly Ala Asp Arg Asn Glu Met Gln Ile Ile Arg Asn Phe

```
Ile Gly Gln Ala Asp Asn Ala Asp His Pro Gln Lys Lys Lys Tyr Gly
               135
                              140
Arg Val Glu Met Val Gly Pro Phe Ser Val Arg Asp Gly Glu Asp Asn
             150 155
Tyr Gln Leu Tyr Leu Ile Arg Pro Ala Ser Ser Ser Gln Ser Asp Phe
            165 170 175
Ile Asn Leu Leu Phe Asp Arg Pro Leu Leu Leu Ile Val Thr Met
    180 185 190
Leu Val Ser Ser Pro Leu Leu Leu Trp Leu Ala Trp Ser Leu Ala Lys
   195 200 205
Pro Ala Arg Lys Leu Lys Asn Ala Ala Asp Glu Val Ala Gln Gly Asn
 210 215 220
Leu Arg Gln His Pro Glu Leu Glu Ser Gly Pro Gln Glu Phe Leu Ala
    230 235 240
Ala Gly Thr Ser Phe Asn Gln Met Val Ser Ala Leu Asp Arg Met Met
            245 250
Thr Ala Gln Gln Arg Leu Leu Ser Asp Ile Ser His Glu Leu Arg Thr
                        265
                             270
Pro Leu Thr Arg Leu Gln Leu Gly Thr Ala Leu Leu Arg Arg Arg Ser
                      280 285
Gly Glu Ser Lys Glu Leu Glu Arg Ile Glu Thr Glu Ala His Arg Leu
                  295
                                  300
Asp Ser Met Ile Asn Asp Leu Leu Val Met Ser Arg Asn Gln Gln Lys
               310
                               315
Asn Ala Leu Val Ser Glu Thr Val Lys Ala Asn His Leu Trp His Glu
            325
                            330
Val Leu Asp Asn Ala Ala Phe Glu Ala Glu Gln Met Gly Lys Ser Phe
        340
                         345
                                         350
Thr Val Asn Phe Pro Pro Gly Pro Trp Pro Leu Tyr Gly Asn Pro Asn
                                    365
 355
                      360
Ala Leu Glu Ser Ala Leu Glu Asn Ile Val Arg Asn Ala Leu Arg Tyr
                  375
                                   380
Ser His Thr Lys Ile Glu Val Ala Phe Ser Val Asp Lys Asp Gly Ile
               390
                                395
Thr Val Ile Val Asp Asp Asp Gly Pro Gly Val Ser Pro Glu Asp Arg
            405
                            410
                                           415
Glu Gln Ile Phe Arg Pro Phe Tyr Arg Thr Asp Glu Ala Arg Asp Arg
         420
                         425
                                         430
Glu Ser Gly Gly Thr Gly Leu Gly Leu Ala Ile Val Glu Thr Ala Met
      435
                     440
                                      445
Gln Gln His Arg Gly Trp Val Lys Ala Asp Asp Ser Pro Leu Gly Gly
                455
                                  460
Leu Arg Leu Thr Leu Trp Leu Pro Leu Tyr Lys Arg Ser
              470
                               475
<210> 10011
<211> 569
<212> PRT
<213> Enterobacter cloacae
<400> 10011
Ile Phe Asp Ser Lys Pro Arg Lys Ser Cys Arg Phe Phe Lys Lys Gln
1
                          10
Ala Glu Arg Ser Gly Asn Ala Val Ser Val Thr Leu Pro Ala Asn Pro
Ala Ile Thr Gly Asn Cys Glu Leu Pro His Val His Leu Cys Phe Leu
                     40
Ala Ser Ala Arg Phe Gly Leu Ser Val Ala Arg Arg Trp Leu Phe Leu
                  5.5
Pro Phe Leu Thr Leu Leu Ala Asn Asp Leu Arg Lys Asp Pro Thr Met
                7.0
                               75
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Thr Phe Arg His Cys Val Ala Val Asp Leu Gly Ala Ser Ser Gly Arg 90 Val Met Leu Ala Thr Trp Asp Cys Asp Leu His Thr Leu Thr Leu Arg 100 105 110 Glu Met His Arg Phe Ala Asn Cys Leu Gln Lys Gln Asp Gly Phe Val 115 120 125 Thr Trp Asp Ile Asp Ala Leu Glu Ala Glu Ile Arg Thr Gly Leu His 130 135 140 Asn Val Cys Glu Asp Gly Ile Arg Ile Asp Ser Ile Gly Ile Asp Thr 150 155 Trp Gly Val Asp Tyr Val Leu Leu Asp Arg His Gly Glu Arg Val Gly 165 170 175 Leu Pro Val Ser Tyr Arg Asp Ser Arg Thr Asp Gly Leu Met Ala His 180 185 190 Ala Ile Ala Gln Leu Gly Lys Glu Asn Ile Tyr Gly Arg Ser Gly Ile 195 200 205 Gln Phe Leu Pro Phe Asn Thr Leu Tyr Gln Leu Arg Ala Leu Val Glu 210 215 220 Gln Gln Pro Glu Leu Val Glu Lys Val Ala His Ala Leu Leu Ile Pro 225 230 235 Asp Tyr Leu Ser Tyr Arg Leu Thr Gly Asn Met Asn Trp Glu Tyr Thr 245 250 255 Asn Ala Thr Thr Thr Gln Leu Val Asn Ile Asn Thr Asp Asn Trp Asp 260 265 270 Glu His Leu Leu Ala Trp Thr Gly Ala Ser Pro Ser Trp Phe Gly Ala 280 285 Pro Thr His Pro Gly Asn Val Ile Gly His Trp Leu Cys Pro Gln Gly 295 300 Asn Lys Ile Pro Val Val Ala Val Ala Ser His Asp Thr Ala Ser Ala 310 315 Val Ile Ala Ser Pro Leu Ala Gly Lys Asp Ala Ala Tyr Leu Ser Ser 325 330 335 Gly Thr Trp Ser Leu Met Gly Phe Glu Ser Lys Thr Pro Tyr Thr Ser 340 345 350 Asp Ala Ala Leu Ala Ala Asn Ile Thr Asn Glu Gly Gly Ala Glu Gly 355 360 365 Arg Tyr Arg Val Leu Lys Asn Ile Met Gly Leu Trp Leu Leu Gln Arg 375 380 Val Leu Lys Glu Gln Asn Ile Thr Asp Leu Pro Glu Leu Ile Ala Glu 390 395 Thr Glu Thr Leu Lys Ala Cys Thr Phe Leu Ile Asn Pro Asn Asp Asp 405 410 Arg Phe Ile Asn Pro Ala His Met Ser Ala Glu Ile Gln Ala Ala Cys 420 425 Phe Glu Ala Gly Gln Pro Val Pro Ser Arg Pro Ala Glu Leu Ala Arg 435 440 445 Cys Ile Phe Asp Ser Leu Ala Leu Leu Tyr Ala Asp Ile Leu Ser Glu 455 460 Leu Ala Asp Leu Arg Gly Lys Pro Phe Thr Gln Leu His Ile Val Gly 470 475 Gly Gly Cys Gln Asn Gln Leu Leu Asn Gln Leu Cys Ala Asp Ala Cys 485 490 Gly Ile Thr Val Val Ala Gly Pro Ile Glu Ala Ser Thr Leu Gly Asn 500 505 Ile Gly Ile Gln Leu Met Thr Leu Asp Glu Leu Ser Asn Val Asp Asp 515 520 525 Phe Arg Ser Val Val Thr Ala Asn Asn Ser Leu Thr Thr Phe Thr Pro 530 535 540 His Pro Cys His Glu Ile Ala Arg Tyr Arg Ala Gln Phe Gln Gln Lys 550 555 Arg Leu Thr Lys Glu Leu Cys Ala

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<210> 10012
<211> 361
<212> PRT
<213> Enterobacter cloacae
<400> 10012
Ile Cys Thr Asn Asn Asn Ile Ala Pro Arg Ser Pro Arg Arg Gly Glu
                        10
Asn His Leu Gln Ser Leu Gln Leu Thr Gln Val Ser Gly Val Lys Ala
                           25
Met Lys Ile Lys Ala Ser Leu Ile Leu Thr Val Ala Ala Leu Ala Leu
                     40
                                          4.5
Ser Gly Ser Ala Leu Ala Glu Val Lys Ile Ala Leu Val Ala Lys Ser
                    55
                                       60
Leu Gly Asn Gly Phe Phe Glu Ala Ala Asn Val Gly Ala Gln Glu Ala
                                   75
                 70
Ala Lys Glu Leu Gly Asp Val Lys Val Ile Tyr Thr Gly Pro Thr Thr
                               90
             8.5
Thr Thr Ala Glu Ala Gln Ile Glu Val Leu Asn Gly Leu Ile Ala Gln
                           105 110
          100
Gly Val Asp Ala Ile Ala Ile Ser Ala Asn Asp Pro Asp Ala Val Val
                        120
                             125
      115
Pro Val Leu Lys Lys Ala Met Gln Arg Gly Ile Lys Val Val Ser Trp
                                       140
 130
                     135
Asp Ser Gly Val Ala Lys Ala Gly Arg Gln Ile His Leu Asn Pro Ser
                 150 155
Asn Asn Ala Leu Ile Gly Glu Thr Asn Val Lys Leu Ala Ala Asp Ala
                    170
                                     175
             165
Leu Lys Ala Leu Asn Val Glu Lys Gly Glu Val Ala Val Leu Ser Ala
                                              190
          180
                           185
Thr Pro Thr Ser Thr Asn Gln Asn Thr Trp Ile Ala Glu Met Lys Lys
 195
                         200
                                           205
Val Leu Pro Lys Tyr Pro Ser Val Asn Leu Val Thr Val Ala Tyr Gly
                     215
                                       220
   210
Asp Asp Leu Ser Asp Lys Ser Tyr Arg Glu Ala Val Gly Leu Leu Lys
                  230
                                   235
Thr Tyr Pro Glu Leu Lys Val Ile Val Ser Pro Ser Ser Val Gly Ile
              245
                                250
Val Ala Ala Ala Gln Ala Val Lys Asp Gln Gly Lys Ile Gly Lys Val
          260
                            265
                                              270
Tyr Val Thr Gly Leu Gly Leu Pro Ser Glu Met Ala Gly Ala Val Lys
       275
                        280
                                           285
Ser Gly Ala Ser Lys Ser Phe Ala Ile Trp Asn Pro Ile Asp Leu Gly
   290
                     295
Tyr Ala Ala Thr Tyr Leu Ala Asp Asp Leu Val Lys Gly Thr Ala Thr
                                   315
                 310
Lys Gly-Glu Ala Ser Met Gly Lys Leu Gly Lys Val Lys Leu Asp Ala
                                330
                                                 335
              325
Asp Gly Asn Gly Ala Met Ala Glu Pro Phe Val Tyr Asp Ala Ser Asn
                 345
        340
Ile Asp Lys Phe Ser Lys Ile Phe
       355
                         360
<210> 10013
<211> 507
<212> PRT
<213> Enterobacter cloacae
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<400> 10013

Thr Lys Arg Arg Thr Ile Met Thr Pro Leu Leu Gln Leu Ser Gly Ile 10 Thr Lys Val Phe Pro Gly Val Arg Ala Leu Glu Asn Val Gln Leu Ala 25 Leu Trp Pro Gly Lys Val Thr Ala Leu Ile Gly Glu Asn Gly Ala Gly 35 4.0 Lys Ser Thr Leu Val Lys Val Met Thr Gly Ile Tyr Gln Pro Asp Glu 5.5 60 Gly Glu Ile Leu Tyr Lys Ala Ile Pro Val His Leu Pro Thr Pro Glu 70 75 Ser Ala His Lys Met Gly Ile Thr Ala Ile His Gln Glu Thr Val Leu 85 90 95 Phe Asp Glu Leu Ser Val Thr Glu Asn Ile Phe Val Gly Gln Tyr Leu 100 105 His Lys Gly Phe Leu Lys Lys Leu Asp Trp Pro Glu Met His Arg Arg 115 120 125 Ala Gln Ala Ile Leu Ala Arg Leu Glu Val Gln Ile Asp Pro Arg Ala 130 135 140 Thr Leu Lys Thr Leu Ser Ile Ala Gln Arg His Met Val Ala Ile Ala 145 150 155 Arg Ala Leu Ser Phe Glu Ala Gln Val Val Ile Leu Asp Glu Pro Thr 165 170 175 Ala Ala Leu Ser Gln His Glu Ile Leu Glu Phe Tyr Gln Ile Val Glu 185 190 Arg Leu Lys Gln Glu Gly Lys Ala Ile Leu Phe Ile Ser His Lys Phe 200 Asp Glu Ile Phe Glu Leu Ala Asp His Tyr Thr Ile Leu Arg Asp Gly 210 215 220 Val Phe Val Gly Ala Gly Ala Ile Asn Glu Ile Thr Glu Glu Arg Met 225 230 235 Val Ser Met Met Val Gly Arg Ala Ile Thr Gln Thr Phe Pro Lys Ile 245 250 Asp Cys Glu Lys Gly Glu Thr Val Leu Glu Val Gln Asn Leu Cys His 260 265 Pro Thr Glu Phe Ala His Ile Ser Phe Ser Leu Arg Lys Gly Glu Ile 280 285 Leu Gly Phe Tyr Gly Leu Val Gly Ala Gly Arg Thr Glu Leu Met Gln 295 300 Ala Leu Ser Gly Val Thr Arg Pro Ser Ser Gly Glu Ile Ile Leu Asn 310 315 Gly Gln Pro Arg Arg Phe Arg Gln Pro Ala Asp Ala Ile Lys Ala Gly 325 330 Ile Val Cys Val Pro Glu Glu Arg Gln Lys Gln Gly Ala Ile Ile Ala 340 345 350 Leu Pro Ile Ala Gln Asn Ile Ser Leu Pro Gln Leu Ser Thr Leu Asn 355 360 365 Pro Asn Gly Val Leu His Asp Asp Arg Glu Trp Lys Leu Ala Asn Glu 370 375 380 Tyr Ala Lys Arg Leu Gln Val Lys Ala Phe Ser Trp Lys Gln Ala Val 390 395 Glu Thr Leu Ser Gly Gly Asn Gln Gln Lys Val Val Ile Gly Lys Trp 405 410 Leu Ala Thr His Pro Asp Val Ile Ile Leu Asp Glu Pro Thr Lys Gly 425 Ile Asp Ile Gly Ser Lys Ala Ala Val His Gln Phe Met Ser Glu Leu 435 440 445 Val Ser Gln Gly Leu Ala Val Ile Met Val Ser Ser Glu Leu Pro Glu 455 460 Val Met Gly Met Ala Asp Arg Ile Ile Val Met His Glu Gly Leu Met 470 475 Val Ala Glu Tyr Gln Ala Gly Asp Ala Thr Ala Glu Thr Ile Val Ser

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485
                                              495
Ala Ala Ser Gly Ala Lys Gln Glu Ala Ala
<210> 10014
<211> 335
<212> PRT
<213> Enterobacter cloacae
<400> 10014
Met Leu Ser Ser Leu Leu Lys His Arg Glu Ala Leu Leu Gly Ala Val
                             1.0
Ile Ile Leu Met Ile Val Ala Ile Gly Ser Arg Val Pro Ser Phe Ile
                          25
                                      30
Ala Pro Gly Asn Leu Val Glu Met Phe Asn Asp Thr Ala Ile Leu Ile
                      40
                               4.5
Val Leu Ala Leu Gly Gln Met Met Val Leu Leu Thr Lys Gly Ile Asp
                   55
                                    60
Leu Ser Met Ala Ala Asn Leu Ala Leu Thr Gly Met Ile Val Ala Leu 65 70 75 80
Ile Asn Phe His Tyr Pro Asp Val Pro Val Trp Ala Leu Leu Ile Leu
                             90
            85
Ala Ser Ala Leu Gly Leu Leu Met Gly Ala Ile Asn Gly Leu Leu Val
         100 105
Trp Lys Leu Gly Ile Pro Ala Ile Val Val Thr Leu Gly Thr Met Ser
                       120
115
Ile Tyr Arg Gly Met Ile Phe Leu Leu Ser Gly Gly Gly Trp Val Asn
                   135
 130
                                    140
Ser Asn Gln Met Gly Ala Asp Phe Leu Gly Leu Pro Arg Ala Ser Val
                150
                                 155 160
Leu Gly Leu Pro Val Leu Ser Trp Cys Ala Ile Ala Val Leu Leu Leu
             165
                             170
Val Gly Tyr Phe Leu Arg Tyr Ser Arg Thr Gly Arg Ala Leu Tyr Thr
         180
                          185
                                           190
Ala Gly Gly Asn Ala Thr Ala Ala Tyr Tyr Thr Gly Ile Asn Ala Gly
      195
                      200
                                        205
Lys Met Gln Phe Ile Ser Phe Cys Leu Ser Gly Leu Leu Ala Gly Phe
                   215
                                    220
  210
Cys Gly Tyr Leu Trp Ile Ser Arg Phe Ala Val Ala Tyr Val Asp Val
                 230
                                 235
225
Ala Asn Gly Phe Glu Leu Gln Val Val Ala Ala Cys Val Ile Gly Gly
             245
                             250
Ile Ser Thr Met Gly Gly Thr Gly Arg Val Leu Gly Cys Leu Phe Gly
          260
                          265
Ala Leu Phe Leu Gly Val Ile Asn Asn Ala Leu Pro Val Ile Gly Val
                       280
                                        285
      275
Ser Pro Phe Trp Gln Met Ala Ile Ser Gly Ser Val Ile Val Ile Ala
 290
                    295
                                     300
Val Leu Leu Asn Glu Arg Gly Asn Lys Arg Lys Gly Arg Leu Ile Leu
                                 315
                310
Arg Asp Ala Ala Leu Ala Arg Gln Lys Leu Ala Val Lys Pro
             325
                              330
<210> 10015
<211> 388
<212> PRT
<213> Enterobacter cloacae
<400> 10015
Leu Arg Arg Ile Ile Met Ser Phe Met Leu Ala Leu Pro Lys Ile Ser
                              10
```

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Leu His Gly Ala Gly Ala Ile Gly Asp Met Val Asn Leu Val Ala Asn
                           2.5
          2.0
Lys Gln Trp Gly Lys Ala Leu Ile Val Thr Asp Gly Gln Leu Val Lys
      35
                       40
Leu Gly Leu Leu Asp Ser Leu Phe Thr Ala Leu Asp Ala His Gln Met
                55
                                     60
Ser Tyr His Leu Phe Asp Glu Val Phe Pro Asn Pro Thr Glu Ala Leu
                70
                     75
Val Gln Lys Gly Tyr Ala Ala Tyr Gln Asp Ala Glu Cys Asp Tyr Leu
85 90 95
             85
Ile Ala Phe Gly Gly Ser Pro Ile Asp Thr Ala Lys Ala Ile Lys
         100 105 110
Ile Leu Thr Ala Asn Pro Gly Pro Ser Thr Asp Tyr Ser Gly Val Gly
      115
              120 125
Lys Val Lys Asn Ala Gly Val Pro Leu Val Ala Ile Asn Thr Thr Ala
                135
                                     140
Gly Thr Ala Ala Glu Met Thr Ser Asn Ala Val Ile Ile Asp Ala Ala
                150 155
Arg Gln Val Lys Glu Val Ile Ile Asp Pro Asn Ile Ile Pro Asp Ile
            165 170 175
Ala Val Asp Asp Ala Ser Val Met Leu Asp Ile Pro Ala Ser Val Thr
          180
                          185
                                            190
Ala Ala Thr Gly Met Asp Ala Leu Thr His Ala Ile Glu Ala Tyr Val
                       200
      195
                                         205
Ser Val Gly Ala His Pro Leu Thr Asp Ala Asn Ala Leu Glu Ala Ile
                    215
                                      220
 210
Arg Leu Ile Asn Leu Trp Leu Pro Lys Ala Val Asp Asp Gly His Asn
225
                 230
                                  235
Leu Glu Ala Arg Glu Gln Met Ala Phe Gly Gln Tyr Leu Ala Gly Met
                              250
             245
                                               255
Ala Phe Asn Ser Ala Gly Leu Gly Leu Val His Ala Leu Ala His Gln
          260
                           265
Pro Gly Ala Thr His Asn Leu Pro His Gly Val Cys Asn Ala Ile Leu
      275
                       280
                                         285
Leu Pro Ile Ile Glu Asn Phe Asn Arg Pro Asn Ala Val Ala Arg Phe
  290
                    295
                                      300
Ala Arg Val Ala Gln Ala Met Gly Val Asp Thr Arg Gly Met Ser Asp
305
                 310
                                  315
Glu Ala Ala Ser Met Ser Ala Ile Gln Ala Ile Arg Asp Leu Ser Ala
             325
                              330
Arg Val Gly Ile Pro Ser Gly Phe Ser Gln Leu Gly Val Thr Lys Ala
          340
                           345
                                            350
Asp Ile Glu Gly Trp Leu Asp Lys Ala Leu Ala Asp Pro Cys Ala Pro
                        360
                                         365
Cys Asn Pro Arg Thr Ala Ser Arg Asp Glu Val Arg Glu Leu Tyr Leu
                    375
  370
                                      380
Glu Ala Leu
385
```

<210> 10016

<211> 222 <212> PRT

<213> Enterobacter cloacae

<400> 10016

Asn Gly Met Lys Asn His Leu Ser Cys Leu Lys Gly Asp Thr Ile Lys I $10 ext{ 10}$ 15 16 17 18 Ala Ile Val Leu Val Cys Leu Ala Val Gly Val Val Gly Met Ser Tyr 20 25 30 30 Gly Ser Leu Ala Met Ala Tyr Gly Phe Pro Leu Trp Val Pro Phe Val 35 40 40 45

```
Leu Ser Leu Thr Val Leu Ala Gly Ala Ser Glu Phe Met Phe Ile Gly
                   55
                                    60
Ile Val Ala Ser Gly Gly Asn Pro Leu Ala Ala Ala Ala Ala Gly Leu
                7.0
                                 7.5
Leu Val Asn Ala Arg His Val Pro Phe Gly Val Thr Val Arg Asp Leu
            85 90
Val Gly Lys Arg Gly Leu Ser Phe Leu Gly Cys His Ile Met Asn Asp
        100 105 110
Glu Ser Val Val Phe Gly Leu Ser Gln Lys Thr Ala Glu Gln Arg Lys
 115 120 125
Ala Ala Tyr Trp Leu Cys Gly Leu Gly Val Ala Ile Ile Trp Pro Leu
 130 135 140
Gly Ala Val Leu Gly Ala Met Val Gly Lys Leu Leu Pro Asp Pro Glu
145 150 155 160
Thr Ile Gly Leu Asp Ala Val Phe Pro Ala Ile Leu Leu Ala Leu Val
           165 170 175
Val Pro Ala Phe Lys Asn Arg Thr Thr Leu Ile Arg Ala Cys Ser Gly
         180 185 190
Ala Val Leu Ser Leu Ala Ala Val Pro Phe Ala Pro Val Gly Leu Pro
 195 200 205
Val Leu Leu Ser Leu Leu Gly Leu Ala Ala Arg Lys Lys
  210
                   215
                                     220
<210> 10017
<211> 219
<212> PRT
<213> Enterobacter cloacae
<400> 10017
Arg Glu Arg Arg Gly Ala Gln Met Arg Lys Arg Asp Thr Ile Val Arg
                              10
Tyr Thr Ala Pro Glu Arg Ile Asn His Trp Val Thr Ala Phe Cys Phe
                          25
 20
                                           30
Met Leu Ala Ala Ile Ser Gly Leu Gly Phe Phe Phe Pro Ser Phe Asn
35
                       40
Trp Leu Met Gln Ile Met Gly Thr Pro Gln Leu Ala Arg Ile Leu His
                  55
Pro Phe Val Gly Val Ile Met Phe Ala Ser Phe Ile Ile Met Phe Phe
                70
                                 75
Arg Tyr Trp His His Asn Leu Ile Asn Arg Asp Asp Ile Phe Trp Ala
            8.5
                             90
Lys Asn Ile Arg Lys Ile Val Val Asn Glu Glu Val Gly Asp Thr Gly
                          105
         100
Arg Tyr Asn Phe Gly Gln Lys Cys Val Phe Trp Ala Ala Ile Ile Phe
      115
                      120
Leu Val Leu Leu Val Ser Gly Val Ile Ile Trp Arg Pro Tyr Phe
                    135
Ala Pro Ala Phe Ser Ile Pro Val Ile Arg Phe Ala Leu Met Leu His
145 150
                                 155
Ser Phe Ala Ala Val Ala Leu Ile Val Val Ile Met Val His Ile Tyr
             165
                             170
Ala Ala Leu Trp Val Lys Gly Thr Ile Thr Ala Met Val Glu Gly Trp
         180
                          185
                                           190
Val Thr Lys Thr Trp Ala Lys Lys His His Pro Arg Trp Tyr Arg Glu
195 200 205
Val Arg Gln Lys Gln Glu Lys Ser Ser Glu
                    215
```

<210> 10018 <211> 429

<212> PRT

13

<213> Enterobacter cloacae

<400> 10018 Asp Arg Arg Asn Asp Gly Ser Pro Leu Arg Lys Asp Pro Asn Met 1.0 Lys Trp Phe Asn Thr Leu Ser His Asn Arg Trp Leu Glu Gln Glu Thr 20 25 Asp Arg Ile Leu Asp Phe Gly Lys Asn Ala Ala Val Pro Thr Gly Phe 35 40 45 Gly Trp Leu Gly Asn Asn Gly Gln Val Arg Ser Asp Met Gly Thr His 50 55 60 Leu Trp Ile Thr Ala Arg Met Leu His Val Tyr Ala Val Ala Ala Asn 70 75 Met Gly Arg Pro Gly Ala Tyr Ala Leu Val Glu His Gly Ile Asn Ala 90 85 Leu Asn Gly Pro Leu Arg Asp Lys Gln His Gly Gly Trp Tyr Ala Cys 100 105 Val Asn Asp Glu Gly Val Ile Asp Ala Ser Lys Gln Gly Tyr Gln His 120 125 Phe Phe Val Leu Leu Gly Ala Ala Ser Ala Val Thr Thr Gly His Pro 135 140 Gln Ala Arg Lys Leu Leu Asp Asp Ala Ile Glu Val Ile Glu Arg Tyr 150 155 Phe Trp Ser Glu Gln Glu Gln Met Cys Leu Glu Ser Trp Asp Glu Ala 165 170 175 Phe Ser Lys Thr Glu Asp Tyr Arg Gly Gly Asn Ala Asn Met His Ala 185 190 Val Glu Ala Phe Leu Ile Val Tyr Asp Val Thr His Asp Arg Lys Trp 195 200 205 Leu Asp Arg Ala Leu Arg Ile Ala Ser Val Ile Ile His Asp Val Ala 215 220 Arg Lys Gly Glu Tyr Arg Val Asn Glu His Phe Asp Thr Asn Trp Asn 225 230 235 Pro Ile Arg Asp Tyr Asn Ile Asp Asn Pro Ala His Arg Phe Arg Ala 245 250 Tyr Gly Gly Thr Pro Gly His Trp Ile Glu Trp Gly Arg Leu Met Leu 265 His Leu Arg Ala Ala Leu Glu Ala Arg Phe Glu Thr Pro Pro Glu Trp 280 285 Leu Leu Glu Asp Ala Lys Gly Leu Phe His Ala Thr Ile Arg Asp Ala 295 300 Trp Ala Pro Asp Gly Ala Asp Gly Phe Val Tyr Ser Val Gly Trp Asp 310 315 320 Gly Lys Pro Ile Val Arg Glu Arg Val Arg Trp Pro Ile Val Glu Ala 330 325 Met Gly Thr Ala Tyr Ala Leu Tyr Thr Val Thr Gly Glu Ala Gln Tyr 340 345 Glu Ala Trp Tyr Gln Lys Trp Trp Asp Tyr Cys Ile Lys Tyr Leu Met 355 365 360 Asp Tyr Glu Asn Gly Ser Trp Trp Gln Glu Leu Asp Thr Asn Asn Glu 375 380 Val Thr Thr Lys Val Trp Asp Gly Lys Gln Asp Ile Tyr His Leu Leu 390 395 His Cys Leu Val Ile Pro Arg Leu Pro Leu Ala Pro Gly Leu Ala Pro 410 Ala Val Ala Ala Gly Leu Leu Asp Ser Gln Ala Lys 425

<210> 10019

<211> 350 <212> PRT

<213> Enterobacter cloacae

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<400> 10019
Met Ala Thr Gly Thr Leu Pro Asp Ala Gly Gln Ile Leu Asn Ser Leu
                              1.0
             5
Ile Asn Ser Ile Leu Leu Val Asp Asp Glu Leu Ala Val His Tyr Ala
                          25
                                           30
          20
Asn Pro Ala Ala Gln Gln Leu Leu Ala Gln Ser Ala Arg Lys Leu Phe
                              45
            40
Gly Thr Pro Leu Pro Glu Leu Leu Ser Tyr Phe Ser Leu Asn Ile Gly
                   55 60
Leu Met Gln Glu Ser Leu Gln Ala Gly Gln Gly Phe Thr Asp Asn Glu
                7.0
                              75
Val Thr Leu Val Ile Asp Gly Arg Ser His Ile Leu Ser Leu Thr Ala
                              90 95
             85
Gln Arg Leu Pro Asp Gly Met Ile Leu Leu Glu Met Ala Pro Met Asp
                          105 110
         100
Asn Gln Arg Arg Leu Ser Gln Glu Gln Leu Gln His Ala Gln Gln Ile
      115
                       120
                                        125
Ala Ala Arg Asp Leu Val Arg Gly Leu Ala His Glu Ile Lys Asn Pro
 130
                    135
                                     140
Leu Gly Gly Leu Arg Gly Ala Ala Gln Leu Leu Thr Lys Ala Leu Pro
                150 155
Asp Pro Ala Leu Ala Glu Tyr Thr Asn Val Ile Ile Glu Gln Ala Asp
             165
                 170
Arg Leu Arg Asn Leu Val Asp Arg Leu Leu Gly Pro Gln Gln Pro Gly
                          185
          180
Met His Val Ser Glu Ser Ile His Lys Val Ala Glu Arg Val Val Lys
                       200
                                         205
      195
Leu Val Ser Met Glu Leu Pro Asp Asn Val Thr Leu Val Arg Asp Tyr
                    215
                                      220
 210
Asp Pro Ser Leu Pro Glu Leu Ala His Asp Pro Asp Gln Ile Glu Gln
                                  235
                 230
225
Val Leu Leu Asn Ile Val Arg Asn Ala Leu Gln Ala Leu Gly Pro Glu
                              250
             245
Gly Gly Glu Ile Ile Leu Arg Thr Arg Thr Ala Phe Gln Leu Thr Leu
                           265
          260
His Gly Val Arg Tyr Arg Leu Ala Ala Arg Ile Asp Val Glu Asp Asn
                       280
                                         285
       275
Gly Pro Gly Ile Pro Pro His Leu Gln Asp Thr Leu Phe Tyr Pro Met
                    295
                                     300
   290
Val Ser Gly Arg Glu Gly Gly Thr Gly Leu Gly Leu Ser Ile Ala Arg
                                  315
305
                 310
Asn Leu Ile Asp Gln His Ser Gly Lys Ile Glu Phe Thr Ser Trp Pro
              325
                               330
Glv His Thr Glu Phe Ser Val Phe Leu Pro Ile Lys Lys
                           345
```

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<210> 10020
<211> 495
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<212> PRT

<213> Enterobacter cloacae

55 Thr Ala Leu Glu Phe Ser Asp Ala Phe Gly Glu Ala Asp Phe Gln His 75 70 Ala Val Ala Arg Tyr Pro Glu Arg Pro Leu Ser Leu Tyr Val His Ile 8.5 90 95 Pro Phe Cys His Lys Leu Cys Tyr Phe Cys Gly Cys Asn Lys Ile Val 100 105 110 Thr Arg Gln Gln His Lys Ala Asp Gln Tyr Leu Asp Ala Leu Glu Gln 115 120 125 Glu Ile Leu His Arg Ala Pro Leu Phe Lys Gly Arg His Val Ser Gln 130 135 140 Leu His Trp Gly Gly Gly Thr Pro Thr Tyr Leu Asn Lys Ala Gln Ile 145 150 155 160 Ser Arg Leu Met Ala Leu Leu Arg Asp Asn Phe Ser Phe Asn Asp Asp 165 170 175 Ala Glu Ile Ser Ile Glu Val Asp Pro Arg Glu Ile Glu Leu Asp Val 180 185 190 Leu Asp His Leu Arg Ala Glu Gly Phe Asn Arg Leu Ser Met Gly Val 195 200 205 Gln Asp Phe Asn Lys Glu Val Gln Arg Leu Val Asn Arg Glu Gln Asp 210 215 220 Glu Ala Phe Ile Phe Ala Leu Leu Asn His Ala Arg Glu Ile Gly Phe 225 230 235 Thr Ser Thr Asn Ile Asp Leu Ile Tyr Gly Leu Pro Lys Gln Thr Pro 245 250 255 Glu Ser Phe Ala Tyr Thr Leu Lys Arg Val Ala Glu Leu Asn Pro Asp 260 265 270 Arg Leu Ser Val Phe Asn Tyr Ala His Leu Pro Thr Leu Phe Ala Ala 275 280 285 Gln Arg Lys Ile Lys Asp Ala Asp Leu Pro Ser Ala Gln Gln Lys Leu 290 295 300 Asp Ile Leu Gln Glu Thr Ile Ala Ser Leu Thr Glu Thr Gly Tyr Gln 305 310 315 Phe Ile Gly Met Asp His Phe Ala Arg Pro Asp Asp Glu Leu Ala Ile 325 330 335 Ala Gln Arg Glu Gly Val Leu His Arg Asn Phe Gln Gly Tyr Thr Thr 340 345 350 Gln Gly Asp Thr Asp Leu Leu Gly Met Gly Val Ser Ala Ile Ser Met 355 360 365 Ile Gly Asp Cys Tyr Ala Gln Asn Gln Lys Glu Leu Lys Leu Tyr Tyr 370 375 380 Gln Gln Val Asp Glu Thr Gly Asn Ala Leu Trp Arg Gly Ile Ala Leu 385 390 395 400 Thr Arg Asp Asp Cys Ile Arg Arg Asp Val Ile Lys Ala Leu Ile Cys 405 410 Asn Phe Arg Leu Glu Phe Arg Glu Val Glu Ser Gln Trp Asp Leu Gln 420 425 Phe Ser Asp Tyr Phe Ala Glu Asp Leu Lys Leu Leu Ala Pro Leu Ala 440 445 435 Lys Asp Gly Leu Val Asp Val Ser Glu Ser Ala Val Val Thr Pro 450 455 460 Lys Gly Arg Leu Leu Ile Arg Asn Ile Cys Met Cys Phe Asp Ala Tyr 465 470 475 Leu Arq Gln Lys Ala Arg Leu Gln Gln Phe Ser Arg Val Ile 485 490

<210> 10021 <211> 323

<211> 323

<213> Enterobacter cloacae

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<400> 10021
Arg Phe Arg Gly Lys Lys Arg Val Arg Ser Gly Cys Trp Trp Arg Lys
                                1.0
Lys Pro Ile Arg Arg Trp Ala Lys Val Ser Thr Ala Thr Thr Pro Asp
         20
                     25
Ala Tyr Ala Pro Gly Lys Thr Asn Gln Leu Asn Ala Val Val Gln Phe
                   40
                             45
Glu Leu Asn Arg Val Arg Arg His Ala Asn Ala Val Val Phe Phe Ser
                    55 60
Thr Gln Arg Asp Val Ser Val Asp Ser Phe Ile Gly Glu His Ala Ala
              70
                      75
Ser Gly Gln Glu Leu Ala Val Cys Val Gln Arg Leu Gln Gly Phe Phe
             8.5
                               90
Gln Arg Ala Gly Asn Leu Trp Asp Leu Phe Arg Phe Phe Trp Arg Gln
                        105
Val Val Gln Val Phe Val His Gly Phe Ala Arg Val Asp Leu Val Leu
            120
      115
                                        125
Asp Thr Val Gln Thr Gly His Gln Gln Cys Cys Glu Ala Gln Val Trp
                    135
                                      140
Val Ser Arg Arg Val Arg Glu Ala His Phe Asp Thr Thr Arg Phe Arg
       150
                                   155
                                                     160
Arg Arg Asn His Arg Asp Thr Asp Arg Ser Arg Thr Val Thr Gly Arg
             165
                               170
                                                  175
Val Arg Gln His His Gly Cys Phe Val Ala Trp Asn Gln Thr Leu Val
              185
          180
                                              190
Gly Val Arg Gly Arg Val Arg Gln Gly Val Asp Arg Phe Ser Val Phe
      195
                         200
Asp Asn Thr Ala Asp Val Val Gln Arg Leu Leu Arg Gln Thr Arg Ile
                     215
                                       220
Leu Val Thr Arg Glu Gln Val Gly Ala Val Leu Gly Gln Gly His Val
225
                230
                                   235
Ala Val His Ala Gly Thr Val Val Ala Lys His Trp Phe Trp His Glu
              245
                                250
Gly Arg Gly Phe Thr Glu Thr Val Arg Asn Val Val Tyr Asn Val Phe
                            265
          260
                                              270
Val Asp Leu Asn Leu Ile Arg Phe Phe Gly His Gly Val Glu Ala Gly
                        280
                                           285
Ser Asp Leu Val Leu Ala Ser Arg Cys His Phe Val Val Val Arg Phe
                    295
                                       300
Asn Asn Gln Ala His Leu Phe His Asp Gln Thr His Gly Arg Thr Asp
305
                 310
                                    315
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<210> 10022
<211> 190
<212> PRT
<213> Enterobacter cloacae
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Val Leu

619 val Cys Asp Ala Gly Arg Ala Gln val Leu Phe Ser Ala Phe Cys 65 70 80 Asp Gly Ala Trp Val Thr Val Ile Ala Leu Gln Arg Ala Arg Phe Gln

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85
Asn Ile Ala Ala Asp Asp Gln Arg Arg Phe Phe Val Glu Arg Val Asn
             105
Glu Arg Ser Gly Cys Ile Trp His Gln Asn His Val Gly Phe Val Asn
    115 120
                             125
Ala Phe Pro Ala Ala Asn Gly Gly Ala Val Lys His Phe Ala Phe Phe
       135 140
Lys Glu Phe Gly Val His Leu Met Ser Arg Asp Arg Asp Val Leu Phe
145 150 155
Phe Thr Phe Ser Ile Gly Glu Ala Gln Ile Asn Lys Leu His Phe Met
       165 170 175
Phe Val Gln His Arg Gln Asn Val Phe Ser Gly His Thr
<210> 10023
<211> 218
<212> PRT
<213> Enterobacter cloacae
<400> 10023
Leu Lys Phe Leu Phe Pro Ala Thr Val Thr Ser Pro Arg Arg Lys Glu
                10
Ile Asn Met Leu Tyr Ile Phe Asp Leu Gly Asn Val Ile Val Asp Ile
                       25
Asp Phe Asn Arg Val Leu Gly Ala Trp Ser Asp Phe Ser Arg Val Pro
35 40
Leu Ala Thr Leu Lys Gln Asn Phe Ala Met Gly Glu Thr Phe His Leu
50 55
His Glu Arg Gly Glu Ile Ser Asp Glu Ala Phe Ala Glu Arg Phe Cys
             7.0
                               7.5
Gln Glu Met Gly Leu Ser Leu Ser Tyr Glu Gln Phe Ser His Gly Trp
          85
                           90
Gln Ala Ile Phe Val Ala Ile Arg Pro Glu Val Ile Asp Ile Met His
        100 105 110
Lys Leu Arg Glu Gln Glu His Arg Val Val Val Leu Ser Asn Thr Asn
115 120 125
Arg Leu His Thr Thr Phe Trp Pro Asp Glu Tyr Pro Glu Ile His Ala
 130 135 140
Ala Ala Asp Lys Val Tyr Leu Ser Gln Glu Met Gly Met Arg Lys Pro
               150
                   155
Glu Ala Arg Ile Tyr Gln Ala Val Leu Gln Glu Glu Gly Phe Thr Ala
165 170 175
Ala Asp Ala Val Phe Phe Asp Asp Asn Ala Asp Asn Ile Glu Gly Ala
        180
                      185 190
Asn Gln Leu Gly Ile Thr Ser Ile Leu Val Thr Gly Lys Glu Thr Ile
 195 200
Pro Asn Tyr Phe Ala Lys Gln Leu Cys
                  215
<210> 10024
<211> 364
<212> PRT
<213> Enterobacter cloacae
<400> 10024
Ala Leu Ser Pro Thr Gly His Glu Tyr Thr Asn Arg Thr Ile Arg Cys
                           10
Gly Tyr Ala Gly Phe Ala Gly Glu Arg Trp Pro Arg His Ile Leu Ala
                      25
Pro Gly Met Ser Gln Leu Ala Val Trp Pro Arg Val Thr Arg Glu Ser
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Thr Ala Met Tyr His Leu Arg Val Pro Gln Thr Glu Glu Glu Leu Asp
                   5.5
Ala Tyr Tyr His Phe Arg Trp Glu Met Leu Arg Lys Pro Leu His Gln
               70
                                75
Pro Lys Gly Ser Glu Arg Asp Ala Trp Asp Ala Met Ala His His Gln
                             90
          8.5
Met Val Val Asp Glu Glu Gly Asn Leu Val Ala Val Gly Arg Leu Tyr
         100 105
                                          110
Ile Asn Ala Asp Asn Glu Ala Ser Ile Arg Phe Met Ala Val His Pro
                      120 125
Ser Val Gln Asp Lys Gly Leu Gly Thr Leu Met Ala Met Thr Leu Glu
                  135
Ser Val Ala Arg Gln Glu Gly Val Lys Arg Val Thr Cys Ser Ala Arg
    150 155
Glu Asp Ala Val Glu Phe Phe Ala Lys Leu Gly Phe Val Asn Gln Gly
            165
                             170
Glu Ile Thr Ala Pro Gln Thr Thr Pro Ile Arg His Phe Leu Met Ile
                        185 190
         180
Lys Pro Ile Ala Thr Leu Asp Asp Ile Leu His Arg Ala Asp Trp Cys
      195
                      200
                                       205
Gly Gln Leu Gln Gln Ala Trp Tyr Gln His Ile Pro Leu Ser Glu Lys
210
                   215
                                    220
Met Gly Val Arg Ile Gln Gln Tyr Thr Gly Gln Lys Phe Ile Thr Thr
                230
                                 235
Met Pro Glu Thr Gly Asn Gln Asn Pro His His Thr Leu Phe Ala Gly
             245
                             250
Ser Leu Phe Ser Leu Ala Thr Leu Thr Gly Trp Gly Leu Ile Trp Leu
                                           270
         260
                          265
Met Leu Arg Glu Arg His Leu Gly Gly Thr Ile Ile Leu Ala Asp Ala
                      280
                                       285
      275
His Ile Arg Tyr Ser Ala Pro Ile Ser Gly Lys Pro Ser Ala Val Ala
                   295
                                    300
Asp Leu Gly Ala Leu Gly Gly Asp Leu Asp Arg Leu Ala Arg Gly Arg
                    315
                310
Lys Ala Arg Val Gln Met Gln Val Glu Leu Phe Gly Asp Glu Thr Pro
             325
                             330 335
Gly Ala Val Phe Glu Gly Thr Tyr Ile Val Leu Pro Ala Lys Pro Tyr
                       345
                                          350
         340
Gly Ala Tyr Glu Glu Gly Gly Asn Glu Glu Glu
      355
                       360
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<210> 10025

<211> 467 <212> PRT

<213> Enterobacter cloacae

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Ser Asp Lys Leu Gly Leu Lys Lys His Leu Leu Trp Ile Ile Ser Val
                   120
      115
Leu Leu Phe Leu Phe Ala Pro Phe Phe Leu Tyr Val Phe Ala Pro Leu
         135
                                140
Leu Lys Thr Asn Ile Trp Leu Gly Ala Leu Ser Gly Gly Leu Tyr Ile
             150 155
Gly Phe Val Phe Ser Ala Gly Ser Gly Ala Ile Glu Ala Tyr Ile Glu
            165
                           170
Arg Val Ser Arg Asn Ser Phe Phe Glu Tyr Gly Lys Ala Arg Met Phe
        180 185
                             190
Gly Cys Leu Gly Trp Gly Leu Cys Ala Ser Thr Gly Gly Ile Leu Phe
   195
                     200
Gly Ile Asp Pro Ser Tyr Val Phe Trp Met Gly Ser Ala Ala Ala Leu
 210 215
                                  220
Leu Leu Met Leu Leu Leu Val Val Ala Lys Pro Lys Pro Asn Gln Thr
    230 235
Ala Gln Val Met Asn Ala Leu Gly Ala Asn Gln Arg Gln Ile Thr Ala
           245
                           250
Lys Thr Val Phe Asn Leu Phe Arg Gln Arg Arg Met Trp Met Phe Ile
                        265
Leu Tyr Val Ile Gly Val Ala Cys Val Tyr Asp Val Phe Asp Gln Gln
                     280
                                     285
Phe Ala Thr Phe Phe Lys Thr Phe Phe Ala Thr Pro Gln Glu Gly Thr
                  295
                                  300
Arg Ala Phe Gly Phe Ala Thr Thr Ala Gly Glu Ile Cys Asn Ala Ile
              310
                              315
Ile Met Phe Cys Ser Pro Trp Ile Ile Asn Arg Ile Gly Ala Lys Asn
            325
                           330
                                            335
Thr Leu Leu Ile Ala Gly Val Ile Met Ala Thr Arg Ile Ile Gly Ser
       340
                        345
                                         350
Ser Phe Ala Thr Thr Ala Val Glu Val Ile Ala Leu Lys Met Leu His
355
                     360
                                     365
Ala Leu Glu Val Pro Phe Leu Leu Val Gly Ala Phe Lys Tyr Ile Thr
  370 375
                                  380
Gly Val Phe Asp Thr Arg Leu Ser Ala Thr Ile Tyr Leu Ile Gly Phe
               390
                               395
Gln Phe Ala Lys Gln Ser Ala Ala Ile Phe Leu Ser Ala Phe Ala Gly
           405
                            410
Asn Met Tyr Asp Arg Val Gly Phe Gln Glu Thr Tyr Leu Ile Leu Gly
         420
                        425
                                        430
Cys Phe Val Leu Ala Ile Thr Val Val Ser Ala Phe Thr Leu Ser Gly
                         445
                     440
Arg Arg Glu Ile Ala Ala Thr Ala Gly Ala Ala Ala Leu Thr His Gln
                  455
                                  460
Ser Arg
465
<210> 10026
<211> 293
<212> PRT
<213> Enterobacter cloacae
<400> 10026
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Asp Arg Pro Tyr Arg Ile Thr Arg Gly Asp Leu Phe Tyr Ile Arg Ala Glu Asp Lys His Ser Tyr Ala Ser Val Asn Asp Leu Val Leu Gln Asn 85 90 Val Ile Tyr Cys Pro Asp Arg Leu Lys Leu Asn Val Asp Trp Ala Gly 100 105 110 Asn Ile Pro Gly Phe His Asn Ala Arg Gly Glu Pro His Trp Arg Leu 115 120 125 Ser Ser Asn Gly Met Ala Gln Val Arg Gln Thr Ile Ser Gln Leu Glu 130 135 140 Gln Glu Ser Gln Lys Ser Asp Pro Ala Ala Asn Gln Met Ser Glu Leu 145 150 155 Leu Phe Ala Gln Leu Val Met Thr Leu Lys Arg His Arg Tyr Ala Thr 165 170 Asp Asn Pro Ser Ala Thr Met Gln Glu Ala Leu Leu Asp Lys Leu Ile 180 185 190 Thr Arg Leu Ala Gly Ser Leu Asn Lys Ser Phe Val Leu Asp Lys Phe 195 200 205 Cys Glu Gln Glu Gln Cys Ser Glu Arg Ala Leu Arg Gln Gln Phe Arg 210 215 220 Thr Gln Thr Gly Met Thr Val Asn His Tyr Leu Arg Gln Leu Arg Ile 230 235 Cys His Ala Gln Tyr Leu Leu Gln His Thr Glu Leu Met Val Ser Glu 245 250 255 Val Ala Met Arg Cys Gly Phe Glu Asp Ser Asn Tyr Phe Ser Val Val 260 265 270 Phe Asn Arg Glu Val Gly Met Thr Pro Val Gln Trp Arg His Arg Ser 275 280 285

Arg Lys Ala Ala 290

<210> 10027 <211> 218

<212> PRT

<213> Enterobacter cloacae

<400> 10027

Gln Leu Cys Arg Pro Thr Ile Met Glu Arg Ile Met Ser Tyr Thr Leu 10 Pro Ser Leu Pro Tyr Ala Tyr Asp Ala Leu Glu Pro His Phe Asp Lys 2.0 25 Gln Thr Met Glu Ile His His Thr Lys His His Gln Thr Tyr Val Asn 35 40 45 Asn Ala Asn Ala Leu Glu Ser Leu Pro Glu Phe Ala Asn Leu Pro 5.5 Val Glu Glu Leu Ile Thr Lys Leu Asp Gln Leu Pro Ala Asp Lys Lys 70 75 Thr Val Leu Arg Asn Asn Ala Gly Gly His Ala Asn His Ser Leu Phe 8.5 90 Trp Lys Gly Leu Lys Thr Gly Thr Thr Leu Gln Gly Asp Leu Lys Ala 110 100 105 Ala Ile Glu Arg Asp Phe Gly Ser Val Asp Asn Phe Lys Ala Glu Phe 125 115 120 Glu Lys Ala Ala Ala Thr Arg Phe Gly Ser Gly Trp Ala Trp Leu Val 135 140 Leu Lys Gly Asp Lys Leu Ala Val Val Ser Thr Ala Asn Gln Asp Ser 150 155 Pro Leu Met Gly Glu Ala Ile Ser Gly Ala Ser Gly Phe Pro Ile Leu 165 170 175 Gly Leu Asp Val Trp Glu His Ala Tyr Tyr Leu Lys Phe Gln Asn Arg 185

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5533
  Arg Pro Asp Tyr Ile Lys Ala Phe Trp Asp Val Val Asn Trp Asp Glu
    195
                        200
  Ala Ala Ala Arg Phe Ala Ala Lys Lys
     210
<210> 10028
  <211> 235
  <212> PRT
  <213> Enterobacter cloacae
  <400> 10028
  Leu Ala Phe Phe Val Ser Glu Gly Val Glu Met His Tyr Pro Val Asn
                                   10
  Val Phe Thr Gly Lys Val Arg Glu Tyr Glu Gly Ser Arg Pro Ser Ala
                             25
  Ile Ala Lys Val Gln Val Asp Gly Glu Leu Thr Leu Thr Asp Leu Gly
         3.5
  Leu Ala Gly Asp Gln Gln Ala Glu Lys Lys Ile His Gly Gly Pro Asp
                       55
  Arg Ala Leu Cys His Tyr Pro Arg Glu His Tyr Gln His Trp Lys Thr
                     70
                                      75
  Glu Phe Pro Glu Gln Ala Asp Leu Phe Val Ala Pro Ala Phe Gly Glu
                8.5
                                   90
  Asn Leu Ser Thr Glu Gly Leu Thr Glu Lys Asn Val Phe Ile Gly Asp
       100
                               105 110
  Ile Tyr Arg Trp Gly Asp Ala Leu Ile Gln Val Thr Gln Pro Arg Ser
                            120
         115
  Pro Cys Phe Lys Leu Asn Tyr His Phe Gly Ile Gln Asp Met Ser Ala
   130
                       135
                                           140
  Gln Leu Gln Asn Ala Gly Lys Thr Gly Trp Leu Tyr Arg Val Val Gln
                     150
                                       155
  Ala Gly Gln Val Ser Ala Asp Ala Pro Leu Glu Leu Ala Ser Arg Leu
                 165 170 175
  Ser Glu Val Ser Val Tyr Glu Ala Cys Ala Ile Ala Trp His Met Pro
             180
                                185
  Phe Asp Asp Asp Gln Tyr His Arg Leu Leu Ser Ala Ala Gly Leu Ser
                           200
         195
  Thr Ser Trp Thr Arg Thr Met Gln Lys Arg Arg Ile Ser Gly Lys Ile
                     215
                                          220
  Glu Ser Ser Arg Arg Leu Trp Gly Lys
                     230
  <210> 10029
  <211> 201
  <212> PRT
  <213> Enterobacter cloacae
  <400> 10029
  Leu Tyr Val Val Leu His Pro Leu Thr His Val Cys Ser Leu Asn Arg
                                    10
  Arg Leu Ser Leu Val Glu Ser Arg His Glu Arg Phe Trp Glu Gln Val
  Met Arg Lys Val Thr Ala Ala Val Met Ala Ser Thr Leu Ala Phe Ser
         35
                            40
  Ala Phe Ser Gln Ala Ala Val Ala Ile Ile Ser Asp Asn Gly Ser Ser
                        55
  Ala Glu Gly Ala Thr Gln His Ser Ser Gln Ser His Met Phe Asp Gly
                     7.0
                                       7.5
  Ile Ser Leu Thr Glu His Gln Arg Gln Gln Met Arg Asp Leu Met Gln
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90 Arg Ala Arg His Asp Gln Pro Pro Val Asn Val Ser Glu Met Glu Thr

100 105 Met His Arg Leu Val Thr Ala Glu Asn Phe Asp Glu Ser Ala Val Arg 115 120 125 Ala Gln Ala Glu Asn Leu Ala Gln Glu Gln Val Ala Arg Gln Val Lys 130 135 140 Met Ala Lys Val Arg Asn Gln Met Phe His Leu Leu Thr Pro Glu Gln 150 155 Gln Ala Val Leu Asn Thr Lys His Gln Gln Arg Met Asn Gln Leu Arg 165 170 175 Glu Val Ala Arg Met Gln Arg Ser Ser Asp Met Thr Leu Phe Ser Ser 185 Asn Ser Ser Thr Arg Ser Asn Gln <210> 10030 <211> 303 <212> PRT <213> Enterobacter cloacae <400> 10030 Arg His Gly Met Thr Gly Val Phe Met Asn Gln Ser Tyr Gly Arg Leu 1.0 Val Ser Arg Ala Ala Ile Ala Ala Thr Val Met Ala Ser Cys Leu Leu 30 Ile Ile Lys Ile Phe Ala Trp Trp Tyr Thr Gly Ser Val Ser Ile Leu 35 40 45 Ala Ala Leu Val Asp Ser Leu Val Asp Ile Ala Ala Ser Leu Thr Asn 55 60 Leu Leu Val Val Arg Tyr Ser Leu Gln Pro Ala Asp Glu Glu His Thr 70 75 Phe Gly His Gly Lys Ala Glu Ser Leu Ala Ala Leu Ala Gln Ser Met 85 90 Phe Ile Ser Gly Ser Ala Leu Phe Leu Phe Leu Thr Gly Ile Gln His 100 105 110 Leu Val Ser Pro Ser Pro Met Asn Asp Pro Gly Val Gly Val Val Val 120 125 115 Thr Val Val Ala Leu Ile Ser Thr Leu Val Leu Val Thr Phe Gln Arg 135 140 Trp Val Val Arg Lys Thr Gln Ser Gln Ala Val Arg Ala Asp Met Leu 145 150 155 His Tyr Gln Ser Asp Val Met Met Asn Gly Ala Ile Leu Ile Ala Leu 165 170 175 Gly Leu Ala Trp Tyr Gly Trp His Arg Ala Asp Ala Leu Phe Ala Leu 180 185 190 Gly Ile Gly Ile Tyr Ile Leu Tyr Ser Ala Leu Arg Met Gly Tyr Asp 200 195 205 Ala Val Gln Ser Leu Leu Asp Arg Ala Leu Pro Asp Ala Glu Arg Asp 215 220 210 Glu Ile Tyr Ala Ile Val Thr Asn Trp Pro Gly Val Ser Gly Ala His 230 235 Asp Leu Arg Thr Arg Gln Ser Gly Pro Thr Arg Phe Ile Gln Ile His 245 250 Leu Glu Met Glu Asp Asn Leu Pro Leu Val Gln Ala His Met Val Ala 260 265 Glu Gln Val Glu Gln Ala Ile Leu Gln Arg Phe Pro Gly Ser Asp Val 280 Ile Ile His Gln Asp Pro Cys Ser Val Val Pro Arg Ala Phe

295

300

290 <210> 10031 <211> 94 <212> PRT <213> Enterobacter cloacae

<400> 10031 Lys Thr Val Thr Lys Gln His Lys Pro Lys Ser Glu Lys Pro Met Leu 10 Ser Pro Gln Ala Glu Leu Asp Leu Leu Glu Asn Asp Glu Arg Leu Asp 20 25 3.0 Ala Leu Leu Glu Arg Leu Glu Glu Gly Glu Thr Leu Thr Ala Glu Glu 45 4 0 Gln Ser Trp Val Asp Ala Lys Leu Asp Arg Ile Asp Glu Leu Met Gln 55 60 Lys Leu Gly Leu Ser Tyr Asp Asp Glu Asp Asp Glu Glu Glu Asp Glu 70 7.5

Lys Gln Glu Asp Met Met Arg Leu Leu Lys Gly Gly Asn

<210> 10032 <211> 316 <212> PRT

<213> Enterobacter cloacae

<400> 10032 Thr Phe Gly Glu Ile Lys Met Lys Ala Ser Glu Ile Ala Glu Gly Ile Thr Met Thr Arg Ile Val Cys Val Gly Ile Thr Val Leu Asp Arg Ile 20 3.0 Trp Tyr Leu Asp Asp Leu Pro Lys Glu Gly Gly Lys Tyr Val Ala Lys 35 40 4.5 Asp Tyr Thr Glu Val Gly Gly Gly Pro Ala Ala Thr Ala Ala Val Ala 50 55 Ala Ala Lys Leu Gly Ala Glu Val Asp Phe Ile Gly Arg Val Gly Asp 75 70 80 Asp Asp Thr Gly Arg Arg Leu Leu Ala Glu Leu Glu Ser Leu Gly Val 90 8.5 Asn Thr Arg Tyr Thr Arg Val Val Lys Gly Ala Arg Ser Ser Gln Ser 100 105 Ala Val Leu Val Asp Gly Ser Gly Glu Arg Val Ile Ala Asn Tyr Ser 120 115 125 Ser Pro Asp Leu Pro Ala Val Ala Asp Trp Leu Gln Glu Ile Asp Phe 130 135 140 Ser Gln Trp Asp Ile Val Leu Ala Asp Val Arg Trp His Asp Gly Ala 150 160 Lys Gln Ala Phe Thr Leu Ala Arg Gln Gln Gly Val Pro Thr Leu Leu 165 170 175 Asp Ala Asp Val Thr Pro Gln Asp Ile Ala Glu Leu Ile Ala Leu Ser 180 185 190 Asp His Ala Ala Phe Ser Ala Pro Gly Leu Arg Arg Leu Thr Gln Arg 195 205 Asp Asp Thr Glu Asp Ala Leu Lys Lys Ala Gln Thr Leu Thr Asn Gly 215 220 His Val Tyr Val Thr Gln Gly Arg Asp Gly Cys Phe Trp Leu Glu Asn 230 235 Gly Ala Leu Cys His Gln Pro Gly Phe Glu Val Asn Val Val Asp Thr 245 250 255 Thr Gly Ala Gly Asp Val Phe His Gly Ala Leu Ala Val Ser Leu Gly 260 265 Gln Lys Leu Pro Ala Ala Asp Ala Val Arg Phe Ala Ser Ala Val Ala 280 Ala Leu Lys Cys Thr Lys Pro Gly Gly Arg Ala Gly Ile Pro Asp Cys 295

Asp Gln Thr Arg Ser Phe Leu Ser Leu Phe Val 305 310 315

<210> 10033 <211> 154

<212> PRT <213> Enterobacter cloacae

<400> 10033

Lys Thr Thr Arg Ser Arg Pro Thr Met Ile Ala Leu Ile Gln Arg Val 1.0 Thr Arg Ala Ser Val Thr Val Ala Asp Glu Val Thr Gly Glu Ile Gly 20 25 Pro Gly Leu Leu Val Leu Leu Gly Val Glu Lys Asp Asp Glu Gln 40 Lys Ala Asn Arg Leu Cys Glu Arg Val Leu Gly Tyr Arg Ile Phe Ser 55 Asp Ala Glu Gly Lys Met Asn Leu Asn Val Gln Gln Ala Gly Gly Ser 7.0 75 Val Leu Val Val Ser Gln Phe Thr Leu Ala Ala Asp Thr Glu Arg Gly 85 90 Met Arg Pro Ser Phe Ser Lys Gly Ala Ala Pro Glu Arg Ala Glu Ala 100 105 110 Leu Tyr Glu Tyr Phe Val Glu Arg Cys Arg Gln Gln Asp Met Asn Thr 115 120 125

Gln Thr Gly Arg Phe Ala Ala Asp Met Gln Val Ser Leu Val Asn Asp 130 140

Gly Pro Val Thr Phe Trp Leu Gln Val 145

<210> 10034

<211> 354 <212> PRT

<213> Enterobacter cloacae

<400> 10034

Gly Ala Gly Ala Arg Tyr Ala Arg Ala Ala Gly Gly Gly Thr Lys Leu 10 Lys Lys Ile Arg Lys Ile Met Ser Leu Lys Ala Ile Ala Lys Glu Leu 25 Gly Leu Ser Val Thr Thr Val Ser Arg Ala Leu Asn Gly Tyr Asp Asp 35 40 Val Ser Ala Glu Thr Arg Ala Arg Val Glu Ala Glu Ala Gln Arg Arg 50 Gly Tyr Arg Pro Asn Thr Phe Ala Arg Arg Leu Lys Met Gly Lys Ile 7.0 75 Asp Ala Val Gly Leu Val Phe Pro Val His Pro Val Pro Leu Asn Asn 85 90 Ser Val Phe Met Asp Met Val Gly Glu Ile Ser His Glu Leu Ala Arg 100 105 His Glu Ile Asp Leu Leu Ile Ala Asp Asp Asp Leu Ala Asp Lys 120 125 His Ser Tyr Met Arg Met Val Gln Ser Arg Arg Val Asp Ala Leu Ile 135 140 Val Ala His Thr Leu Asp His Asp Pro Arg Leu Glu Gln Leu Gln Ala 150 155 Ala Gly Phe Pro Phe Leu Ala Leu Gly Arg Ser Gln Leu Pro Gln Pro 165 170 Tyr Ala Trp Phe Asp Phe Asp Asn Tyr Ala Gly Thr Tyr Gln Ala Thr 185 Arg Trp Leu Ile Glu Lys Gly His Gln Arg Ile Ala Leu Leu Gly Glu

200 Ser Asn Asn Gln Ala Phe Ile Thr Gln Arg Arg Gln Gly Tyr Leu Asp 215 Ala Leu Arg Glu Ala Gly Leu Ser Ser Glu Trp Leu Arg Ala Met Pro 230 235 Pro Ser Arg Arg Val Gly Tyr Ala Thr Thr Gln Glu Leu Leu Ser Leu 245 250 Pro Gln Pro Pro Thr Ala Ile Ile Thr Asp Cys Asn Thr His Gly Asp 265 270 260 Gly Ala Ala Met Ala Leu Ala Gln Met Gly Arg Leu Thr Gly Glu Asn 285 275 280 Ala Val Ser Leu Val Val Tyr Asp Gly Leu Pro Gln Asp Ser Ile Val 295 300 Asp Ile Asp Val Ala Ala Val Ile Gln Ser Thr Arg Gln Gly Val Gly 310 315 Lys Gln Ile Ala Asp Met Val Arg Gln Leu Ile Asn Gly Asp Asp Ile 325 330 335 Asp Thr Leu Gln Val Leu Trp Gln Pro Glu Phe Ser Pro Gly Gln Thr 345 Ala

<210> 10035 <211> 743 <212> PRT

<213> Enterobacter cloacae

<400> 10035 Ser His Glu Lys Phe Gln Thr Arg Ser Gln Ile Arg Asn Val Leu Val 1.0 Cys Ile Arg Asn Val Ser Asp Gln Asn Ser Gly His Pro Asp Asp Arg 25 2.0 Arg Cys Pro Met Gln Asp Ala Ile Phe Arg Leu Glu Ser Asn Thr Val 35 4.0 45 Asp Val Val Leu Lys Thr His Pro Phe Ala Glu Ile Leu Tyr Trp Gly 55 60 Pro His Leu Gln His Phe Ser Pro Gln Asp Val Leu Ser Ile Ala Arg 7.0 75 Pro Val Ala Asn Gly Arg Leu Asp Val Asp Ser Pro Val Thr Leu Met 90 8.5 Ala Glu Leu Gly His Gly Leu Phe Gly Ser Pro Gly Ile Glu Gly His 100 105 110 Arg Gln Gly Leu Asp Gly Ser Pro Val Phe Lys Thr Thr Gln Val Gln 115 120 125 Gln Ala Leu Asn Ala Leu Thr Ile Thr Ala Glu Asp Glu His Ala Gly 140 135 Leu Arg Leu Thr Ser Glu Ile Thr Leu Asp Ala Ser Gly Val Leu Val 150 155 Val Arg His Gly Leu Thr Asn Leu Lys Thr Leu Ala Trp Gln Val Asp 170 165 Arg Phe Ala Val Thr Leu Pro Val Ala Glu Arg Ala Gln Glu Val Met 185 190 Ala Phe His Gly Arg Trp Ile Arg Glu Phe Gln Pro His Arg Val Thr 195 Leu Glu His Asp Ser Phe Val Ile Glu Asn Arg Arg Gly Lys Thr Ser 220 215 His Glu His Phe Pro Ala Leu Ile Ser Gly Thr Pro Ser Phe Ser Glu 230 235 Met His Gly His Val Trp Gly Val His Leu Gly Trp Ser Gly Asn His 250 245 Arg Leu Arg Ala Glu Ala Lys Thr Asp Gly Arg Arg Tyr Met Gln Ala

260 265 Glu Ala Leu Tyr Leu Pro Gly Glu Met Ala Ile Glu Glu Gly Glu Thr 275 280 285 Leu Trp Thr Pro Arg Leu Tyr Ala Ser His Ser Pro His Gly Leu Asn 290 295 300 Gly Met Ser Gln Gln Phe His Arg Tyr Leu Arg Asp Asn Val Ile Arg 305 310 315 Phe Pro Glu Asp Lys Pro Arg Pro Val His Leu Asn Thr Trp Glu Gly 325 330 335 Ile Tyr Phe Asp His Asp Pro Asp Tyr Ile Met Arg Met Ala Asp Glu 340 345 350 Ala Ala Ala Leu Gly Val Glu Arg Phe Ile Ile Asp Asp Gly Trp Phe 355 360 365 Lys Gly Arg Asn Asp Asp His Ala Ala Leu Gly Asp Trp Tyr Leu Asp 370 375 380 Glu Lys Lys Tyr Pro Asn Gly Leu Lys Pro Val Ile Asp His Val Lys 385 390 395 Gin Leu Gly Met Glu Phe Gly Ile Trp Val Glu Pro Glu Met Ile Asn 405 410 415 Pro Asp Ser Asp Leu Tyr Arg Ala His Pro Asp Trp Val Leu Ala Leu 420 425 Pro Gly Tyr Ala Gln Ala Thr Gly Arg His Gln Leu Val Leu Asn Leu 435 440 445 Asn Ile Pro Gln Ala Phe Asp Tyr Leu Val Glu Arg Met Ser Trp Leu 460 455 Leu Gly Glu His Ala Val Asp Tyr Val Lys Trp Asp Met Asn Arg Glu 465 470 475 480 Leu Val Gln Pro Gly His Lys Gly Lys Ala Ala Ala Asp Ala Gln Thr 485 490 Arg Gln Phe Tyr Arg Leu Leu Asp Val Leu Gly Glu Arg Phe Pro His 500 505 Ile Glu Phe Glu Ser Cys Ser Ser Gly Gly Gly Arg Ile Asp Tyr Glu 515 520 525 Val Leu Thr Arg Cys His Arg Phe Trp Ala Ser Asp Asn Asn Asp Ala 535 530 540 Leu Glu Arg Asn Thr Ile Gln Arg Gly Met Ser Tyr Phe Phe Pro Pro 555 545 550 Glu Val Met Gly Ala His Ile Gly His His Lys Cys His Ala Thr Phe 565 570 Arg Gln His Ser Ile Gln Phe Arg Gly Leu Thr Ala Leu Phe Gly His 585 590 580 Met Gly Leu Glu Leu Asp Pro Leu Thr Val Asp Ala Gln Glu Arg Glu 595 600 605 Gly Tyr Arg His Tyr Ala Ala Leu Tyr Lys Arg Trp Arg Gly Val Ile 615 610 620 His His Gly Thr Gln Trp Arg Val Asp Met Pro Asp Ala Thr Thr Leu 630 635 Ala Gln Gly Ile Val Ser Glu Asp Lys Thr Gln Gly Leu Phe Leu Val 645 650 Ser Gln Leu Ala Met Pro Asp Tyr Thr Leu Met Met Pro Leu Arg Met 665 670 660 Pro Gly Leu Asp Ala Ser Ala Gln Tyr Arg Ile Thr Leu Leu Asp His 680 685 Pro Asn Ile Gln Ile Thr Gly Glu Gly Gly His Thr Met Arg Lys Leu 695 Pro Ala Trp Met Asp Ala Pro Gln Thr Val Ser Gly Glu Trp Leu Met 710 715 Gln Ala Gly Ile Ala Leu Pro Ile Leu Asp Pro Glu Thr Thr Ile Leu 725 730 735 Ile Gly Val Glu Arg Val 740

<400> 10037

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<210> 10036
<211> 365
<212> PRT
<213> Enterobacter cloacae
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Ile Thr Thr Ile Trp Pro Asp Leu Asn Gln Phe Ser Trp Lys Gly Leu
                              10
Ile Tyr Tyr Leu Gln Tyr Ser Thr Val Glu Gln Phe Leu Pro Ala Ala
          20
                   25
Asp Phe Asn Phe Ala Phe Leu Ser Ser Glu Val Val Met Ile Lys Lys
                       40
                                   4.5
Ile Gly Val Leu Thr Ser Gly Gly Asp Ala Pro Gly Met Asn Ala Ala
                    55
Ile Arg Gly Val Val Arg Ala Ala Leu Thr Glu Gly Leu Glu Val Phe
              70
                      75
Gly Ile Tyr Asp Gly Tyr Leu Gly Leu Tyr Glu Asp Arg Met Val Gln
             85
                            90
Leu Asp Arg Tyr Ser Val Ser Asp Met Ile Asn Arg Gly Gly Thr Phe
         100
                           105
                                             110
Leu Gly Ser Ala Arg Phe Pro Glu Phe Arg Asp Glu His Ile Arg Glu
      115
                        120 125
Val Ala Ile Glu Asn Met Lys Lys Arg Gly Leu Asp Ala Leu Val Val
 130 135
                                      140
Ile Gly Gly Asp Gly Ser Tyr Met Gly Ala Lys Arg Leu Thr Glu Met
145
                 150
                                  155
Gly Phe Pro Cys Ile Gly Leu Pro Gly Thr Ile Asp Asn Asp Ile Lys
                               170
             165
Gly Thr Asp Tyr Thr Ile Gly Tyr Phe Thr Ala Leu Gly Thr Val Val
                           185
                                              190
          180
Glu Ala Ile Asp Arg Leu Arg Asp Thr Ser Ser Ser His Gln Arg Ile
                        200 205
      195
Ser Ile Val Glu Val Met Gly Arg Tyr Cys Gly Asp Leu Thr Leu Ala
                                       220
   210
                     215
Ala Ala Ile Ala Gly Gly Cys Glu Phe Val Val Val Pro Glu Val Glu
225
                 230
                                   235
Phe Ser Arg Glu Asp Leu Val Ala Glu Ile Lys Ala Gly Ile Ala Lys
             245
                               250
Gly Lys Lys His Ala Ile Val Ala Ile Thr Glu His Ile Cys Asp Val
                                            270
          260
                            265
Asp Glu Leu Ala Lys Tyr Ile Glu Thr Glu Thr Lys Arg Glu Thr Arg
       275
                        280
Ala Thr Val Leu Gly His Ile Gln Arg Gly Gly Ser Pro Gly Pro Tyr
                     295
                                       300
   290
Asp Arg Ile Leu Ala Ser Arg Met Gly Ala Tyr Ala Ile Glu Leu Leu
305
                 310
                                  315
Leu Gln Gly His Gly Gly Arg Cys Val Gly Ile Gln Asn Glu Lys Leu
                               330
              325
Val His His Asp Ile Ile Asp Ala Ile Glu Asn Met Lys Arg Pro Phe
                                             350
          340
                            345
Lys Gly Asp Trp Leu Asp Cys Ala Lys Lys Leu Tyr
                        360
<210> 10037
<211> 350
<212> PRT
<213> Enterobacter cloacae
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Ser Ser Val Ser Phe Leu Ala Arg Cys Ile His Gln Asn Thr Thr Gln

10 Glu Ser Trp Ala Met Asn Lys Trp Gly Val Gly Leu Thr Leu Leu Leu 20 25 Ala Ser Thr Ser Val Leu Ala Lys Asp Ile Gln Leu Leu Asn Val Ser 40 Tyr Asp Pro Thr Arg Glu Leu Tyr Asp Gln Tyr Asn Lys Ala Phe Ala 55 60 Ala His Trp Lys Gln Glu Thr Gly Asp Asn Val Val Val Arg Gln Ser 75 70 His Gly Gly Ser Gly Lys Gln Ala Thr Ser Val Ile Asn Gly Ile Glu 85 90 95 Ala Asp Val Val Thr Leu Ala Leu Ala Tyr Asp Val Asp Ala Ile Ala 105 Glu Arg Gly Arg Ile Asp Lys Asn Trp Ile Lys Arg Leu Pro Asp Asn 115 Ser Ala Pro Tyr Thr Ser Thr Ile Val Phe Leu Val Arg Lys Gly Asn 135 140 Pro Lys Gln Ile Lys Asp Trp Asn Asp Leu Ile Lys Pro Gly Val Ser 150 155 Val Ile Thr Pro Asn Pro Lys Ser Ser Gly Gly Ala Arg Trp Asn Tyr 165 170 Leu Ala Ala Trp Gly Tyr Ala Leu His His Asn Asn Gly Asp Gln Ala 180 185 Lys Ala Gln Asp Phe Val Lys Ala Leu Phe Lys Asn Val Glu Val Leu 200 205 195 Asp Ser Gly Ala Arg Gly Ala Thr Asn Thr Phe Val Glu Arg Gly Ile 215 Gly Asp Val Leu Ile Ala Trp Glu Asn Glu Ala Leu Leu Ala Thr Asn 230 235 225 Glu Leu Gly Lys Asp Lys Phe Glu Ile Val Thr Pro Ser Glu Ser Ile 250 245 Leu Ala Glu Pro Thr Val Ser Val Val Asp Lys Val Val Asp Lys Lys 265 270 260 Gly Thr Lys Ala Val Ala Glu Ala Tyr Leu Lys Tyr Leu Tyr Ser Pro 285 280 275 Glu Gly Gln Glu Ile Ala Ala Lys Asn Phe Tyr Arg Pro Arg Asp Glu 290 295 300 Ala Val Ala Lys Lys Tyr Glu Asn Ala Phe Pro Lys Leu Lys Leu Phe 315 310 Thr Ile Asp Asp Val Phe Gly Gly Trp Thr Lys Ala Gln Lys Glu His 330 Phe Ser Asn Gly Gly Thr Phe Asp Gln Ile Ser Lys Arg

<210> 10038 <211> 273 <212> PRT

<213> Enterobacter cloacae

340

<400> 10038
Glu Ile Arg Arg Val Phe Tyr Leu Val Ile Ile Leu Arg Tyr Ser Phe
1 1 5 10 15
Ala Ser Ile Glu Asn Arg Glu Arg Val Val Lys Lys Ile Ile Leu Leu
20 25 30
Ile Leu Ile Val Ile Ala Leu Ala Ala Gly Gly Val Tyr Trp Met Lys
30 45 46
Ala Gly Asn Pro Asn Ala Leu Arg His Ile Val Leu Asp Gln Cys Val
50 5 60
Pro Asn Gln Leu His Asn Arg Asn Pro Ala Pro Cys Ala Gln Val Lys
65 70 75 80
Pro Asp Ala Gly Tyr Val Val Phe Lys Asp Arg Asn Gly Pro Leu Gln

8.5 Tyr Leu Leu Met Pro Thr Tyr Arg Ile Asn Gly Thr Glu Ser Pro Leu 100 105 110 Leu Thr Glu Pro Gln Thr Pro Asn Phe Phe Trp Leu Ala Trp Gln Ser 115 120 125 Arg His Phe Met Ser Met Lys Arg Gly Ala Asp Val Pro Asp Ser Ala 130 135 140 Val Ser Leu Thr Ile Asn Ser Pro Thr Gly Arg Thr Gln Asn His Phe 145 150 155 160 His Ile His Ile Ser Cys Leu Arg Pro Asp Val Arg Glu Lys Leu Asn 165 170 175 Ala Ser Gln Gly Gln Ile Ser Thr Gln Trp Leu Pro Leu Pro Gly Gly 180 185 190 Leu Glu Gly His Glu Tyr Leu Ala Arg Arg Val Thr Glu Asn Glu Leu 195 200 205 Val Gln Arg Ser Pro Phe Met Met Leu Ala Glu Glu Leu Pro Glu Ala 210 215 220 Arg Asp His Met Gly Arg Phe Ala Leu Ala Met Ala Gln Gln Ser Asp 225 230 235 Gly Ser Phe Val Leu Leu Ala Thr Glu Arg Asn Leu Leu Thr Phe Asn 245 250 255 Arg Ala Ser Ala Glu Glu Leu Gln Asp His Gln Cys Asp Ile Leu Lys 265

<210> 10039 <211> 611 <212> PRT

<213> Enterobacter cloacae

<400> 10039 Gly Lys Val Val Ile Glu Lys Leu Arg Asn Ile Ala Ile Ile Ala His 1.0 Val Asp His Gly Lys Thr Thr Leu Val Asp Lys Leu Leu Gln Gln Ser 20 25 Gly Thr Phe Asp Ala Arg Ala Glu Thr Gln Glu Arg Val Met Asp Ser 40 Asn Asp Leu Glu Lys Glu Arg Gly Ile Thr Ile Leu Ala Lys Asn Thr 55 60 50 Ala Ile Lys Trp Asn Asp Tyr Arg Ile Asn Ile Val Asp Thr Pro Gly 75 70 His Ala Asp Phe Gly Gly Glu Val Glu Arg Val Met Ser Met Val Asp 85 90 Ser Val Leu Leu Val Val Asp Ala Phe Asp Gly Pro Met Pro Gln Thr 100 105 Arg Phe Val Thr Lys Lys Ala Phe Ala His Gly Leu Lys Pro Ile Val 115 120 Val Ile Asn Lys Val Asp Arg Pro Gly Ala Arg Pro Asp Trp Val Val 135 140 Asp Gln Val Phe Asp Leu Phe Val Asn Leu Asp Ala Thr Asp Glu Gln 155 150 Leu Asp Phe Pro Ile Val Tyr Ala Ser Ala Leu Asn Gly Ile Ala Gly 170 165 Leu Asp His Glu Asp Met Ala Glu Asp Met Thr Pro Leu Tyr Gln Thr 180 185 190 Ile Val Asp Arg Val Pro Ala Pro Asn Val Asp Leu Glu Gly Thr Leu 205 200 195 Gln Met Gln Ile Ser Gln Leu Asp Tyr Asn Asn Tyr Val Gly Val Ile 215 220 Gly Ile Gly Arg Ile Lys Arg Gly Lys Val Lys Pro Asn Gln Gln Val

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230
                            235
Thr Ile Ile Asp Ser Glu Gly Lys Thr Arg Asn Gly Lys Val Gly Lys
        245 250 255
Val Leu Thr His Leu Gly Leu Glu Arg Ile Glu Ser Asp Ile Ala Glu
      260 265 270
Ala Gly Asp Ile Ile Ala Ile Thr Gly Leu Gly Glu Leu Asn Ile Ser
    275 280 285
Asp Thr Ile Cys Asp Pro Gln Asn Val Glu Ala Leu Pro Ala Leu Ser
 290 295 300
Val Asp Glu Pro Thr Val Ser Met Phe Phe Asn Val Asn Thr Ser Pro
305 310 . 315
Phe Cys Gly Lys Glu Gly Lys Phe Val Thr Ser Arg Gln Ile Leu Asp
           325 330 335
Arg Leu Asn Lys Glu Leu Val His Asn Val Ala Leu Arg Val Glu Glu
                                     350
       340 345
Thr Glu Asp Ala Asp Ala Phe Arg Val Ser Gly Arg Gly Glu Leu His
     355 360 365
Leu Ser Val Leu Ile Glu Asn Met Arg Arg Glu Gly Phe Glu Met Ala
      375 380
 370
Val Ser Arg Pro Lys Val Ile Phe Arg Glu Ile Asp Gly Arg Lys Gln
              390 395
Glu Pro Phe Glu Asn Val Thr Leu Asp Val Glu Glu Gln His Gln Gly
               410 415
           405
Ser Val Met Gln Ala Leu Gly Glu Arg Lys Gly Asp Leu Lys Asn Met
        420 425 430
Asn Pro Asp Gly Lys Gly Arg Val Arg Leu Asp Tyr Val Ile Pro Ser
           440
                       445
435
Arg Gly Leu Ile Gly Phe Arg Ser Glu Phe Met Thr Met Thr Ser Gly
                 455 460
 450
Thr Gly Leu Leu Tyr Ser Thr Phe Ser His Tyr Asp Asp Val Arg Pro
             470 475 480
Gly Glu Val Gly Gln Arg Asn Asn Gly Val Leu Ile Ser Asn Gly Gln
                         490 495
           485
Gly Lys Ala Val Ala Phe Ala Leu Phe Gly Leu Gln Asp Arg Gly Lys
                    505 510
        500
Leu Phe Leu Gly His Gly Ala Glu Val Tyr Glu Gly Gln Ile Ile Gly
     515 520
Ile His Ser Arg Ser Asn Asp Leu Thr Val Asn Cys Leu Thr Gly Lys
      535 540
Lys Leu Thr Asn Met Arg Ala Ser Gly Thr Asp Glu Ala Thr Val Leu
              550 555 560
545
Val Pro Pro Ile Lys Met Thr Leu Glu Gln Ala Leu Glu Phe Ile Asp
           565 570
Asp Asp Glu Leu Val Glu Val Thr Pro Gln Ser Ile Arg Ile Arg Lys
        580
            585
Arg His Leu Thr Glu Asn Asp Arg Lys Arg Ala Met Arg Gly Ala Lys
                    600
Glu Asp
  610
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<210> 10040 <211> 304

<212> PRT <213> Enterobacter cloacae

<400> 10040

Asn Ala Gln Ser Pro Ala Gly Ala Arg Val Tyr Pro Thr Val Ile Lys 10 15 Pro Ala Leu Phe Cys His Phe Leu Tyr Lys Met Arg Gly Val Met Val 25 Phe Arg Gly Gln Pro Met Ser Leu Thr Glu Leu Thr Gly Asn Pro Arg His Asp Gln Leu Leu Thr Leu Ile Ala Asp Arg Gly Tyr Met Asn Ile 55 Asp Glu Leu Ala Gln Leu Leu Asp Val Ser Thr Gln Thr Val Arg Arg 70 75 Asp Ile Arg Lys Leu Ser Glu Gln Gly Leu Ile Thr Arg His His Gly 85 90 Gly Ala Gly Arg Ala Ser Ser Val Val Asn Thr Ala Phe Glu Gln Arg 100 105 110 Glu Val Ser Leu Thr Glu Glu Lys Arg Ala Ile Ala Glu Ala Ile Ala 115 120 125 Asp Tyr Ile Pro Asp Gly Ser Thr Ile Phe Ile Thr Ile Gly Thr Thr 130 135 140 Val Glu His Val Ala Arg Ala Leu Leu Asn His Asn His Leu Arg Ile 150 155 Ile Thr Asn Ser Leu Arg Val Ala His Ile Leu Tyr Lys Asn Pro Arg 165 170 175 Phe Glu Val Met Val Pro Gly Gly Thr Leu Arg Pro His Asn Gly Gly 180 185 Ile Ile Gly Pro Ala Ala Thr Ala Phe Val Ser Gly Phe Arg Ala Asp 200 205 195 Tyr Leu Val Thr Ser Val Gly Ala Ile Glu His Asp Gly Ala Met Met 210 215 Glu Phe Asp Val Asn Glu Ala Ser Val Val Lys Thr Met Ile Ala His 235 230 Ser Arg His Ile Leu Leu Ala Ala Asp His Thr Lys Tyr His Ala Ser 245 250 Ala Ala Val Glu Ile Gly Asn Val Ala Gln Ala Thr Ala Leu Phe Thr 265 260 Asp Glu Leu Pro Gly Pro Ala Leu Gln Asn His Leu Lys Ser Ser Lys 280 275 Val Glu Val Val Glu Val Asn Ser Gly Glu Glu Gln Gln Ala Gly 295 290

<210> 10041

<211> 317 <212> PRT

<213> Enterobacter cloacae

<400> 10041 Ser Val Arg Tyr His Leu His Ser Gly Asp Arg Lys Arg Asp Asp Thr 10 Glu Leu Leu Cys Glu Ala Val Met Leu Lys Thr Val His Gln Lys Ala 25 Asn His His Thr Arg Pro Leu Arg Ala Trp Leu Lys Leu Leu Trp His 35 40 Arg Ile Asp Glu Asp Asn Met Thr Thr Leu Ala Gly Asn Leu Ala Tyr 55 60 Val Ser Leu Leu Ser Leu Val Pro Leu Val Ala Val Ile Phe Ala Leu 75 70 Phe Ser Ala Phe Pro Met Phe Ala Asp Val Ser Met Gln Leu Arg His 90 85 Phe Val Phe Ala Asn Phe Ile Pro Ala Thr Gly Asp Val Ile Gln Asn 100 105 110 Tyr Ile Glu Gln Phe Val Ala Asn Ser Ser Lys Met Thr Ala Val Gly 115 120 125 Ala Cys Gly Leu Ile Val Thr Ala Leu Leu Leu Met Tyr Ser Ile Asp 135 140 130 Ser Ala Leu Asn Thr Ile Trp Arg Ser Lys Lys Val Arg Pro Lys Val 150 155

Tyr Ser Phe Ala Val Tyr Trp Met Ile Leu Thr Leu Gly Pro Leu Leu

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170
Ala Gly Ala Ser Leu Ala Ile Ser Ser Tyr Leu Leu Ser Leu Arg Trp
          180
                           185
                                    190
Ala Thr Asp Leu Asn Ser Val Ile Asp Asn Val Leu Arg Ile Phe Pro
      195
            200 205
Leu Ile Leu Ser Trp Leu Ser Phe Trp Leu Leu Tyr Ser Val Val Pro
       215 220
Thr Thr Arg Val Pro Asn Arg Asp Ala Val Val Gly Ala Leu Val Ala
    230 235
Ala Leu Leu Phe Glu Leu Gly Lys Lys Gly Phe Ala Leu Tyr Ile Thr
        245 250 255
Met Phe Pro Ser Tyr Gln Leu Ile Tyr Gly Val Leu Ala Val Ile Pro 260 \hspace{1cm} 265 \hspace{1cm} 270 \hspace{1cm}
Ile Leu Phe Val Trp Val Tyr Trp Thr Trp Cys Ile Val Leu Leu Gly
 275 280 285
Ala Glu Ile Thr Val Thr Leu Gly Val Tyr Arg Glu Leu Lys Lys Ala
 290 295 300
Ala Glu Ala Glu Lys Gln Gln Glu Ala Asp Gln Pro
<210> 10042
<211> 304
<212> PRT
<213> Enterobacter cloacae
<400> 10042
Ser Ile Leu Cys Val Arg Pro Ala Val Cys Val Ala Ile Ala Gly Ser
Leu Pro Trp Leu Phe Arg Asn Thr Val Val Ser Lys Gln Asn Arg Val
    20 25
Ala His Ala Ser Pro Leu Pro Ala Gly Ile Val Glu Leu Ser Val His
                     40
Arg Pro Pro His Ile Ser His Ala Thr Pro Asp Phe Leu Ala Glu Glu
                    55
                                      60
Val Pro Val Ala Leu Ile Tyr Asn Gly Ile Ser His Val Val Met Met
                                  75
               70
Ala Ser Pro Lys Asp Leu Glu Leu Phe Ala Ile Gly Phe Ser Leu Ser
             85
                              90
Glu Gly Ile Ile Ala His Pro Gln Glu Ile Tyr Gly Met Asp Val Val
                                110
          100
                           105
His Ala Cys Asn Gly Leu Glu Val Gln Ile Glu Leu Ser Ser Arg Arg
                        120
                                         125
Phe Met Gly Leu Lys Glu Arg Arg Arg Ala Leu Ala Gly Arg Thr Gly
                    135
                                     140
Cys Gly Val Cys Gly Val Glu Gln Leu Asn Asp Ile Gly Lys Pro Ile
145 150 155
Ile Pro Leu Pro Phe Thr Gln Thr Phe Asn Leu Ala His Leu Asp Arg
             165
                              170
Ala Leu Glu His Leu Asn Asp Val Gln Pro Ile Gly Gln Leu Ser Gly
          180
                           185
                                            190
Cys Thr His Ala Ala Ala Trp Ile Leu Pro Ser Gly Asn Ile Ala Gly
                       200
                                         205
Gly His Glu Asp Val Gly Arg His Val Ala Leu Asp Lys Leu Leu Gly
                    215
                                      220
Arg Arg Ala Arg Glu Ser Asn Val Trp Gln Gln Gly Ala Ala Leu Val
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230

245

Ser Ser Arg Ala Ser Tyr Glu Met Val Gln Lys Ser Ala Met Cys Gly

Val Glu Ile Leu Phe Ala Val Ser Ala Ala Thr Thr Leu Ala Val Glu 260 Val Ala Glu Arg Cys Asn Leu Thr Leu Val Gly Phe Cys Lys Pro Gly

235

5545 280 Arg Ala Thr Ile Tyr Thr His Pro Gln Arg Leu Ile Val Asp Gln 295 290 300 <210> 10043 <211> 93 <212> PRT <213> Enterobacter cloacae <400> 10043 Glv Leu Ile Phe Ile Ser Ser Arg His Glv Ala Leu Ser Lvs Gln Leu 10 Asn Glu Arg Val Tyr Leu Met Lys Ser Ile Lys Thr Phe Val Ala Val 20 25 Ile Ala Leu Ala Thr Ser Phe Gly Ser Phe Ala Ala Gln Thr Val Thr 4.0 Ala Ser Ala Ser Thr Leu Asp Gly Ala Glu Ala Lys Ile Ala Ala Gln 55 60 Ala Gln Glu Ala Gly Ala Ser Ser Tyr Lys Ile Thr Gln Ala Phe Thr 70 7.5 Gly Asn Arg Val His Met Thr Ala Glu Leu Asn Lys 85 <210> 10044 <211> 214 <212> PRT <213> Enterobacter cloacae <400> 10044 Pro Tyr Arg Thr Tyr Phe His Tyr Asn Glu Arg Ile Arg Asn Val Leu 10 Gln Asp Glu Arg Phe Val Arg Tyr Arg Glu Lys Glu Ala Val Ile Met 25 20 3.0 Thr Gln Pro Ile Ser Val Ile Ala Lys Ser Leu Val Arg Glu Arg Leu 35 4.0 Arg Thr Gly Leu Ser Leu Ala Glu Ile Ala Arg Arg Ala Gly Ile Ala 55 Lys Ser Thr Leu Ser Gln Leu Glu Ser Gly Asn Gly Asn Pro Ser Leu 65 70 75 Glu Thr Leu Trp Ser Leu Cys Val Ala Leu Asp Ile Pro Phe Ala Arg 90 8.5 Leu Leu Glu Pro Gln Gln Pro Val Thr Gln Val Ile Arg Arg Gly Glu 100 105 110 Gly Thr Lys Val Val Ala Gly Gln Ala Asn Tyr Glu Ala Ile Leu Leu 115 120 125 Ala Ala Cys Pro Pro Gly Ala Arg Arg Asp Ile Tyr Leu Leu Leu Thr 130 135 140 Gln Pro Gly Ala Asp Arg Ile Ser Gln Pro His Pro Pro Gly Ser Val 145 150 155 160 Glu His Ile Ile Val Thr Gln Gly Arg Ala Met Val Gly Leu Ile Asp 165 170 175 Ala Ala Glu Glu Leu Gly Pro Gly Asp Tyr Ile Cys Tyr Pro Ala Asp 180 185 Gln Pro His Ile Phe Lys Ala Leu Glu Pro Asp Thr His Ala Leu Leu 200 205 Val Ala Glu Gln Asn 210

<210> 10045 <211> 288

<212> PRT

<213> Enterobacter cloacae

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<400> 10045
Glu Leu Phe Ser Leu Val Gly Ala Val Met Thr Val Leu His Ser Val
                             10
Asp Phe Phe Pro Thr Gly Ala Ser Pro Val Ala Ile Glu Pro Arg Leu
       20
                         25
                                         30
Pro Gln Ala Ala Phe Pro Glu His His His Asp Phe His Glu Ile Val
                    40
                               4.5
Ile Val Glu His Gly Thr Gly Ile His Val Phe Asn Gly Gln Pro Tyr
                 55
Thr Ile Ser Gly Gly Thr Val Cys Phe Val Arg Asp His Asp Arg His
          70
                                7.5
Leu Tyr Glu His Thr Asp Asn Leu Cys Leu Thr Asn Val Leu Tyr Arg
          85
                 90
Ser Pro Asp Ala Phe Gln Phe Leu Ser Gly Leu Asn Gln Leu Leu Pro
        100 105
                              110
Gln Glu Lys Asp Gly His Tyr Pro Ser His Trp Arg Val Asn Gln Ser
    115
                    120 125
Thr Leu Gln Gln Val Arg Gln Leu Val Ser Gln Met Glu Gln Ser Glu
                  135
                                140
Asp Gly Gln Glu Thr His Ala Ile Ala Thr Arg Glu Leu Leu Phe Met
     150 155
Gln Leu Leu Val Leu Leu Arg Arg Ser Ser Leu Val Glu Gly Leu Glu
            165 170
Asn Asn Asp Ala Arg Leu Asn Gln Leu Met Ala Trp Leu Glu Asp His
        180
                         185
                               190
Phe Ala Glu Asp Val Cys Trp Glu Thr Leu Ala Asp Asp Phe Ser Leu
                      200
                                       205
Ser Leu Arg Thr Leu His Arg Gln Leu Lys Gln His Thr Gly Leu Thr
                   215
                                   220
Pro Gln Arg Tyr Leu Asn Arg Leu Arg Leu Ile Lys Ala Arg His Leu
             230
                               235
Leu Arg His Thr Asp Glu Ser Val Thr Asp Ile Ala Tyr Arg Cys Gly
            245 250
Phe Gly Asp Ser Asn His Phe Ser Thr Leu Phe Arg Arg Glu Phe Ser
        260 265
Trp Ser Pro Arg Asp Ile Arg Gln Gly Lys Asp Ala Leu Leu Gln
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<210> 10046 <211> 442 <212> PRT <213> Enterobacter cloacae

<400> 10046 Lys Ile Leu Gln Glu Thr Gly Met Ser Leu Trp Leu Thr His Pro Leu 10 Leu Leu Pro Ser Leu Ile Val Gly Val Thr Ile Val Leu Trp Ala Thr 20 25 Ser Leu Leu Pro Glu Phe Ile Thr Ala Leu Leu Phe Phe Thr Ala Ala 35 4.5 Met Ala Ala Arg Ile Ala Pro Pro Glu Val Ile Phe Gly Gly Phe Ala 55 Ser Ser Ala Phe Trp Leu Val Phe Ser Gly Phe Val Leu Gly Val Ala 70 75 Ile Arg Lys Thr Gly Leu Ala Asp Arg Ala Ala Arg Ala Leu Ser Ala 85 90 Lys Leu Thr Asp Ser Trp Val Leu Met Val Ala Ser Val Val Leu Leu 100 105 110 Ser Tyr Ala Leu Ala Phe Val Met Pro Ser Asn Met Gly Arg Ile Ala

```
120
Leu Leu Met Pro Ile Val Ala Ala Met Ala Lys Arg Ala Gly Ile Pro
  130
         135
                       140
Asp Gly Ser Arg Ala Trp Phe Gly Leu Ala Leu Ala Val Gly Phe Gly
         150
                  155
Thr Phe Gln Leu Ser Ala Thr Ile Leu Pro Ala Asn Val Pro Asn Leu
      165
               170 175
Val Met Ser Gly Ala Ala Glu Gly Ser Tyr Gly Ile His Leu Asn Tyr
      180 185 190
Val Pro Tyr Leu Leu His Thr Pro Val Leu Gly Ile Leu Lys Gly
     195 200 205
Leu Ile Leu Ile Gly Leu Ile Cys Trp Leu Phe Pro Gly Asn Pro Lys 210 215
Pro Ala Lys Asp Leu Ala Pro Ser Glu Pro Met Gly Arg Asp Glu Lys
225 230 235 240
Arg Leu Ala Trp Leu Leu Ala Val Val Leu Thr Met Trp Val Thr Glu
          245 250 255
Ser Trp His Gly Val Gly Pro Ala Trp Thr Gly Leu Ala Ala Ser Val
      260 265 270
Val Val Met Leu Pro Arg Ile Gly Phe Ile Thr Gly Glu Glu Phe Ser
275 280
                                  285
Ala Gly Val Asn Met Arg Thr Cys Ile Tyr Val Ala Gly Ile Leu Gly
290 295
                            300
Leu Ala Ile Thr Val Thr Gln Thr Gly Ile Gly Ala Ala Val Gly Glu
305 310 315
Thr Leu Leu His Ile Met Pro Leu Asp Ala Asp Arg Pro Phe Thr Ser
          325 330
Phe Leu Ala Leu Thr Gly Ile Thr Thr Ala Leu Asn Phe Ile Met Thr
        340 345
                          350
Ala Asn Gly Val Pro Ala Leu Tyr Thr Thr Leu Ala Gln Ser Phe Ser
355 360
                       365
Asp Ala Thr Gly Phe Pro Leu Leu Ser Val Ile Met Ile Gln Val Leu
370 375
                               380
Gly Tyr Ser Thr Pro Leu Leu Pro Tyr Gln Ala Ser Pro Ile Val Val
     390
                           395
Ala Met Gly Leu Gly Lys Val Pro Ala Lys Ala Gly Met Leu Leu Cys
         405 410
Leu Ala Leu Ala Ile Ala Thr Tyr Leu Val Leu Leu Pro Leu Asp Tyr
            425
      420
Leu Trp Phe Ser Val Leu Gly Arg Leu
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<210> 10047 <211> 167 <212> PRT <213> Enterobacter cloacae

<400> 10047

Leu Lys Arg Tyr Leu Val Gly Leu Ser Lys Gly His Asn Ser Arg Val Lys Cys Gly Leu Asn Asn Asn Lys Glu Pro Tyr Met Thr Ile Gln Gln 20 25 Trp Leu Phe Ser Phe Lys Gly Arg Ile Gly Arg Arg Asp Phe Trp Ile 40 4.5 Trp Ile Ala Thr Trp Val Val Ala Met Leu Leu Leu Phe Phe Val Ala 50 55 Tyr Asn Ala Trp Leu Ser Thr Gln Thr Ala Ala Phe Ala Leu Val Cys 65 70 75 Leu Leu Trp Pro Thr Ala Ala Val Val Val Lys Arg Leu His Asp Arg 90 Gly Arg Ser Gly Ala Trp Ala Phe Leu Ile Ile Leu Ala Trp Met Leu

100 105 110 Val Ala Gly Asn Trp Ser Leu Leu Pro Ser Ile Leu Pro Trp Val Val 115 120 125 Gly Arg Leu Leu Pro Thr Val Ile Phe Val Met Met Val Val Glu Leu 130 135 140 Gly Ala Phe Ile Gly Thr Gln Ser Glu Asn Lys Tyr Gly Lys Asp Thr 150 155 Leu Glu Val Lys Tyr Arg

<210> 10048 <211> 91 <212> PRT

<213> Enterobacter cloacae

<400> 10048

Ser Val Ala Leu Gln Phe Arg Arg Gly Arg Ile Met Ser Leu Glu Val 10 Phe Glu Lys Leu Glu Ser Lys Val Gln Gln Ala Ile Asp Thr Ile Thr 25 30

Leu Leu Gln Met Glu Ile Glu Glu Leu Lys Glu Lys Asn Asn Ser Leu 40

Ser Gln Glu Val Gln Asn Ala Gln His Ser Arg Glu Glu Met Glu Arg 55 60 Glu Asn Asn Gln Leu Arg Glu Gln His Asn Gly Trp Gln Glu Arg Leu 70 75

Gln Ala Leu Leu Gly Arg Met Glu Lys Val

8.5

<210> 10049 <211> 1073 <212> PRT

<213> Enterobacter cloacae

195

<400> 10049 Cys Lys Asn Arg Cys His Asp Arg Gln Arg Arg Pro Gln Leu Ile Pro 10 Tyr Leu Arg Ile Gln Ser Met Asp Phe Ser Arg Phe Phe Ile Asp Arg 25 Pro Ile Phe Ala Ala Val Leu Ser Ile Leu Ile Phe Ile Thr Gly Leu 35 40 Ile Ala Ile Pro Leu Leu Pro Val Ser Glu Tyr Pro Asp Val Val Pro 55 Pro Ser Val Gln Val Arg Ala Glu Tyr Pro Gly Ala Asn Pro Lys Val 70 75 Ile Ala Glu Thr Val Ala Thr Pro Leu Glu Glu Ala Ile Asn Gly Val 85 Glu Asn Met Met Tyr Met Lys Ser Val Ala Gly Ser Asp Gly Val Leu 100 105 Val Thr Thr Val Thr Phe Arg Pro Gly Thr Asp Pro Asp Gln Ala Gln 120 125 Val Gln Val Gln Asn Arg Val Ala Gln Ala Glu Ala Arg Leu Pro Glu 135 140 Asp Val Arg Arg Leu Gly Ile Thr Thr Gln Lys Gln Ser Pro Thr Leu 145 150 155 Thr Leu Val Val His Leu Phe Ser Pro Gly Gly Lys Tyr Asp Ser Leu 165 170 Tyr Met Arg Asn Tyr Ala Thr Leu Lys Val Lys Asp Glu Leu Ala Arg 180 185 190

Leu Pro Gly Val Gly Gln Ile Gln Ile Phe Gly Ser Gly Glu Tyr Ala

Met Arg Val Trp Leu Asp Pro Asn Lys Val Ala Ala Arg Gly Leu Thr Ala Ser Asp Val Val Thr Ala Met Gln Glu Gln Asn Val Gln Val Ser Ala Gly Gln Leu Gly Ala Glu Pro Leu Pro Lys Glu Ser Asp Phe Leu 245 250 Ile Ser Ile Asn Ala Gln Gly Arg Leu His Thr Glu Glu Glu Phe Gly Asn Ile Val Leu Lys Thr Thr Gln Asp Gly Thr Val Val Arg Leu Arg Asp Val Ala Arg Ile Glu Met Gly Ser Gly Ser Tyr Ala Leu Arg Ser 290 295 300 Gln Leu Asn Asn Lys Asp Ala Val Gly Ile Gly Ile Phe Gln Ser Pro 305 310 315 320 Gly Ala Asn Ala Ile Asp Leu Ser Asn Ala Val Arg Ala Lys Met Asp Glu Leu Ser Thr Arg Phe Pro Ala Asp Met Lys Trp Ala Ala Pro Tyr Asp Pro Thr Val Phe Val Arg Asp Ser Ile Arg Ala Val Val Gln Thr Leu Leu Glu Ala Val Val Leu Val Val Leu Val Val Ile Leu Phe Leu Gln Thr Trp Arg Ala Ser Ile Ile Pro Leu Ile Ala Val Pro Val Ser Val Val Gly Thr Phe Ser Ile Leu Tyr Leu Leu Gly Phe Ser Leu Asn Thr Leu Ser Leu Phe Gly Leu Val Leu Ala Ile Gly Ile Val Val Asp Asp Ala Ile Val Val Val Glu Asn Val Glu Arg Asn Ile Glu Glu Gly 4.3.5 Leu Ala Pro Leu Ala Ala Ala His Gln Ala Met Arg Glu Val Ser Gly Pro Ile Ile Ala Ile Ala Leu Val Leu Cys Ala Val Phe Val Pro Met Ala Phe Leu Ser Gly Val Thr Gly Gln Phe Tyr Lys Gln Phe Ala Val Thr Ile Ala Ile Ser Thr Val Ile Ser Ala Ile Asn Ser Leu Thr Leu Ser Pro Ala Leu Ala Ala Leu Leu Leu Lys Pro His Gly Ala Pro Lys Asp Phe Pro Thr Arg Leu Ile Asp Arg Leu Phe Gly Trp Ile Phe Arg Pro Phe Asn Arg Phe Phe Leu Arg Ser Ser Asn Gly Tyr Gln Gly Leu Val Gly Lys Thr Leu Gly Arg Arg Gly Ala Val Phe Val Val Tyr Leu Leu Leu Cys Ala Ala Gly Val Met Phe Lys Ala Val Pro Gly Gly Phe Ile Pro Thr Gln Asp Lys Leu Tyr Leu Ile Gly Gly Val Lys Met Pro Glu Gly Ser Ser Leu Ala Arg Thr Asp Ala Val Ile Arg Lys Met Ser Glu Ile Gly Met Asn Thr Glu Gly Val Asp Tyr Ala Val Ala Phe Pro Gly Leu Asn Ala Leu Gln Phe Thr Asn Thr Pro Asn Thr Gly Thr Val Phe Phe Gly Leu Lys Pro Phe Asp Gln Arg Lys His Ser Ala Ala Glu Ile Asn Ala Glu Ile Asn Ala Lys Ile Ala Gln Ile Gln Gln Gly Phe Gly Phe Ser Ile Leu Pro Pro Pro Ile Leu Gly Leu Gly Gln Gly

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695
Ser Gly Tyr Ser Leu Tyr Ile Gln Asp Arg Ala Gly Leu Gly Tyr Gly
                    715
        710
Ala Leu Gln Asn Ala Val Asn Thr Met Ser Gly Ala Ile Met Gln Thr
           725
               730 735
Pro Gly Met His Phe Pro Ile Ser Thr Tyr Gln Ala Asn Val Pro Gln
   740 745 750
Leu Asp Val Gln Val Asp Arg Asp Lys Ala Lys Ala Gln Gly Val Ser
 755 760 765
Leu Thr Asp Leu Phe Gly Thr Leu Gln Thr Tyr Leu Gly Ser Ser Tyr
 770 775 780
Val Asn Asp Phe Asn Gln Phe Gly Arg Thr Trp Arg Val Met Ala Gln
785 790 795
Ala Asp Gly Gln Phe Arg Asp Ser Val Glu Asp Ile Ala Asn Leu Arg
        805 810
Thr Arg Asn Ser Gln Gly Glu Met Val Pro Ile Gly Ser Met Val Asn
      820 825 830
Ile Thr Thr Tyr Gly Pro Asp Pro Val Ile Arg Tyr Asn Gly Tyr
   835 840 845
Pro Ala Ala Asp Leu Ile Gly Asp Ala Asp Pro Arg Val Leu Ser Ser
 850 855 860
Ala Gln Ala Met Thr Gln Leu Asp Ala Met Ser Lys Gln Ile Leu Pro
865 870 875
Asn Gly Met Asn Ile Glu Trp Thr Asp Leu Ser Phe Gln Gln Ala Thr
         885
                         890
Gln Gly Asn Thr Ala Leu Ile Val Phe Pro Val Ala Val Leu Leu Ala
      900 905
                                     910
Phe Leu Val Leu Ala Ala Leu Tyr Glu Ser Trp Thr Leu Pro Leu Ala
                 920
                                  925
Val Ile Leu Ile Val Pro Met Thr Met Leu Ser Ala Leu Phe Gly Val
                935 940
Trp Leu Thr Gly Gly Asp Asn Asn Val Phe Val Gln Val Gly Leu Val
             950
                            955
Val Leu Met Gly Leu Ala Cys Lys Asn Ala Ile Leu Ile Val Glu Phe
          965 970 975
Ala Arg Glu Leu Glu Ile Gln Gly Lys Gly Ile Met Glu Ala Ala Leu
        980 985
                          990
Glu Ala Cys Arg Leu Arg Leu Arg Pro Ile Val Met Thr Ser Ile Ala
     995 1000
                                  1005
Phe Ile Ala Gly Thr Ile Pro Leu Ile Leu Gly His Gly Ala Gly Ala
 1010 1015 1020
Glu Val Arg Gly Val Thr Gly Ile Thr Val Phe Ser Gly Met Leu Gly
1025 1030 1035 1040
Val Thr Leu Phe Gly Leu Phe Leu Thr Pro Val Phe Tyr Val Thr Leu
          1045 1050
Arg Lys Phe Val Thr Arg Gly Lys Ala Glu Arg Glu Val Leu Pro Ala
        1060
                      1065
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<210> 10050
<211> 285
<212> PRT
<213> Enterobacter cloacae
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 $<\!400>10050$ Ile Gln Arg Ala Ser Leu Met Arg Asn Ile Thr Leu Arg His Ser Phe 1 5 10 15 Pro Arg Ser Arg Ile Gly Arg Ser Met Lys Ser Ile Leu Pro Gly Ala 20 25 30 Val Leu Ala Leu Leu Ala Thr Thr Ala Leu Ala Ala Asp Gln Arg Gln

4.0 Gly Asn Val Leu Thr Leu Gly Gly Gly Val Asp Val Ala Pro Arg Tyr 55 60 Ser Gly Ser Asp Lys Ser Arg Val Ser Ala Ala Gln Val Val Asp Tyr 75 70 Ala Met Ala Asn Gly Phe Phe Val Ser Thr Thr Arg Gly Ile Gly Tyr 85 90 Gly Asn Ser Phe Gly Asn Leu Asp Tyr Asn Ala Ala Leu Ser Tyr Arg 100 105 110 Ala Gly Arg Lys Asp Arg Asp Val Ser Ser Asp Ser Ile Ala Ser Gly 115 120 125 Ser Asp Asp Leu Arg Gly Met Gly Asp Ile Lys Gly Ser Ala Ile Val 130 135 140 Val Pro Gly Leu Gly Tyr Arg Val Thr Asp Trp Leu Thr Val Gln Leu 150 155 Gln Ala Glu Val Pro Val Ser Glu Arg Asp Asn Gly Glu Ala Val His 165 170 Phe Gly Ile Ala Ser Pro Phe Tyr Thr Ser Pro Lys Asn Ala Leu Thr 180 185 190 Leu Ala Leu Thr Gly Ser Trp Gly Ser Ser Lys Tyr Val Gln Thr Tyr 200 Tyr Gly Val Asn Ala Ala Gln Ser Ala Ala Ser Gly Phe Ala Arg His 215 220 Asp Ala Gly Ser Gly Leu Tyr Ala Tyr Ser Leu Asn Leu Asp Trp Thr 225 230 235 His Lys Leu Thr Ser Arg Trp Ser Leu Leu Ala Ala Ala Gly Val Thr 245 250 Gln Leu Thr Gly Glu Ala Gly Asp Ser Pro Ile Val Gln Arg Lys Thr 260 265 Ser Pro Val Gly Ser Leu Lys Val Thr Tyr Ser Phe

<210> 10051 <211> 301 <212> PRT

<213> Enterobacter cloacae

<400> 10051 Glu Lys Leu Cys Met Thr Thr Leu Asn Leu Gly His Leu Ala Thr Phe 10 Arg Leu Val Val Gln Arg Gly Ser Phe Ser Ala Ala Ala Asp Val Met 20 25 Gly Ile Ser Gln Pro Ala Val Ser Leu Gln Ile Arg Gln Leu Glu Gln 40 Phe Leu Gln Thr Arg Leu Ile Glu Arg Thr Gly Arg Gly Ile Lys Ala 55 Thr Ala Ala Gly Glu Ala Leu Arg Val His Gly Glu Arg Leu Glu Leu 70 75 Ala Val Glu Glu Thr Ile Arg Ser Val Ser Ala Phe Asn Gln Glu Val 85 90 Ser Gly Thr Ile Thr Leu Gly Thr Gly Ala Thr Ala Cys Ile His Leu 100 105 Leu Pro Ala Leu Leu Gln Gln Leu Arg Glu Glu Tyr Pro Leu Leu Arg 120 125 Ile Gly Val Thr Thr Gly Asn Thr Pro Asp Ile Val Arg Ala Ile Glu 135 140 Glu Asn Arg Leu Asp Met Gly Leu Val Thr Leu Pro Ala Ser Gly Arg 150 155 Thr Leu Ala Ile Met His Ala Met Glu Glu Glu Phe Val Trp Ile Gly 165 170 Ala Gln Val Gln Pro Glu Glu Gly Glu Gln Phe Thr Pro Asp Ser Leu

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180
                           185
                                            190
Tyr Ala Gln Pro Leu Ile Ala Phe Glu Ser Gly Ser Gly Thr Arg Thr
    195
                  200
                             205
Leu Ile Asp Gly Trp Phe Glu Ala Arg Gly Leu Ala Val Ser Pro Val
 210
                 215
                          220
Met Gln Leu Gly Ser Ile Glu Ala Ile Lys Arg Met Val Arg Ala Gly
      230 235
Leu Gly Tyr Ser Ile Val Pro Arg Met Ala Val Glu His Ala Asp Asp
          245 250 255
Arg Glu Gly Leu Arg Val Gln Ser Leu Thr Pro Val Leu Arg Arg Gln
         260 265 270
Leu Ala Ile Val Met Arg Gln Asp Lys Ile Leu Ser Lys Gly Met Thr
      275 280 285
Val Ile Ile Arg Leu Leu Gln Arg Glu His Gly Arg
                    295
<210> 10052
<211> 436
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(224)
<400> 10052
His Ser Glu Glu Asn Thr Met Thr Arg Arg Ala Ile Gly Val Ser Glu
                              10
Arg Pro Pro Leu Leu Gln Thr Ile Pro Leu Ser Leu Gln His Leu Phe
 20
                           25
Ala Met Phe Gly Ala Thr Val Leu Val Pro Ile Leu Phe His Ile Asn
35
                       40
Pro Ala Thr Val Leu Leu Phe Asn Gly Ile Gly Thr Leu Leu Tyr Leu
 5.0
                   55
                                     60
Phe Ile Cys Lys Gly Lys Ile Pro Ala Tyr Leu Gly Ser Ser Phe Ala
                 70
                                  75
Phe Ile Ser Pro Val Leu Leu Leu Pro Leu Gly Tyr Glu Val Ala
             85
                              90
Leu Gly Gly Phe Ile Met Cys Gly Val Leu Phe Cys Leu Val Ser Phe
          100
                           105
                                110
Ile Val Lys Lys Ala Gly Thr Gly Trp Leu Asp Val Met Phe Pro Pro
      115
                       120
Ala Ala Met Gly Ala Ile Val Ala Val Ile Gly Leu Glu Leu Ala Gly
                   135
                                     140
Val Ala Ala Asn Met Ala Gly Leu Leu Pro Ala Asp Gly Gln Ser Pro
                150
                                  155
Asp Ser Lys Thr Ile Ile Ile Ser Leu Val Thr Leu Gly Val Thr Val
             165
                              170
Phe Gly Ser Val Leu Phe Arg Gly Phe Met Ala Ile Ile Pro Ile Leu
          180
                           185
                                            190
Ile Gly Val Leu Ala Gly Tyr Ala Leu Ser Phe Val Met Gly Val Val
      195
                       200
                                         205
Asp Thr Thr Pro Ile Ala Glu Ala His Trp Phe Ala Leu Pro Thr Xaa
                    215
Tyr Thr Pro Arg Phe Glu Trp Phe Ala Ile Phe Thr Ile Leu Pro Ala
                230
                                235
Ala Leu Val Val Ile Ala Glu His Val Gly His Leu Val Val Thr Ala
                             250
            245
Asn Ile Val Lys Arg Asp Leu Ile Arg Asp Pro Gly Leu His Arg Ser
         260
                           265
Met Phe Ala Asn Gly Phe Ser Thr Ile Ile Ser Gly Phe Phe Gly Ser
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280 Thr Pro Asn Thr Thr Tyr Gly Glu Asn Ile Gly Val Met Ala Ile Thr 300 295 Arg Val Tyr Ser Thr Trp Val Ile Gly Gly Ala Ala Ile Ile Ala Ile 310 315 Leu Leu Ser Cys Val Gly Lys Leu Ala Ala Ala Ile Gln Ile Ile Pro 325 330 335 Val Pro Val Met Gly Gly Val Ser Leu Leu Leu Tyr Gly Val Ile Gly 340 345 . 350 Ala Ser Gly Ile Arg Val Leu Ile Glu Ser Lys Val Asp Tyr Ser Lys 355 360 365 Ala Gln Asn Leu Ile Leu Thr Ser Val Ile Leu Ile Ile Gly Val Ser 375 380 Gly Ala Lys Val His Ile Gly Ala Ala Glu Leu Lys Gly Met Ala Leu 390 395 Ala Thr Ile Val Gly Val Gly Leu Ser Leu Ile Phe Lys Leu Ile Ser 405 410 415 Val Ile Arg Pro Glu Glu Val Val Leu Asp Ala Asp Asp Ser Glu Lys 425 Ala Pro His

435

<210> 10053 <211> 248

<212> PRT <213> Enterobacter cloacae

245

<400> 10053

Thr Pro Phe Arg Phe Tyr Val Arg Ser Leu Val Glu Val Phe Leu Asn 10 Gly Pro Ala Gln Leu Ser Leu Pro Leu Tyr Leu Pro Asp Asp Glu Thr 25 Phe Ala Ser Phe Trp Pro Gly Asp Asn Pro Ser Leu Leu Ala Ala Leu 3.5 40 Gln Asn Val Leu Arg Gln Glu His Ser Gly Tyr Ile Tyr Ile Trp Ser 50 55 Arg Glu Gly Ala Gly Arg Ser His Leu Leu His Ala Ala Cys Ala Glu 75 70 Leu Ser Ala Arg Gly Asp Ala Val Gly Tyr Val Pro Leu Asp Lys Arg 85 90 95 Thr Trp Phe Val Pro Glu Val Leu Glu Gly Met Glu His Leu Ser Leu 100 105 110 Val Cys Ile Asp Asn Ile Glu Cys Val Ala Gly Asp Glu Pro Trp Glu 115 120 Met Ala Ile Phe Asn Leu Tyr Asn Arg Ile Leu Glu Ser Gly Lys Thr 135 140 Arg Leu Leu Ile Thr Gly Asp Arg Pro Pro Arg Gln Leu Asn Leu Gly 150 155 145 Leu Pro Asp Leu Ala Ser Arg Leu Asp Trp Gly Gln Ile Tyr Lys Leu 165 170 Gln Pro Leu Ser Asp Glu Asp Lys Leu Gln Ala Leu Gln Leu Arg Ala 180 185 190 Arg Leu Arg Gly Phe Glu Leu Pro Glu Asp Val Gly Arg Phe Leu Leu 195 200 205 Lys Arg Leu Asp Arg Glu Met Arg Thr Leu Phe Asp Thr Leu Asp Gln 210 215 220 Leu Asp Arg Ala Ser Ile Thr Ala Gln Arg Lys Leu Thr Ile Pro Phe 235 230 Val Lys Asp Ile Leu Lys Leu

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<210> 10054
<211> 248
<212> PRT
<213> Enterobacter cloacae
<400> 10054
Ile Gln Ile Ile Thr Pro Gly Val Met Lys Met Gln Lys Gln Ala Glu
                               1.0
Leu Tyr Arg Gly Lys Ala Lys Thr Val Tyr Ser Thr Glu Asn Pro Asp
         20
                            25
Leu Leu Val Leu Glu Phe Arg Asn Asp Thr Ser Ala Gly Asp Gly Ala
                       40
                                          45
Arg Ile Glu Gln Phe Asp Arg Lys Gly Met Val Asn Asn Lys Phe Asn
 50 55
His Phe Ile Met Thr Lys Leu Ala Glu Ala Gly Ile Pro Thr Gln Met
                 70
                                   75
Glu Ala Leu Leu Ser Asp Thr Glu Cys Leu Val Lys Lys Leu Asp Met
                                90
              85
Val Pro Val Glu Cys Val Ile Arg Asn Arg Ala Ala Gly Ser Leu Val
          100
                            105
Lys Arg Leu Gly Ile Glu Glu Gly Ile Glu Leu Asn Pro Pro Leu Phe
 115 120 125
Asp Leu Phe Leu Lys Asn Asp Ala Met His Asp Pro Met Val Asn Glu
                 135
                                       140
Ser Tyr Cys Glu Thr Phe Gly Trp Val Ser Lys Glu Asn Leu Ala Arg
                 150
                                   155
Met Gln Glu Leu Thr Tyr Lys Ala Asn Asp Val Leu Lys Lys Leu Phe
              165
                               170
                                    175
Asp Asp Ala Gly Leu Ile Leu Val Asp Phe Lys Leu Glu Phe Gly Leu
          180
                            185
                                              190
Tyr Lys Gly Glu Val Val Leu Gly Asp Glu Phe Ser Pro Asp Gly Ser
      195
                        200
Arg Leu Trp Asp Lys Glu Thr Leu Asp Lys Met Asp Lys Asp Arg Phe
210
                     215
                                       220
Arg Gln Ser Leu Gly Gly Val Val Glu Ala Tyr Glu Ala Val Ala His
                 230
                                    235
                                                      240
Arg Leu Gly Val Lys Leu Asp
              245
<210> 10055
<211> 294
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<211> 294 <212> PRT <213> Enterobacter closes

<213> Enterobacter cloacae

<400> 10055 Phe Glu Val Phe Met Arg Trp Gln Gly Arg Arg Glu Ser Asp Asn Val Glu Asp Arg Arg Ser Ser Gly Gly Gly Pro Ser Met Gly Gly Pro 20 25 Gly Phe Arg Leu Pro Ser Gly Lys Gly Gly Ile Ile Leu Leu Val Val 35 40 Val Leu Val Ala Gly Tyr Tyr Gly Val Asp Leu Thr Gly Leu Met Thr 50 Gly Glu Thr Gly Gln Gln Gln Tyr Ser Gln Arg Ser Ile Ser Pro 70 75 Asn Glu Asp Glu Ala Ala Lys Phe Thr Ser Val Ile Leu Ala Thr Thr 85 90 Glu Asp Thr Trp Gly Gln Gln Phe Glu Lys Met Gly Arg Thr Tyr Gln 100 105 Pro Pro Lys Leu Val Met Tyr Arg Gly Ala Thr Arg Thr Gly Cys Gly 115 120

Thr Gly Gln Ser Val Met Gly Pro Phe Tyr Cys Pro Ala Asp Ser Thr 135 140 Val Tyr Ile Asp Leu Ser Phe Tyr Asp Asp Met Lys Ser Lys Leu Gly 150 155 Ala Asp Gly Asp Phe Ala Gln Gly Tyr Val Ile Ala His Glu Val Gly 165 170 175 His His Val Gln Lys Leu Leu Gly Ile Glu Pro Lys Val Arg Gln Met 180 185 190 Gln Gln Asn Ala Ser Gln Ala Glu Met Asn Arg Leu Ser Val Arg Met 195 200 205 Glu Leu Gln Ala Asp Cys Phe Ala Gly Val Trp Gly His Ser Met Gln 210 215 220 Gln Gln Gly Val Leu Glu Thr Gly Asp Leu Glu Glu Ala Leu Asn Ala 230 235 Ala Gln Ala Ile Gly Asp Asp Arg Leu Gln Gln Gln Ser Gln Gly Arg 245 250 Val Val Pro Asp Ser Phe Thr His Gly Thr Ser Glu Gln Arg Tyr Ser 260 265 270 Trp Phe Lys Arg Gly Phe Asp Ser Gly Asn Pro Ser Gln Cys Asn Thr 275 280

Phe Gly Lys Ala Met 290

<210> 10056 <211> 268

<212> PRT <213> Enterobacter cloacae

<400> 10056 Lys Pro Thr Phe Cys Asn Gly Asn Phe Phe Asn Asp Phe Phe Ser Lys 10 Val Ala Trp Ser Leu Pro Arg Arg Gly Val Lys Ser Cys Leu Ser Ile 20 25 3.0 Lys Glu Ile Ala Met Lys His Asp His Phe Val Val Gln Ser Pro Asp 35 40 Thr Pro Ala Lys Gln Leu Leu Leu Phe His Gly Val Gly Asp Asn 5.5 60 Ala Val Asn Met Gly Gln Ile Gly Ser Trp Phe Ala Pro Val Phe Pro 65 70 75 His Ala Leu Ile Val Ser Ile Gly Gly Val Glu Pro Cys Gly Pro Asp 8.5 Gly Arg Gln Trp Phe Ser Val Glu Gly Val Thr Glu Glu Asn Arg Gln 100 105 Ala Arg Ile Asp Ala Val Met Pro Ala Phe Ile Asp Thr Val Arg Tyr 115 120 125 Trp Gln Gln Gln Ser Gly Val Gly Ala Asp Ala Thr Ala Leu Ile Gly 130 135 Phe Ser Gln Gly Ser Ile Met Ser Leu Glu Ser Val Lys Ala Gln Pro 145 150 155 Gly Leu Val Ser Arg Val Ile Ala Phe Asn Gly Arg Phe Ala Thr Leu 165 170 Pro Gln Ser Ala Thr Thr Gln Thr Thr Ile His Leu Ile His Gly Gly 185 Glu Asp Arg Val Ile Glu Leu Ser His Ala Val Ala Ala Gln Glu Thr 195 200 205 Leu Met Arg Glu Gly Gly Asp Val Thr Leu Asp Ile Val Asp Asp Leu 215 220 Gly His Ala Ile Asp Asp Arg Ser Met Gln Phe Ala Leu Asp His Leu 225 230 235 Arg Tyr Thr Val Pro Lys His Tyr Phe Asp Glu Ala Leu Ser Gly Ala 245 250

Lys Pro Asn Asp Asp Ile Val Glu Phe Met 260 265

<210> 10057 <211> 686 <212> PRT

<213> Enterobacter cloacae

<400> 10057

Thr Leu Arg Arg His Ala Ala Val Gly Lys Tyr Asp Asn Asn Arg Lys Asn Lys Val Ile Glu Pro Lys Thr Gly Val Val Met Asn Arg Phe Ile 2.5 Met Ala Asn Ala Gln Gln Cys Ile Gly Cys Arg Ala Cys Glu Val Ala Cys Val Met Ala His Asn Gly Glu Gln His Ala Leu Ser Glu Arg His 5.5 Phe His Pro Arg Ile Thr Val Leu Thr Ser Gly Leu Arg Lys Ser Pro Val Thr Cys His His Cys Glu Asn Ala Pro Cys Ala Gln Ser Cys Pro Asn Gly Ala Ile Thr Gln His Ser Asp Ser Val Gln Val Asn Gln Gln Lys Cys Ile Gly Cys Lys Ala Cys Val Val Ala Cys Pro Phe Gly Thr 115 120 Met Asp Met Leu Ile Ala Pro Leu Glu Asn Asp Ser Val Lys Ala Ser Ala His Lys Cys Asp Leu Cys Leu Glu Arg Pro Gln Gly Pro Ala Cys Val Glu Asn Cys Pro Ala Glu Val Leu Thr Leu Ala Thr Pro Ala Val Leu Asp Lys Leu Val Lys Gln Arg Arg Gln Arg Ser Ala Arg Leu Asp Ala Leu Pro Trp His Ser Glu Ala Val Gln Ser Val Pro Pro Gln Thr Lys Arg Gln Gln Met Gln Asn Thr Pro Ala Arg Gly Glu Pro Asp Lys Leu Ser Pro Asp Ala Arg Ala Gly His Phe Asn Glu Ile Tyr Leu Pro Phe Arg Pro Glu Gln Ala Gln Arg Glu Ala Ser Arg Cys Leu Lys Cys Gly Asp His Ser Ile Cys Glu Trp Thr Cys Pro Leu His Asn His Ile Pro Gln Trp Ile Glu Arg Ile Arg Ala Gly Asp Ile Ile Gly Ala Ala Glu Leu Ser His Gln Thr Asn Cys Leu Pro Glu Ile Thr Gly Arg Val Cys Pro Gln Asp Arg Leu Cys Glu Gly Ala Cys Thr Leu Arg Asp Ala Ser Gly Ala Val Thr Ile Gly Asn Ile Glu Arg Tyr Ile Ser Asp Arg Ala Leu Ala Met Gly Trp Thr Pro Asp Val Ser His Val Lys Pro Val Gly Lys Arg Val Ala Ile Ile Gly Ala Gly Pro Ala Gly Leu Ala Cys Ala Asp Val Leu Val Arg Ser Gly Val Gly Val Thr Val Tyr Asp Arg His Pro Glu Ile Gly Gly Leu Leu Thr Phe Gly Ile Pro Ala Phe Lys 385 390 395 400 Leu Asp Lys Ser Leu Leu Ala Arg Arg Arg Glu Ile Phe Ser Ala Met

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Gly Ile Arg Phe Glu Leu Asn Cys Glu Val Gly Lys Asp Val Ser Met
        420
                      425
                                       430
Ala Gln Leu Gln Asn Asp Tyr Asp Ala Leu Phe Ile Gly Val Gly Thr
  435 440
                         445
Tyr Arg Ser Met Lys Ala Gly Ile Pro His Glu Asp Ala Pro Gly Val
 450
       455
                      460
Tyr Asp Ala Leu Pro Phe Leu Val Ala Asn Thr Arg Asn Val Met Gly
465 470 475
Leu Asp Pro Ala Ala Asp Glu Pro Phe Ile Asp Thr Gln Gly Leu Asn
       485 490
Val Val Leu Gly Gly Gly Asp Thr Ala Met Asp Cys Val Arg Thr
        500 505 510
Ala Leu Arg His Gly Ala Ala Lys Val Thr Cys Ala Tyr Arg Arg Asp
515 520 525
Glu Ala Asn Met Pro Gly Ser Lys Lys Glu Val Lys Asn Ala Lys Glu
                 535
                                 540
Glu Gly Ala Ala Phe Glu Phe Asn Val Gln Pro Val Glu Leu Thr Leu
               550 555
Asp Thr Asp Gly Lys Val Asn Gly Ile Arg Met Leu Arg Thr Arg Leu
      565
                           570
Gly Glu Pro Asp Ala Gln Gly Arg Arg Pro Val Pro Val Ala Gly
        580
                      585 590
Ser Glu Phe Val Met Pro Ala Asp Ala Val Ile Met Ala Phe Gly Phe
     595
                    600
                                     605
Asn Pro His Ala Met Pro Trp Leu Gln Ala Gln Gly Val Asp Thr Asp
610
                  615
                                 620
Asp Trp Gly Arg Ile Lys Ala Ser Val Glu Ser Arg Tyr Arg Tyr Gln
               630
                              635
Thr Ser Asn Pro Gln Ile Phe Ala Gly Gly Asp Ala Val Arg Gly Ala
           645
                           650
Asp Leu Val Val Thr Ala Met Ala Glu Gly Arg His Ala Ala Gln Gly
        660
                       665 670
Ile Met Asp Trp Leu Gly Val Pro Pro Arg Asn Met His
                     680
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<210> 10058 <211> 768 <212> PRT <213> Enterobacter cloacae

<400> 10058 Pro Lys Arg Glu Arg Asn Asn Lys Met Asp Asp Gln Leu Lys Gln Ser 10 Ala Leu Asp Phe His Glu Phe Pro Val Pro Gly Lys Ile Gln Val Ser 25 20 30 Pro Thr Lys Pro Leu Ala Thr Gln Arg Asp Leu Ala Leu Ala Tyr Ser 35 40 Pro Gly Val Ala Ala Pro Cys Leu Glu Ile Glu Lys Asp Pro Leu Ala 55 Ala Tyr Lys Tyr Thr Ala Arg Gly Asn Leu Val Ala Val Ile Ser Asn 70 7.5 Gly Thr Ala Val Leu Gly Leu Gly Asn Ile Gly Ala Leu Ala Gly Lys 90 Pro Val Met Glu Gly Lys Gly Val Leu Phe Lys Lys Phe Ala Gly Ile 100 105 Asp Val Phe Asp Ile Glu Val Asp Glu Leu Asp Pro Asp Lys Phe Ile 115 120 125 Asn Val Val Ala Ala Leu Glu Pro Thr Phe Gly Gly Ile Asn Leu Glu 135 140 Asp Ile Lys Ala Pro Glu Cys Phe Tyr Ile Glu Gln Lys Leu Arg Glu

Arg Met Asn Ile Pro Val Phe His Asp Asp Gln His Gly Thr Ala Ile Ile Ser Thr Ala Ala Ile Leu Asn Gly Leu Arg Val Val Glu Lys Asn 185 190 Leu Ser Asp Val Arg Met Val Val Ser Gly Ala Gly Ala Ala Ala Ile Ala Cys Met Asn Leu Leu Val Ala Leu Gly Met Gln Lys His Asn Ile 210 215 Val Val Cys Asp Ser Lys Gly Val Ile Tyr Lys Asp Arg Glu Pro Asn 225 230 235 240 Met Ala Glu Thr Lys Ala Ala Tyr Ala Val Glu Asp Asp Gly Lys Arg Thr Leu Glu Asp Val Ile Glu Gly Ala Asp Ile Phe Leu Gly Cys Ser 265 270 Gly Pro Lys Val Leu Thr Gln Glu Met Val Gln Lys Met Ala Arg Ala Pro Met Ile Leu Ala Leu Ala Asn Pro Glu Pro Glu Ile Leu Pro Pro Leu Ala Lys Ala Val Arg Glu Asp Ala Ile Ile Cys Thr Gly Arg Ser Asp Tyr Pro Asn Gln Val Asn Asn Val Leu Cys Phe Pro Phe Ile Phe 325 330 Arg Gly Ala Leu Asp Val Gly Ala Thr Ala Ile Asn Glu Glu Met Lys Leu Ala Ala Val His Ala Ile Ala Glu Leu Ala His Ala Glu Gln Ser Glu Val Val Ala Ser Ala Tyr Gly Asp Gln Asp Leu Ser Phe Gly Pro Asp Tyr Ile Ile Pro Lys Pro Phe Asp Pro Arg Leu Ile Val Lys Ile 390 395 Ala Pro Ala Val Ala Lys Ala Ala Met Asp Ser Gly Val Ala Thr Arg Pro Ile Glu Asp Phe Asp Ala Tyr Val Asp Lys Leu Thr Glu Phe Val Tyr Lys Thr Asn Leu Phe Met Lys Pro Ile Phe Ser Gln Ala Arg Ala 435 440 Asp Ala Lys Arg Val Val Leu Ala Glu Gly Glu Glu Ala Arg Val Leu His Ala Thr Gln Glu Leu Ile Thr Leu Gly Leu Ala Lys Pro Ile Leu Ile Gly Arg Pro Ser Val Ile Glu Met Arg Ile Gln Lys Leu Gly Leu Gln Ile Lys Pro Gly Val Asp Phe Glu Ile Val Asn Asn Glu Ser Asp Pro Arg Phe Lys Glu Tyr Trp Asn Glu Tyr Tyr Ser Ile Met Lys Arg Arg Gly Ile Thr Gln Glu Gln Ala Gln Arg Ala Val Ile Ser Asn Thr Thr Val Ile Gly Ala Ile Met Val His Arg Gly Glu Ala Asp Ala Leu Ile Cys Gly Thr Ile Gly Glu Tyr His Glu His Phe Ser Val Val Gln Glu Ile Phe Gly Tyr Arg Glu Gly Val His Thr Ala Gly Ala Met Asn Ala Leu Leu Leu Pro Ser Gly Asn Thr Phe Ile Ala Asp Thr Tyr Val Asn Asp Asp Pro Ser Pro Glu Glu Leu Ala Glu Ile Thr Val Met Ala Ala Glu Thr Val Arg Arg Phe Gly Ile Glu Pro Lys Val Ala Leu Leu Ser His Ser Asn Phe Gly Ser Ser Lys Ser Ala Ala Ala Cys Lys Met

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645
                           650
Arg Gln Thr Leu Asp Leu Val Arg Glu Arg Ala Pro Glu Leu Met Ile
        660
                  665
                                      670
Asp Gly Glu Met His Gly Asp Ala Ala Leu Val Glu Ser Ile Arg Asn
     675
          680
                                 685
Glu Arg Met Pro Asp Ser Pro Leu Lys Gly Ser Ala Asn Val Leu Ile
 690 695 700
Met Pro Asn Val Glu Ala Ala Arg Ile Ser Tyr Asn Leu Leu Arg Val
705 710 715
Ser Ser Ser Glu Gly Val Thr Val Gly Pro Val Leu Met Gly Val Ser
         725 730 735
Lys Pro Val His Val Leu Thr Pro Ile Ala Ser Val Arg Arg Ile Val
       740 745 750
Asn Met Val Ala Leu Ala Val Val Glu Ala Gln Thr Gln Pro Leu
                    760
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<210> 10059

<211> 175 <212> PRT

<213> Enterobacter cloacae

<400> 10059

His Tyr Ala Lys Phe Trp Arg Val Phe Pro Arg Leu Leu Ala Lys Cys 5 15 15 Pro Val His Ala Ile Ile Thr Val Phe Lys Pro Glu Lys Ala Val Asn

20 25 30 Thr Met Glu Ile Arg Val Phe Arg Gln Glu Asp Phe Glu Glu Val Ile 35 40 45

Thr Leu Trp Glu Arg Cys Asp Leu Leu Arg Pro Trp Asn Asp Pro Glu 50 Met Asp Ile Glu Arg Lys Val Asn His Asp Val Ser Leu Phe Leu Val

65 $^{'}$ 70 $^{'}$ 75 80 Ala Glu Val Asn Gly Glu Val Val Gly Thr Val Met Gly Gly Tyr Asp 85 90 95

Gly His Arg Gly Ser Ala Tyr Tyr Leu Gly Val His Pro Glu Tyr Arg

Ala Arg Gly Ile Ala Asn Ala Leu Leu Asn Arg Leu Glu Lys Lys Leu 115 120 125 Ile Ala Arg Gly Cys Pro Lys Ile Gln Ile Met Val Arg Glu Asp Asn

Ile Ala Arg Gly Cys Pro Lys Ile Gln Ile Met Val Arg Glu Asp Asn 130 135 Asp Val Val Leu Gly Met Tyr Glu Arg Leu Gly Tyr Glu His Ala Asp 145 155

Val Leu Thr Leu Gly Lys Arg Leu Ile Glu Asp Glu Glu Tyr
165 170 17

<210> 10060

<211> 316 <212> PRT

<213> Enterobacter cloacae

<400> 10060

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Arg Gln Leu Ser Gly Gly Glu Gly Ala Lys Glu Leu Lys Asp Phe Ile
Pro Tyr Gly Lys Gly Leu Ala Pro Ala Thr Gln Tyr Asp Val Leu Ile
        100 105
                                       110
His Ile Leu Ser Leu Arg His Asp Val Asn Phe Ser Ile Ala Gln Ala
     115
          120
                         125
Ala Ile Glu Ala Phe Gly Asp Ser Ile Asp Val Gln Glu Glu Ile His
 130 135
                                 140
Gly Phe Arg Trp Val Glu Glu Arg Asp Leu Ser Gly Phe Val Asp Gly
145 150 155
Thr Glu Asn Pro Ala Gly Glu Glu Thr Arg Arg Glu Val Ala Val Ile
     165
                           170 175
Lys Asp Gly Val Asp Ala Gly Gly Ser Tyr Val Phe Val Gln Arg Trp
        180 185
Glu His Asn Leu Arg Gln Leu Asn Arg Met Ser Val His Asp Gln Glu
                    200
Met Met Ile Gly Arg Thr Lys Asp Ala Asn Glu Glu Ile Asp Gly Asp
 210 215
                                  220
Ala Arg Pro Val Thr Ser His Leu Ser Arg Val Asp Leu Lys Glu Asp
              230
                              235 240
Gly Lys Gly Leu Lys Ile Val Arg Gln Ser Leu Pro Tyr Gly Thr Ala
            245
                           250
Ser Gly Thr His Gly Leu Tyr Phe Cys Ala Tyr Cys Ala Arg Leu Tyr
         260
              265
                                        270
Asn Ile Glu Gln Gln Leu Leu Ser Met Phe Gly Asp Thr Asp Gly Lys
                     280
                                     285
Arg Asp Ala Met Leu Arg Phe Thr Arg Pro Val Thr Gly Gly Tyr Tyr
290 295
Phe Ala Pro Ser Val Glu Arg Leu Leu Ala Leu
305
             310
```

<210> 10061 <211> 279 <212> PRT

<213> Enterobacter cloacae

<400> 10061 Val Met Phe Ala Gly Ser Thr Arg Arg Val Leu Pro Gly Phe Thr Leu 1 5 10 Ser Leu Gly Thr Ser Leu Leu Phe Val Cys Leu Ile Leu Leu Leu Pro 20 25 Leu Ser Ala Leu Val Met Gln Leu Ala Glu Met Ser Trp Ser Gln Tyr 40 Trp Glu Val Val Thr Asn Pro Gln Val Val Ala Ala Tyr Lys Val Thr 5.5 Leu Leu Ser Ala Phe Val Ala Ser Ile Phe Asn Gly Val Phe Gly Leu 70 75 Leu Met Ala Trp Ile Leu Thr Arg Tyr Arg Phe Pro Gly Arg Thr Leu 85 90 Leu Asp Ala Leu Met Asp Leu Pro Phe Ala Leu Pro Thr Ala Val Ala 100 105 Gly Leu Thr Leu Ala Ser Leu Phe Ser Val Asn Gly Phe Tyr Gly Glu 115 120 125 Trp Leu Ala Lys Phe Asp Ile Lys Val Thr Tyr Thr Trp Leu Gly Ile 135 140 Ala Val Ala Met Ala Phe Thr Ser Ile Pro Phe Val Val Arg Thr Val 150 155 Gln Pro Val Leu Glu Glu Leu Gly Pro Glu Tyr Glu Glu Ala Ala Glu 165 170 Thr Leu Gly Ala Thr Arg Trp Gln Ser Phe Arg Lys Val Val Leu Pro 185

Glu Leu Ser Pro Ala Leu Leu Ala Gly Val Ala Leu Ser Phe Thr Arg
195
Ser Leu Gly Glu Phe Gly Ala Val Ile Phe Ile Ala Gly Asn Ile Ala
210
210
215
225
Phe Asp Tyr Pro Ala Ala Ser Ala Ile Ala Ser Val Ile Leu Ala Ala
245
Ser Leu Leu Leu Phe Ser Ile Asn Thr Leu Gln Ser Arg Phe Gly
260
Arg Arg Val Val Gly His

<210> 10062 <211> 377 <212> PRT <213> Enterobacter cloacae

<400> 10062 Arg Ile Arg Lys Asn Val Ser Ile Arg Arg Glu Ile Met Ser Ile Glu Ile Ala Asn Ile Lys Lys Ser Phe Gly Arg Thr Gln Val Leu Asn Asp 20 25 30 Ile Ser Leu Asp Ile Pro Ser Gly Gln Met Val Ala Leu Leu Gly Pro 35 40 4.5 Ser Gly Ser Gly Lys Thr Thr Leu Leu Arg Ile Ile Ala Gly Leu Glu 5.0 55 His Gln Thr Ser Gly His Ile Arg Phe His Gly Thr Asp Val Ser Arg 75 70 65 Leu His Ala Arg Asp Arg Lys Val Gly Phe Val Phe Gln His Tyr Ala 85 90 95 Leu Phe Arg His Met Thr Val Phe Asp Asn Ile Ala Phe Gly Leu Thr 100 105 110 Val Leu Pro Arg Arg Glu Arg Pro Asp Ala Ala Ala Ile Lys Ala Lys 120 Val Thr Lys Leu Leu Glu Met Val Gln Leu Ala His Leu Ala Asp Arg 135 130 140 Phe Pro Ala Gln Leu Ser Gly Gly Gln Lys Gln Arg Val Ala Leu Ala 145 150 155 Arg Ala Leu Ala Val Glu Pro Gln Ile Leu Leu Leu Asp Glu Pro Phe 165 170 175 Gly Ala Leu Asp Ala Gln Val Arg Lys Glu Leu Arg Arg Trp Leu Arg 180 185 190 Gln Leu His Glu Glu Leu Gln Phe Thr Ser Val Phe Val Thr His Asp 195 200 205 Gln Glu Glu Ala Met Glu Val Ala Asp Arg Val Val Wet Ser Gln 215 Gly Asn Ile Glu Gln Val Asp Glu Pro Glu Gln Leu Trp Arg Glu Pro 225 230 235 Ala Thr Arg Phe Val Leu Glu Phe Met Gly Glu Val Asn Arg Leu Gln 245 250 255 Gly Thr Ile Arg Gly Gly Gln Phe His Val Gly Ala His Arg Trp Pro 260 265 270 Leu Gly Tyr Thr Ser Ala His Gln Gly Pro Val Asp Leu Phe Leu Arg 275 280 Pro Trp Glu Val Asp Val Ser Arg Arg Thr Ser Leu Asp Ser Pro Leu 295 300 290 Pro Val Gln Val Leu Glu Ala Ser Pro Lys Gly His Tyr Thr Gln Leu 310 315 Val Val Gln Pro Leu Gly Trp Tyr Thr Glu Pro Leu Thr Val Val Met 325 330

5562 Arg Asp Asp Glu Pro Pro His Arg Gly Glu Arg Leu Phe Val Gly Leu 340 345 350 Gln His Ala Arg Ile Tyr His Gly Asn Glu Arg Ile Glu Thr Arg Glu 355 360 Asp Ile Ala Leu Ala Glu Ser Ala <210> 10063 <211> 291 <212> PRT <213> Enterobacter cloacae <400> 10063 Arg Glu Leu Phe Ala Gly Gly Gly Asp Leu Ser Val Met Glu Met Ile 10 Leu Phe Arg Asp Asn Thr Arg Ala Gln Gln Thr Asp Ile Val Ala Val 2.0 25 3.0 Gln Ser Gln Val Val Tyr Gly Ser Val Gly Asn Ser Ile Ala Val Pro 35 40 4.5 Asn Ile Arg Thr His Arg Leu Asn Val Thr Ala Val Pro Thr Val Leu 50 55 Phe Ser Asn Thr Pro His Tyr Asp Thr Phe Tyr Gly Gly Val Ile Pro 70 75 Asp Glu Trp Phe Ser Gly Tyr Leu Lys Ala Leu Glu Glu Arg Glu Ile 85 90 Leu Arg Glu Leu Lys Ala Val Thr Thr Gly Tyr Met Gly Ser Ala Ser 105 100 Gln Ile Val Leu Leu Ala Gln Trp Leu Lys Ala Ile Lys Val Gln His 115 120 125 Pro Asp Leu Val Leu Val Asp Pro Val Ile Gly Asp Ile Asp Ser 130 135 140 Gly Met Tyr Val Lys Pro Asp Ile Pro Glu Ala Tyr Arg Glu His Leu 150 155 160 145 Leu Pro Leu Ala Gln Gly Ile Thr Pro Asn Val Tyr Glu Leu Glu Val 170 165 Leu Ser Gly Lys Pro Cys Arg Thr Pro Glu Ser Ala Ile Ala Ala Ala 185 180 190 Gln Gly Leu Leu Ser Asn Ser Leu Lys Trp Val Ala Ile Thr Ser Ala 195 200 205 Pro Val Ala Asp Asp Pro Gln Asn Ile His Val Val Leu Val Ser Glu 215 220 Gly Gly Val Thr Val Ser Ala His Pro Arg Val Glu Thr Asp Leu Lys 230 225 235 Gly Thr Gly Asp Leu Phe Cys Ser Glu Leu Val Ser Gly Ile Val Gly 245 250 Gly Lys Thr Val Ala Asp Ala Ile Arg Met Ala Gly Asp Arg Val Thr 265 Asp Val Met Ile Tyr Thr Gln Ser Lys Gly Tyr Asp Glu Leu Ile Leu Pro Ala 290 <210> 10064 <211> 94 <212> PRT <213> Enterobacter cloacae <400> 10064 Thr Asn Ser Ser Ile Pro Leu Ser Asp Ser Ile Glu Asn Ala Trp Leu

10 Val Ser Lys Ile Leu Pro Met Val Pro Ser Thr Gly Ala Thr Ile Leu

25 Leu Pro Val Gly Leu Ile Ala Met Pro Ser Pro Thr Ile Phe Ser Ala 3.5 40 4.5 Asn Thr Thr Ser Gly Thr Ser Ser Met Leu Thr Ile Ser Pro Glu Ser 55 60 Gly Ala Thr Ile Ser Ile Val Pro Glu Ser Phe Leu Ser Ser Glu Thr 70 75 Arg Asp Phe Ser Leu Ser Asn Lys Pro Met Ile Phe Ser 85 <210> 10065 <211> 425 <212> PRT <213> Enterobacter cloacae <400> 10065 Thr Thr Gln Met Ala Leu Ser Gln Leu Pro Asp Lys Gly Ser Gly Ala 10 Ala Ser Pro Ala Ala Ser Cys Pro Ala Ala Thr Ile Thr Gly Ile Lys 25 30 Ile Met Ser Leu Gln Lys Thr Trp Gly Asn Phe His Leu Ser Ala Met 35 40 45 Gly Val Val Leu Leu Ser Val Leu Leu Val Gly Cys Asp Asp Ser Val 55 60 Ala Gln Asn Ala Ala Pro Gln Ala Pro Val Val Ser Ala Ala Asp Val 75 7.0 Val Val Lys Ser Ile Ser Gln Trp Asp Ser Phe Asn Gly Arg Ile Glu 85 90 Ala Val Glu Ser Val Gln Leu Arg Pro Arg Val Ser Gly Tyr Ile Glu 100 105 110 Lys Val Asn Tyr Thr Asp Gly Gln Glu Val Lys Lys Gly Glu Val Leu 115 120 125 Phe Thr Ile Asp Asp Arg Thr Tyr Arg Ala Ala Leu Glu Gln Ala Gln 135 140 Ala Asn Leu Ala Arg Ala Lys Thr Gln Ala Ser Leu Ala Gln Ser Glu 150 155 Ala Asn Arg Thr Asp Lys Leu Ile Asn Thr His Leu Val Ser Arg Glu 165 170 Glu Trp Glu Gln Arg Arg Ser Ala Ala Val Gln Ala Gln Ala Asp Ile 180 185 190 Arg Ala Ala Gln Ala Ala Val Asp Ala Ala Gln Leu Asn Leu Asp Phe 195 200 205 Thr Lys Val Thr Ala Pro Ile Asp Gly Arg Ala Ser Arg Ala Leu Ile 210 215 220 Thr Ser Gly Asn Leu Val Thr Ala Gly Asp Ser Ala Ser Val Leu Thr 230 235 Thr Leu Val Ser Gln Lys Thr Val Tyr Val Tyr Phe Asp Val Asp Glu

Ser Ser Asn His Thr Ala Leu Pro Val Glu Ile Gly Leu Thr Gly Glu 280 280 Glu Gly Tyr Pro His Gln Gly Lys Val Asp Phe Leu Asp Asn Gln Leu 290 295 Thr Pro Gly Thr Gly Thr Ile Arg Met Arg Ala Leu Leu Asp Asn Ser

Ser Thr Tyr Leu His Tyr Gln Lys Leu Ala Arg Ser Gly Gln Gly Ala 260 265 270

250

255

245

The Fro Gly the Gly the He Arg Met Arg Ala Leu Leu Asp Ash Ser 305 310 315 316 Gln Arg Gln Phe The Pro Gly Leu Phe Ala Arg Val Arg Leu Pro Gly 325 325

Ser Ala Glu Phe Lys Ala Thr Leu Val Asp Asp Lys Ala Val Leu Thr 340 Asp Gln Asp Arg Lys Tyr Val Tyr Ile Val Asp Lys Asp Gly Lys Ala

360 Gln Arg Arg Asp Ile Thr Pro Gly Arg Leu Ala Asp Gly Leu Arg Ile 370 375 380 Val Gln Gln Gly Leu Asn Pro Gly Asp Lys Val Ile Val Asp Gly Leu 385 390 395 Gln Lys Val Phe Met Pro Gly Met Pro Val Asn Ala Lys Thr Val Ala 405 410 Met Thr Ala Ser Ala Ala Leu Asn <210> 10066 <211> 793 <212> PRT <213> Enterobacter cloacae <400> 10066 Val Asn Arg Ile Pro Ser Leu Ile Phe Lys Ile Pro Pro Pro Leu Cys Leu Pro Gly Ile Phe Arg Ala Thr Cys Thr Ser Gly Trp Met Pro Val 25 Phe Leu Tyr Pro Leu Glu Arg Lys Gly Cys Lys Arg Ala Ser Met Asn 35 40 Ile His His Ile Leu Lys Gln Asn Lys Asp Arg Trp Trp Ala Leu Pro 50 55 - 60 Leu Ile Leu Pro Val Val Leu Leu Pro Val Leu Ser Val Ala Asn Thr 70 75 Leu Thr Gln Leu Gly Asp Gly Ile Val Ala Leu Tyr Tyr Leu Pro Leu 90 85 Ser Phe Leu Leu Ala Leu Met Leu Phe Phe Gly Leu Glu Ala Leu Pro 100 105 110 Gly Val Val Val Ser Leu Phe Leu Arg Tyr Tyr Pro Ser Val Gly Leu 120 Phe Glu Thr Val Ala Gly Ile Leu His Phe Ile Val Pro Leu Val Leu 135 140 Ser Trp Gly Gly Tyr Arg Val Phe Ala Pro Arg Arg Asn Met Thr Ala 155 150 Tyr Gly Asp Ile Arg Leu Met Gly Gln Arg Ile Phe Trp Gln Val Phe 165 170 Cys Pro Ala Thr Leu Phe Leu Val Leu Phe Gln Phe Ala Val Tyr Leu 180 185 190 Gly Ile Tyr Glu Ser Arg Gln Ser Leu Ala Gly Leu Asn Pro Leu Asn 195 200 205 Ile Arg Thr Leu Ile Asn Tyr Gln Gly Leu Leu Val Ser Gly Leu Thr 215 Gly Val Pro Leu Ser Tyr Leu Leu Ile Arg Leu Ile Arg His Pro Arg 225 230 235 240 Tyr Ile Lys Gly Leu Met Ser Gln Leu Arg Ala Gln Ile Asp Lys Lys 245 250 255 Val Thr Ala Val Glu Phe Val Val Trp Phe Leu Ala Leu Gly Gly Leu 265 270 Leu Val Met Leu Leu Pro Met Asn Ala Asn Ser Ser Ile Phe Ser 280 285 Thr Asn Tyr Thr Leu Ser Leu Leu Met Pro Val Met Leu Trp Gly Ala 295 300 Met Arg Phe Gly Tyr Lys Leu Met Ser Leu Ile Trp Thr Pro Val Leu 310 315 Leu Val Ser Ile His Phe Phe Tyr His Tyr Ile Pro Val Gln Glu Gly 325 330 Tyr Gly Ile Gln Leu Ala Ile Thr Ser Ser Ser Tyr Leu Val Phe Ser 345

Phe Val Val Thr Tyr Met Ser Met Leu Ala Thr Arg Gln Arg Ala Ile

```
360
Asn Ile Arg Ser Arg Ser Gln Ala Phe Leu Asp Pro Val Val His Met
         375
                      380
Pro Asn Leu Arg Ala Leu Ser Arg Glu Leu Ala Ser His Pro Trp Ser
        390
                 395
Ala Leu Cys Leu Leu Arg Val Pro Glu Leu Glu Val Leu Gly Arg Asn
        405 410 415
Tyr Gly Val Met Leu Arg Ile Gln Tyr Lys Gln Gln Leu Ala Gln Trp
      420 425 430
Ile Asn Gly Thr Leu Gln Pro Asn Glu Arg Val Tyr His Leu Thr Gly
 435 440 445
Tyr Asp Met Ala Val Arg Leu Asp Ala Glu Ser His Gln Gln Arg Ile
 450 455 460
Glu Thr Leu Asp Glu His Ile Lys Gln Phe Val Phe Val Trp Asp Gly
465 470 475
Met Pro Val Gln Pro Gln Val Gly Ile Ser Tyr Cys Tyr Val Arg Ser
      485 490
Pro Val Asn His Leu Tyr Leu Val Leu Gly Glu Leu Gly Ile Val Ala
   500 505 510
Asp Leu Ser Leu Ser Thr Asn His Pro Glu Asn Leu Gln Gln Arg Gly
515 520 525
Ala Val His Leu Gln Arg Ser Leu Lys Asp Lys Val Ala Met Met Ser
530 535
                    540
Arg Leu Gln Ala Ala Leu Glu Gln Asp Ala Phe Thr Leu Leu Val Gln
545 550 555
Pro Val Arg Gly Leu Arg Gly Asp Cys Tyr His Glu Val Leu Leu Arg
          565 570 575
Met Arg Asp Asp Asn Gly Ala Leu Ile Phe Pro Glu Gln Phe Leu Pro
        580 585
Ile Ala Gln Glu Phe Gly Leu Ser Ser Arg Val Asp Leu Trp Val Leu
   595
                   600
Glu Arg Thr Leu Ser Phe Leu Ala Gln His Arg Gln Arg Leu Pro Gly
610 615
                               620
Gln Arg Phe Ala Ile Asn Leu Ala Pro Ser Thr Val Tyr Arg Ala Gln
625 630 635
Phe Pro Leu Glu Val Ser Arg Leu Leu Ala Lys Tyr Ala Val Glu Ala
           645
                         650
Trp Gln Leu Ile Phe Glu Val Thr Glu Ser Ser Ala Phe Gly His Ala
                    665 670
   660
Asp Leu Ala Ala Ser Thr Leu Arg Lys Leu Gln Lys Met Gly Ile Arg
675 680 685
Ile Ala Ile Asp Asp Phe Gly Thr Gly Tyr Ala Ser Tyr Ala Arg Leu
 690 695
                               700
Lys Ser Val Asp Ala Asp Ile Leu Lys Ile Asp Gly Gly Phe Ile Arg
705 710 715
Asn Ile Val Ser Asn Ser Leu Asp Tyr Gln Ile Val Ala Ser Ile Cys
                          730
           725
His Leu Ala Arg Met Lys Lys Met Leu Val Val Ala Glu Tyr Val Glu
           745
        740
Thr Glu Glu Ile Arg Ser Ala Val His Ala Leu Gly Ile Asp Tyr Val
                   760
 755
                                  765
Gln Gly Tyr Leu Ile Gly Leu Pro Ala Glu Leu Asp Thr Leu Leu Asp
                 775
                               780
Thr Glu Pro Ser Gln Glu Ser Ala
              790
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<210> 10067

<211> 478

<212> PRT

<213> Enterobacter cloacae

<400> 10067 Arg Met Ser Gly Phe Lys Ala Gly Phe Leu Trp Gly Gly Ala Val Ala Ala His Gln Leu Glu Gly Gly Trp Lys Glu Gly Gly Lys Gly Val Ser 20 25 Val Ala Asp Val Met Thr Ala Gly Ala His Gly Val Pro Arg Glu Ile 35 40 4.5 Thr Asn Gly Val Met Glu Gly Lys Asn Tyr Pro Asn His Glu Ala Ile 55 60 Asp Phe Tyr His Arg Tyr Lys Glu Asp Ile Lys Leu Phe Ala Glu Met 70 75 Gly Phe Lys Cys Phe Arg Thr Ser Ile Ala Trp Thr Arg Ile Phe Pro 90 Lys Gly Asp Glu Leu Glu Pro Asn Glu Ala Gly Leu Gln Phe Tyr Asp 100 105 Asp Leu Phe Asp Glu Cys Leu Lys His Gly Ile Glu Pro Val Ile Thr 115 120 125 Leu Ser His Phe Glu Met Pro Phe His Leu Val Thr Glu Tyr Gly Gly 130 135 140 Trp Arg Asn Arg Lys Leu Ile Asp Phe Phe Val Arg Phe Ala Lys Val 150 155 Val Phe Glu Arg Tyr Gln His Lys Val Lys Tyr Trp Met Thr Phe Asn 165 170 175 Glu Ile Asn Asn Gln Ala Asn Phe His Glu Asp Phe Ala Pro Phe Thr 180 185 190 Asn Ser Gly Leu Lys Tyr Ala Pro Gly Glu Asp Arg Glu Pro Val Met 200 195 205 Phe Gln Ala Ala His Tyr Glu Leu Val Ala Ser Ala Leu Ala Val Lys 215 220 210 Ala Gly Arg Glu Ile Asn Pro Ser Leu Gln Ile Gly Cys Met Ile Ala 225 230 235 Met Cys Pro Ile Tyr Pro Leu Thr Cys Ala Pro Asp Asp Met Met Met 245 250 Ala Met Asn Ala Met His Arg Arg Tyr Trp Phe Thr Asp Val His Val 260 265 Arg Gly Lys Tyr Pro Gln His Leu Leu Asn Tyr Phe Glu Arg Arg Gly 280 275 285 Phe Ala Leu Asp Ile Thr Glu Glu Asp Lys Val Ala Leu Thr Gln Gly 295 300 Cys Val Asp Tyr Ile Gly Phe Ser Tyr Tyr Met Ser Phe Ala Thr Lys 310 315 Ala Thr Ala Asp Asn Pro Thr Leu Asp Tyr Asp Glu Ser Lys Ser Leu 325 330 Val Ser Asn Pro Tyr Val Gln Lys Ser Asp Trp Gly Trp Gln Ile Asp 340 345 Pro Val Gly Leu Arg Tyr Ser Leu Asn Trp Phe Trp Asp His Tyr Gln 355 360 Leu Pro Leu Phe Ile Val Glu Asn Gly Phe Gly Ala Ile Asp Val Gln 375 380 Glu Ser Asp Gly Thr Val Asn Asp Gln Tyr Arg Ile Asp Tyr Leu Ser 390 395 Ala His Ile Arg Glu Met Lys Lys Ala Val Val Glu Asp Gly Val Asp 405 410 Leu Met Gly Tyr Thr Pro Trp Gly Cys Ile Asp Leu Val Ser Ala Gly 420 425 Thr Gly Glu Met Lys Lys Arg Tyr Gly Phe Ile Phe Val Asp Lys Asp 440 445 Asn Glu Gly Asn Gly Thr Leu Asn Arg Ser Lys Lys Lys Ser Phe Asp 455 460 Trp Tyr Lys Gln Val Ile Ala Ser Asn Gly Glu Gln Leu 470

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<210> 10068
<211> 297
<212> PRT
<213> Enterobacter cloacae
<400> 10068
Asn Arg Ser Gln Ser Ile Arg Cys Ser Asp Ile Asn Leu Ile Arg Leu
           5
                               10
Val Ala Glu Arg Asp Ala Met Glu Ile Lys Leu His Ala Asn Ala Thr
        20
                   25
Thr Thr Pro Arg Ile Arg Arg Tyr Leu Gln Gln Ser Asp Lys Ser Asp
                        40
                                          45
Arg Glu Leu Ala Val Glu Leu Gly Ile Ser Val Thr Thr Val Arg Arg
                     55
Trp Arg Asn Arg Asp Gln Val Ser Asp Asn His Thr Thr Pro Lys Val
                 70
                                 75
Ile His Lys Ala Leu Arg Gln Glu Gln Ala Ala Leu Ile Asn Ala Leu
              85
                              90
Arg Asp Ile Thr Gly Ala Pro Leu Asp Glu Leu Leu Leu Leu Val Asn
          100
                          105
Asp Gly Leu Gly Ile Ala Val Ser Arg Ala Thr Leu Asn Arg Tyr Leu
      115
                        120
                                           125
Lys Pro Ala Ser Val Arg Gln Lys Gly Ala Ser Leu Gln Gly Lys Lys
                     135
                                       140
Ala Leu Lys Ala Gly Ile Met Pro Gln Lys Leu Leu His His Gln
                                   155
145
                 150
                                                      160
Pro Leu Ser Leu His Met Asp Asp Gly Gly Glu Gln His Leu Leu Trp
              165
                                170
Ala Arg Glu Pro Val Ser Gly Trp Cys Tyr Ala Arg Leu Tyr Ala Gly
         180
                          185
                                             190
Val Ser Pro Gln Leu Leu Thr Arg Trp Thr Asn Glu Val Leu Ala Ala
       195 200
                              205
Cys Pro Ala Asp Ile Gln Ser Val Glu Thr Phe Gly Leu Ala Val Asn
                    215
                                       220
Leu Pro Glu His Asn Val Thr Val Lys Val His Ser Gln Tyr Tyr Leu
225
                  230
                                    235
Ala Leu Gln Val Thr Val Pro Leu Arg Glu Ile Ile Pro Arg Val Asn
                                250
              245
Ser Glu Pro Ala Gly Ala Leu Leu Ile Gln Leu Cys Glu Phe Tyr Asn
                            265
          260
Arg Gly Lys Ala Gln Lys Lys Leu Gly Glu Arg Thr Pro Gln Ala Phe
                        280
Leu Lys Ala Leu Arg Arg Asn Asp
   290
                     295
<210> 10069
<211> 302
<212> PRT
<213> Enterobacter cloacae
<400> 10069
Gly Ser Cys Ser His Arg Gly Trp Leu Met Phe Thr Gly Ser Ile Val
                                10
Ala Leu Val Thr Pro Met Asp Glu Lys Gly Asn Val Cys Arg Ser Ser
                             25
Met Lys Lys Leu Ile Asp Tyr His Val Ala Asn Gly Thr Ser Ala Ile
                        40
     35
                                           45
Val Ser Val Gly Thr Thr Gly Glu Ser Ala Thr Leu Ser His Glu Glu
                     55
His Gly Asp Val Val Met Leu Thr Leu Glu Leu Ala Asp Gly Arg Ile
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Pro Val Ile Ala Gly Thr Gly Ala Asn Ala Thr Ala Glu Ala Ile Ser
          85
                         90
Leu Thr Gln Arg Phe Asn Asp Ser Gly Ile Val Gly Cys Leu Thr Val
       100 105
                           110
Thr Pro Tyr Tyr Asn Arg Pro Thr Gln Glu Gly Leu Phe Gln His Phe
 115 120 125
Lys Ala Ile Ala Glu His Thr Asp Leu Pro Gln Ile Leu Tyr Asn Val
130 135 140
Pro Ser Arg Thr Gly Cys Asp Met Leu Pro Glu Thr Val Gly Arg Leu
145 150 155
Ser Lys Val Lys Asn Ile Ile Gly Ile Lys Glu Ala Thr Gly Asn Leu
         165 170 175
Ser Arg Val His Gln Ile Lys Glu Leu Val Ser Asp Asp Phe Ile Leu
        180 185 190
Leu Ser Gly Asp Asp Ala Thr Ala Leu Asp Phe Met Gln Leu Gly Gly
                  200 205
Asn Gly Val Ile Ser Val Thr Ala Asn Val Ala Ala Arg Asp Met Ala
 210
      215
                               220
Asp Met Cys Lys Leu Ala Ala Ala Gly His Phe Asp Glu Ala Arg Val
225 230
                            235
Ile Asn Gln Arg Leu Met Pro Leu His Asn Lys Leu Phe Val Glu Pro
           245 250
Asn Pro Ile Pro Val Lys Trp Ala Cys Lys Glu Leu Gly Leu Val Ala
        260
                    265
Thr Asp Thr Leu Arg Leu Pro Met Thr Pro Ile Thr Asp His Gly Arg
275 280
Glu Ile Val Ala Gly Ala Leu Lys His Ala Gly Leu Leu
                 295
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<211> 97 <212> PRT <213> Enterobacter cloacae

<210> 10070

<400> 10070 Ser Trp Arg Leu Gly Leu Ile Arg Thr Pro Cys Arg Gly Phe Arg Arg 10 Arg Ala Ser Thr Pro Thr Thr Gly Gly Ala Ser Arg Pro Pro Trp Arg 25 Ala Val Ile Ala Thr Arg Pro Arg Ile Arg Arg Phe Leu Leu Ala Val 35 40 45 Met Arg Tyr Ala Val Arg Ile Trp Trp Ser Pro Arg Trp Arg Lys Gly 60 Ala Met Pro Arg Arg Gly Ser Trp Thr Gly Leu Ala Cys Arg Arg Ala 65 70 75 80 Thr Cys Ile Asn Ala Asp Gly Arg Gln Ser Gly Leu His Gly Val Val 85 90

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<210> 10071
<211> 207
<212> PRT
<213> Enterobacter cloacae
<400> 10071
Thr Asp Ser Phe Cys Arg Gly A
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Thr Asp Ser Phe Cys Arg Gly Ala Arg Met Ser Pro Asn Ile Ser Val 1 5 0 15 Ile Lys Asp Lys Ile Leu Ser Glu Asn Tyr Phe Val Leu Arg Asn Ile 20 25 30

```
Thr Tyr Asp Leu Thr Arg Lys Asn Gly Asp Val Ile Arg His Lys Arg
Glu Val Tyr Asp Arg Gly Asn Gly Ala Thr Ile Leu Leu Tyr Asn Arg
                                        60
Glu Lys Gln Ser Val Val Leu Ile Arg Gln Phe Arg Ile Ala Thr Trp
                  70
                                    75
Val Asn Gly Asn Ala Asp Gly Arg Leu Ile Glu Thr Cys Ala Gly Leu
             85
                                90
Leu Asp Asp Asp Glu Pro Glu Val Cys Ile Arg Lys Glu Ala Ile Glu
          100
                            105 110
Glu Thr Gly Phe Glu Val Gly Thr Val Gln Lys Val Phe Glu Leu Phe
      115 120
Met Ser Pro Gly Gly Val Thr Glu Leu Ile His Phe Phe Ile Ala Glu
 130 135 140
Tyr Thr Asp Ala Gln Arg Thr His Arg Gly Gly Gly Val Asp Asp Glu
                 150
                                   155
Asp Ile Glu Val Leu Glu Met Pro Phe Ala Lys Ala Val Asp Met Val
              165 170
Lys Arg Gly Glu Ile Arg Asp Gly Lys Ala Val Ile Leu Leu Gln Tyr
          180 185 190
Leu Gln Thr Ser Gly Leu Met Asn Ala Ala Ala Glu Ala Arg
                         200
<210> 10072
<211> 152
<212> PRT
<213> Enterobacter cloacae
<400> 10072
Ser Lys Met Lys Ser Thr Glu Phe His Pro Gly Asp Tyr Asp Val His
                               10
Gly Arg Leu Arg Leu Pro Phe Leu Phe Trp Cys Val Leu Leu Gln
          20
                            2.5
                                               30
Ala Arg Thr Trp Val Leu Phe Val Met Ala Gly Ala Ser Arg Gly Gln
                        40
                                           45
Gly Asp Thr Leu Leu Asn Leu Phe Tyr Pro Asp His Asp Ala Phe Trp
                     55
Leu Gly Leu Leu Pro Gly Val Pro Ala Val Leu Ala Phe Leu Cys Ser
                 70
                                    7.5
Gly Arg Arg Gln Phe Leu Pro Arg Phe Trp Arg Ala Leu Arg Trp Leu
             8.5
                                90
Leu Ile Leu Ala Gln Val Val Leu Leu Val Trp Gln Pro Val Leu Trp
                            105
          100
                                              110
Leu Tyr Gly Glu Pro Leu Ser Gly Ile Gly Ile Ala Leu Val Val Ala
                        120
       115
Asp Ile Val Ala Leu Leu Trp Leu Val Thr Asn Pro Arg Leu Arg Ala
                     135
                                       140
Cys Phe Met Gln Glu Ser Asp
145
<210> 10073
<211> 213
<212> PRT
<213> Enterobacter cloacae
<400> 10073
Asn Gly Thr Phe Cys Arg Tyr Cys Thr Pro Thr Ser Val Asp Leu Leu
                                10
Arg Lys Asp Val Ser Met Lys Ser Leu Arg Leu Leu Cys Ala Leu
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20 25 30 Pro Leu Ala Leu Thr Gly Cys Ser Thr Leu Ser Ser Ile Asn Trp Ser

40 Ala Ala Tyr Pro Trp Asn Trp Phe Gly Ser Ser Thr Glu Val Thr Glu 55 60 Gln Gly Val Gly Lys Ile Thr Ala Ser Thr Ala Leu Asp Gln Asp Ala 70 75 Ile Gln Asp Ala Ile Gly Ser Asp Tyr Arg Leu Arg Ser Gly Met Lys 85 90 Thr Glu Asn Gly Asn Ile Val Arg Tyr Phe Glu Ala Leu Lys Asp Asp 105 110 100 Lys Val Ala Met Val Ile Asn Gly Asp Lys Gly Thr Val Asn Arg Ile 120 125 Ala Val Met Asp Glu Glu Ile Pro Thr Ser Gly Gly Val Lys Val Gly 130 135 140 Thr Pro Phe Gly Glu Leu Tyr Gln Lys Ala Phe Gly His Cys Ala Ser 150 155 Val Pro Ser Glu Glu Ser Val Ala Val Glu Cys Lys Ala Asp Gly Ser 165 170 Gln His Ile Ser Tyr Val Phe Ser Gly Thr Trp Asn Gly Pro Glu Gly 180 185 190 Leu Met Pro Ser Asp Asp Thr Leu Lys Lys Trp Lys Val Ser Lys Ile 195 200 Ile Trp Lys Gln 210

<210> 10074 <211> 341 <212> PRT

<213> Enterobacter cloacae

<400> 10074 Gly Cys Ala Met Ala Val Thr Val Leu Lys Lys Gly Ser Leu Ala Leu Ala Gly Leu Leu Val Ala Gln Ala Gln Ala Thr Glu Leu Leu Asn 20 25 30 Ser Ser Tyr Asp Val Ser Arg Glu Leu Phe Ala Ala Leu Asn Pro Ala 40 4.5 Phe Glu Gln Gln Trp Ala Lys Glu Asn Asn Gly Asp Lys Leu Thr Ile 55 Lys Gln Ser His Ala Gly Ser Ser Lys Gln Ala Leu Ala Ile Leu Gln 70 75 Gly Leu Lys Ala Asp Val Val Thr Tyr Asn Gln Val Thr Asp Val Gln 85 90 Ile Leu His Asp Lys Gly Lys Leu Ile Pro Ala Asn Trp Gln Ser Arg 100 105 110 Leu Pro Asn Asn Ser Ser Pro Phe Tyr Ser Thr Met Gly Phe Leu Val 120 Arg Lys Gly Asn Pro Lys Asn Ile His Asp Trp Asn Asp Leu Val Arg 130 135 140 Ser Asp Val Lys Leu Ile Phe Pro Asn Pro Lys Thr Ser Gly Asn Ala 155 150 Arg Tyr Thr Tyr Leu Ala Ala Trp Gly Ala Ala Asp Lys Ala Asp Gly 170 165 Asn Asp Lys Ala Lys Thr Glu Gln Phe Met Thr Gln Phe Leu Lys Asn 185 190 Val Glu Val Phe Asp Thr Gly Gly Arg Gly Ala Thr Thr Thr Phe Ala 195 200 205 Glu Arg Gly Leu Gly Asp Val Leu Ile Ser Phe Glu Ser Glu Val Asn 220 210 215 Asn Ile Arg Lys Gln Tyr Glu Ala Gln Gly Phe Glu Val Val Ile Pro 230 235 Lys Thr Asn Ile Leu Ala Glu Phe Pro Val Ala Trp Val Asp Lys Asn

245 250 Val Lys Ala Asn Gly Thr Glu Lys Ala Ala Lys Ala Tyr Leu Asn Tyr 260 265 Leu Tyr Ser Pro Gln Ala Gln Thr Val Ile Thr Asp Tyr Tyr Tyr Arg 275 280 285 Val Asn Asn Pro Asp Val Met Ser Lys Leu Lys Asp Lys Phe Pro Gln 295 300 Thr Glu Leu Phe Arg Val Glu Asp His Phe Gly Ala Trp Pro Glu Val 305 310 315 320 Met Lys Thr His Phe Ala Ser Gly Gly Glu Leu Asp Lys Leu Leu Ala 325 330 Ala Gly Arg Lys 340

<210> 10075 <211> 307 <212> PRT

<213> Enterobacter cloacae

<400> 10075 Val Lys Ile Val Asn Thr Leu Glu His Thr Ile Gly Asn Thr Pro Leu 1.0 Val Lys Leu Gln Arg Met Gly Cys Asp Asn Gly Ser Glu Ile Trp Val 20 25 30 Lys Leu Glu Gly Asn Asn Pro Ala Gly Ser Val Lys Asp Arg Ala Ala 35 4.0 Leu Ser Met Ile Val Gln Ala Glu Lys Arg Gly Glu Ile Lys Pro Gly 55 60 5.0 Asp Val Leu Ile Glu Ala Thr Ser Gly Asn Thr Gly Ile Ala Leu Ala 7.0 Met Ile Ala Ala Leu Lys Gly Tyr Arg Met Lys Leu Leu Met Pro Asp 90 8.5 Asn Met Ser Gln Glu Arg Arg Ala Ala Met Arg Ala Tyr Gly Ala Glu 100 105 110 Leu Ile Leu Val Ser Lys Glu Gln Gly Met Glu Gly Ala Arg Asp Leu 120 125 115 Ala Leu Ala Met Ala Glu Arg Gly Glu Gly Lys Leu Leu Asp Gln Phe 135 140 Asn Asn Pro Asp Asn Pro Tyr Ala His Tyr Thr Thr Thr Gly Pro Glu 145 150 155 Ile Trp Gln Gln Thr Ala Gly Arg Ile Thr His Phe Val Ser Ser Met 165 170 175 Gly Thr Thr Gly Thr Ile Thr Gly Val Ser Arg Phe Leu Arg Glu Gln 180 185 190 Asp Lys Pro Val Thr Ile Val Gly Leu Gln Pro Glu Glu Gly Ser Ser 200 195 205 Ile Pro Gly Ile Arg Arg Trp Pro Ala Glu Tyr Met Pro Gly Ile Phe 215 220 Asn Ala Gln Leu Val Asp Gln Val Leu Asp Ile His Gln Arg Glu Ala 230 235 Glu Asn Thr Met Arg Glu Leu Ala Val Arg Glu Gly Ile Phe Cys Gly 245 250 Val Ser Ser Gly Gly Ala Val Ala Gly Ala Ile Arg Val Ala Glu Ser 260 265 Thr Pro Gly Ala Val Val Ala Ile Ile Cys Asp Arg Gly Asp Arg 275 280 285 Tyr Leu Ser Thr Gly Val Phe Gly Glu Glu Ser Tyr Ser Gln Gly Ala 295 300 290 Gly Ile 305

<210> 10076 <211> 241 <212> PRT

<213> Enterobacter cloacae

<400> 10076 Leu Met Tyr Val Lys Gln Asp Gly Tyr Gly Ala Ile Arg Lys Lys Arg 1.0 Tyr Asn Pro Ala Ile Phe Leu Arg Met Pro Pro Gln Arg Arg Lys Arg 25 3.0 Met Lys Ile Val Glu Val Lys His Pro Leu Val Lys His Lys Leu Gly 40 Leu Met Arg Glu His Asp Ile Ser Thr Lys Arg Phe Arg Glu Leu Ala 5.5 Ser Glu Val Gly Ser Leu Leu Thr Tyr Glu Ala Thr Ser Asp Leu Glu 70 75 Thr Glu Lys Val Thr Ile Glu Gly Trp Asn Gly Pro Val Gln Val Glu 90 8.5 Gln Ile Lys Gly Lys Lys Ile Thr Val Val Pro Ile Leu Arg Ala Gly 100 105 110 Leu Gly Met Met Glu Gly Val Leu Glu His Val Pro Ser Ala Arg Ile 120 125 Ser Val Val Gly Ile Tyr Arg Asn Glu Glu Thr Leu Glu Pro Val Pro 135 140 130 Tyr Phe Gln Lys Leu Val Ser Asn Ile Asp Glu Arg Met Ala Leu Val 150 155 Val Asp Pro Met Leu Ala Thr Gly Gly Ser Met Ile Ala Thr Ile Asp 165 170 175 Leu Leu Lys Lys Ala Gly Cys Ser Ser Ile Lys Val Leu Val Leu Val 185 190 180 Ala Ala Pro Glu Gly Ile Ala Ala Leu Glu Lys Ala His Pro Asp Val 195 200 205 Glu Leu Tyr Thr Ala Ser Val Asp Gln Gly Leu Asn Glu His Gly Tyr 210 215 220 Ile Ile Pro Gly Leu Gly Asp Ala Gly Asp Lys Ile Phe Gly Thr Lys

235

<210> 10077 <211> 371 <212> PRT

<213> Enterobacter cloacae

230

<400> 10077 Ile Gln Phe Thr Val Ser Leu Pro Pro Phe Asp Ser Gly Lys Gly Cys 10 Met Leu Glu Met Leu Met Gln Trp Tyr Arg Arg Arg Phe Ser Asp Pro 2.0 25 Glu Ala Ile Ala Leu Leu Val Ile Leu Val Ala Gly Phe Gly Ile Leu 35 40 4.5 Phe Phe Phe Ser Gly Leu Leu Ala Pro Leu Leu Val Ala Ile Val Leu 5.5 Ala Tyr Leu Leu Glu Trp Pro Thr Ala Arg Leu Glu His Ile Gly Cys 70 75 Ser Arg Arg Trp Ala Thr Ser Ile Val Leu Val Leu Phe Val Gly Ile 85 90 95 Leu Leu Leu Met Ser Phe Val Val Met Pro Ile Ala Trp Gln Gln Gly 100 105 Ile Tyr Leu Ile Arg Asp Met Pro Gly Met Leu Asn Lys Leu Ser Asp 120

```
Phe Ala Ala Thr Leu Pro Arq Arq Tyr Pro Ala Leu Met Asp Ala Gly
 130
         135
                                 140
Ile Ile Asp Ala Met Ala Glu Asn Met Arg Ala Arg Ile Met Thr Met
          150 155
Gly Asp Ser Val Val Lys Tyr Ser Leu Ala Ser Leu Val Gly Leu Leu
         165 170 175
Thr Leu Ala Val Tyr Leu Val Leu Val Pro Leu Met Val Phe Phe Leu
        180 185 190
Val Lys Asp Lys Glu Gln Met Leu Asn Ala Val Arg Arg Val Leu Pro
   195 200
                         205
Arg Asn Arg Gly Leu Ala Gly Gln Val Trp Gln Glu Met Asn Gln Gln
 210 215 220
Ile Thr Asn Tyr Ile Arg Gly Lys Val Leu Glu Met Ile Val Val Gly 225 230 235 240
Val Ala Thr Trp Ile Gly Phe Val Ile Phe Gly Leu Asn Tyr Ser Leu
           245
                           250 255
Leu Leu Ala Val Leu Val Gly Phe Ser Val Leu Ile Pro Tyr Ile Gly
         260 265 270
Ala Phe Val Val Thr Ile Pro Val Val Gly Val Ala Leu Phe Gln Phe
 275 280 285
Gly Leu Gly Thr Glu Phe Trp Ser Cys Phe Ala Val Tyr Leu Ile Ile
 290 295
                                 300
Gln Gly Leu Asp Gly Asn Leu Leu Val Pro Val Leu Phe Ser Glu Ala
305 310 315
Val Asn Leu His Pro Leu Val Ile Ile Leu Ser Val Val Ile Phe Gly
           325
                           330
Gly Leu Trp Gly Phe Trp Gly Val Phe Phe Ala Ile Pro Leu Ala Thr
         340 345 350
Leu Ile Lys Ala Val Val His Ala Trp Pro Asp Val Pro Ala Val Glu
                     360
Asp Lys
  370
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<210> 10078 <211> 348 <212> PRT

<213> Enterobacter cloacae

<400> 10078

Gly Asp Leu Met Ala Tyr Ser Val Gln Lys Ser Arg Leu Ala Lys Val 10 Ala Gly Val Ser Leu Val Met Leu Leu Ala Ala Cys Ser Ser Asp Ser 20 Arg Tyr Lys Arg Gln Val Ser Gly Asp Glu Ser Tyr Leu Asp Ala Pro 40 45 Pro Leu Ala Glu Leu His Ala Pro Ala Gly Met Ile Leu Pro Ile Gln 55 Asn Gly Asp Tyr Asn Ile Pro Val Thr Asn Gly Ser Gly Leu Val Gly 70 75 Lys Ala Leu Asp Ile Arg Pro Pro Ala Gln Pro Leu Ala Leu Val Ser 85 90 Gly Ala Arg Thr Gln Phe Thr Gly Asp Thr Ala Ser Leu Leu Val Glu 105 Ser Ala Arg Gly Thr Thr Leu Trp Pro Gln Val Val Ser Val Ile Gln 120 115 125 Ser Lys Asn Tyr Thr Ile Asp Lys Arg Asp Asp Ala Ser Gln Ala Leu 135 140 Thr Thr Asp Trp Ile Glu Trp Asn Arg Leu Asp Glu Asp Gln Gln Tyr 150 155 Arg Gly Arg Tyr Gln Val Ser Val Lys Pro Gln Gly Tyr Gln Gln Ala 170

Val Thr Val Lys Leu Leu Asn Leu Asp Gln Ala Gly Lys Pro Val Ala 185 180 Asp Pro Ser Ala Met Gln Arg Tyr Ser Thr Glu Met Leu Asn Val Ile 195 200 205 Ala Ala Gly Leu Asp Lys Asn Ala Thr Asp Ala Ala Asn Ala Ala Gln 210 215 220 Asn Arg Asn Gly Ser Thr Phe Asp Val Gln Ser Gly Ala Asp Asp Thr 230 235 240 Gly Leu Pro Met Leu Val Val Arg Ala Pro Phe Asn Gln Thr Trp Gln 245 250 255 Arg Leu Pro Ala Thr Leu Glu Lys Val Gly Met Lys Val Thr Asp Ser 260 265 270 Thr Arg Ser Thr Gly Ser Ile Thr Ala Thr Tyr Lys Pro Leu Ser Asp 275 280 285 Ser Ala Trp Gln Glu Leu Gly Ala Ser Asp Pro Gln Leu Pro Ser Gly 295 300 Asp Tyr Lys Ile Gln Val Gly Asp Leu Asp Asn Arg Ser Ser Leu Gln 310 315 Phe Ile Asp Pro Lys Gly His Thr Leu Thr Gln Ala Gln Asn Asp Ala 325 330 Leu Val Ala Ala Phe Gln Ala Ala Phe Ser Lys

345

<210> 10079 <211> 656

<212> PRT

<213> Enterobacter cloacae

340

<400> 10079 Tyr Leu Arg Gln Ser Tyr Val Met Leu Gly Phe Glu Gln Leu Val Asn 10 Gln Leu Gln Arg Thr Gly His Arg Arg Leu Val Val Leu Ser Gly Asp 20 25 Glu Ala Trp Thr Leu Ser Gln Val Thr His Leu Arg Asp Thr Leu Pro 40 45 35 Gly Asp Trp Leu Trp Leu Glu Glu Asn Pro Ser Lys Ala Ile Ser Gly 55 60 Leu Leu Gly Arg Glu Tyr Leu His Ala Val Phe Asp Ala Arg Asp Gly 70 75 Phe Asp Val Ser Ala Phe Ala Ala Leu Ser Gly Thr Leu Arg Ala Gly 90 85 Ser Leu Leu Val Leu Leu Val Pro Pro Phe Ser Val Trp Ala Asp Arg 105 110 100 Pro Asp Arg Asp Ser Leu Arg Trp Ser Asp Ser Ala Glu Pro Ile Ala 120 115 125 Thr Pro His Phe Val His His Phe Cys Arg Met Leu Ala Ala Asp Ser 135 140 Asp Ala Ile Val Trp His Gln His Arg Pro Leu Cys Leu Pro Val Ala 150 155 Pro Asp Leu Pro Ala Trp Gln Pro Ala Ser Gly Glu Pro Gln Arg Glu 170 165 Gln Ala Glu Ile Leu Asp Ala Leu Leu Thr Met Ser Ala Gly Val Ala 180 185 190 Ala Val Thr Ala Pro Arg Gly Arg Gly Lys Ser Ala Leu Ala Gly Met 195 200 Leu Leu Ser Gly Ile Gln Gly Ser Ala Val Val Thr Ala Pro Ala Lys 210 215 Gly Ala Thr Asp Val Ile Ala Arg Phe Ala Gly Glu Arg Phe His Phe 225 230 235 Met Ala Pro Asp Ala Leu Leu Ala Ser Thr Thr Glu Ala Asp Trp Leu 245 250 255

```
Ile Val Asp Glu Ala Ala Ala Ile Pro Gly Pro Leu Leu Glu Lys Leu
                        265
         260
Ala Ser Arg Phe Pro Arg Val Leu Leu Thr Thr Thr Val Gln Gly Tyr
                       280
                                       285
     275
Glu Gly Thr Gly Arg Gly Phe Leu Leu Lys Phe Cys Ala Arg Phe Ser
  290 295 300
Gly Leu Arg Arg Tyr Thr Leu Ser Thr Pro Val Arg Trp Ala Thr Gly
              310 315
Cys Pro Leu Glu Arg Ile Val Ala Asn Ala Leu Leu Phe Asp Asp Ala
             325 330 335
Leu Ile Asp Arg Lys Pro Ala Gly Glu Val Arg Leu Thr Ser Leu Glu
               345 350
Pro Gly Ile Trp Glu Ser Asp Pro Ala Arg Gly Ala Gly Val Tyr Glu
      355
                       360
                            365
Leu Leu Cys Ala Ala His Tyr Arg Thr Ser Pro Leu Asp Leu Arg Arg
  370
                    375
                                     380
Met Met Asp Ala Pro Gly Gln His Phe Ala Val Ala Gln Ala Gly Ala 385 390 395 400
Glu Ile Ala Gly Ala Leu Trp Leu Val Glu Glu Gly Gly Leu Pro Pro
                              410 415
             405
Glu Leu Ser Arg Ala Val Trp Ala Gly Phe Arg Arg Pro Arg Gly Asn
          420
                           425 430
Leu Val Ala Gln Ser Leu Ala Ala His Gly Gly Ser Pro Leu Ala Ala
                        440
                                         445
      435
Thr Leu Lys Gly Arg Arg Val Ser Arg Ile Ala Val His Pro His Arg
 450
                    455
                                     460
Gln Arg Glu Gly Ile Gly Gln Arg Leu Ile Arg Ser Ala Ser Gly Glu
                                  475
                 470
Asp Tyr Leu Ser Val Ser Phe Gly Tyr Thr Asp Glu Leu Trp Arg Phe
                               490
                                               495
             485
Trp Arg Gln Cys Gly Phe Val Leu Val Arg Met Gly Ser His Arg Glu
         500
                           505
                                            510
Ala Ser Ser Gly Cys Tyr Thr Ala Met Ala Leu Leu Pro Leu Ser Glu
                        520
                                         525
Ala Glv His Gln Leu Cys Glu Gln Ala His Gln Arg Leu Cys Arg Asp
                    535
                                     540
 530
Met Arg Val Leu Ser Ala Trp Asn Gly Glu Lys Ile Pro Val Thr Asp
545
                 550
                                  555
Ala Trp Glu Ala Thr Leu Asn Ser Asp Asp Trp Leu Glu Leu Ala Gly
              565
                              570
Phe Ala Phe Ala His Arg Ala Phe Ser Thr Ser Val Ala Ala Leu Thr
                           585
                                             590
Arg Leu Val Leu Ala Val Asp Ile Pro Leu Pro Ala Leu Arg Gly Lys
      595
                        600
                                         605
Met Glu Gly Asn Thr His Asp Phe Gly Arg Lys Ala Leu Leu Ala Lys
                                      620
                    615
Leu Arg Glu Glu Thr Ala His Ala Leu Glu Arg Leu Asp Tyr Ser Arg
                 630
                        635
Ser Gln Gln Leu Lys Ala Asp Ile Leu Gln Trp Gln Phe Phe Gln
              645
```

<210> 10080 <211> 378

<212> PRT <213> Enterobacter cloacae

<400> 10080

Ile Tyr Pro Ile Asn Pro Ile Glu Pro Ala Arg Pro Gly His Glu Asp 1 5 10 15 Thr Pro Gln Ile Asp Leu Phe Val Ser Gly Ala Val Pro Phe Met Arg 20 25 30

```
Tyr Cys Val Phe Leu Leu Phe Phe Ile Cys Val Leu Pro Ala Pro Arg
     3.5
                      40
Val Trp Ala Ala Pro Ala Gln Gln Ser Phe Ser Asp Trp Gln Val Thr
                  55
Cys Asn Asn Gln Asn Phe Cys Val Ala Arg Asn Thr Gly Glu His Arg
    70
                                75
Gly Leu Val Met Ser Leu Ser Arg Ser Ala Gly Ala Lys Thr Asp Ala
       85 90
Ser Leu Arg Ile Asp Leu Gly Gly Leu Ser Ala Pro Pro Val Lys Glu
         100 105 110
Pro Asp Ile Ala Pro Arg Leu Leu Leu Asp Asn Val Pro Leu Lys Leu
    115 120 125
Thr Ser Gln His Trp Gln Leu Thr Pro Trp His Leu Lys Thr Asp Asp
 130 135 140
Thr Gly Thr Ile Thr Thr Phe Leu Lys Thr Ile Gln Glu Gly Gln Ala
               150
                                155
Leu Thr Leu Arg Gly Gly Lys Gln Thr Ile Ser Leu Ala Gly Leu Lys
            165
                            170
Ala Ala Leu Leu Phe Ile Asp Ala Gln Gln Lys Arg Val Gly Ser Glu
        180 185 190
Thr Ala Trp Ile Lys Lys Gly Asp Ser Pro Pro Leu Ser Val Pro Pro
      195
                      200
                          205
Ala Pro Ala Leu Lys Lys Val Ala Val Val Asn Pro Thr Pro Thr Pro
                                   220
 210
                   215
Leu Thr His Asn Glu Leu Asn Asp Leu Leu Asp Tyr Gly Asn Trp Arg
                                235
               2.30
Met Asn His Ser Gln Cys Ser Leu Asp Pro Asn Arg Arg Glu Val Arg
                             250
             245
Val Thr Ala Leu Thr Asp Asp Lys Ala Leu Met Ile Ile Ser Cys Glu
                                          270
                         265
          260
Ala Gly Ala Tyr Asn Thr Val Asp Leu Ala Trp Leu Val Ser Arg Lys
                      280
                                       285
      275
Lys Pro Phe Ala Ala Arg Ser Val Arg Leu Arg Leu Pro Phe Thr Pro
                   295
                                    300
Ser Ser Gln Ser Ser Asp Met Glu Leu Met Asn Ala Ser Phe Asp Glu
                                315
                310
Lys Lys Arg Glu Leu Thr Thr Leu Ala Leu Gly Arg Gly Ile Gly Asp
             325
                             330
                                              335
Cys Gly Ile Gln Thr Arg Trp Arg Phe Asn Gly Gln Arg Phe Arg Leu
          340
                         345
Val Arg Tyr Ala Glu Glu Pro Ser Cys Asp Asn Trp Asn Gly Pro Asp
     355
                       360
Ala Trp Pro Thr Leu Trp Ile Thr Arg
```

370 <210> 10081 <211> 306 <212> PRT

<213> Enterobacter cloacae

<400> 10081

His Ser Ala Lys Ser Leu Trp Ser Thr Cys Gly Arg Ser Leu Met Ala 1 5 10 15 15 16 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 1

375

```
Trp Leu Thr Val Met Ile Ala Leu Ile Thr Val Pro Val Asn Leu Val
          8.5
                90
Phe Gly Val Leu Leu Ala Trp Leu Val Thr Arg Phe Asn Phe Pro Gly
       100 105 110
Arg Gln Leu Leu Thr Leu Leu Asp Ile Pro Phe Ala Val Ser Pro
 115 120 125
Val Val Ala Gly Leu Val Tyr Leu Leu Phe Tyr Gly Ser Asn Gly Pro
 130 135 140
Leu Gly Gly Trp Leu Asp Glu His Asp Leu Gln Ile Met Phe Ala Trp
145 150 155 160
Pro Gly Met Val Leu Val Thr Val Phe Val Thr Cys Pro Phe Val Val
      165 170 175
Arg Glu Leu Val Pro Val Met Leu Ser Gln Gly Ser His Glu Asp Glu
       180 185
Ala Ala Val Leu Leu Gly Ala Ser Gly Trp Gln Met Phe Arg Arg Val
                   200 205
Thr Leu Pro Asn Ile Arg Trp Ala Leu Leu Tyr Gly Val Val Leu Thr
 210 215 220
Asn Ala Arg Ala Ile Gly Glu Phe Gly Ala Val Ser Val Val Ser Gly
              230 235
Ser Ile Arg Gly Glu Thr Leu Ser Leu Pro Leu Gln Ile Glu Leu Leu
          245 250 255
Glu Gln Asp Tyr Asn Thr Val Gly Ser Phe Thr Ala Ala Ala Leu Leu
       260
                      265
                                     270
Thr Leu Met Ala Ile Leu Thr Leu Phe Leu Lys Ser Val Val Gln Trp
                         285
275 280
Arg Leu Glu Asn Gln Glu Lys Arg Gln His Gln Glu Gly Asn His Glu
                295
                               300
```

His 305

<210> 10082 <211> 152

<212> PRT

<213> Enterobacter cloacae

<400> 10082

Arg Ser Ala Trp Met Val Glu Thr Pro Ala Ala Gly Thr Ile Gly Val 1.0 His Leu Ala Lys Glu Val Asp Phe Phe Ser Ile Gly Thr Asn Asp Leu 20 25 Thr Gln Tyr Thr Leu Ala Val Asp Gly Gly Asn Asp Met Ile Ser His 40 35 45 Leu Tyr Gln Pro Met Ser Pro Ser Val Leu Asn Leu Ile Lys Gln Val 5.5 Ile Asp Ala Ser His Ala Glu Gly Lys Trp Thr Gly Met Cys Gly Glu 70 7.5 Leu Ala Gly Asp Glu Arg Ala Thr Leu Leu Leu Gly Met Gly Leu 85 90 95 Asp Glu Phe Ser Met Ser Ala Ile Ser Ile Pro Arg Ile Lys Lys Ile 105 100 Ile Arg Asn Thr Asn Phe Glu Asp Ala Lys Val Leu Ala Glu Gln Ala 115 120 125 Leu Ala Gln Pro Thr Thr Asp Glu Leu Met Thr Leu Val Asn Lys Phe 135 Ile Glu Glu Lys Thr Ile Cys

<210> 10083 <211> 129 <212> PRT

<213> Enterobacter cloacae

```
<400> 10083
Leu Asn Arg Leu Ala Val Pro Arg Gln Arg Val Gln Pro Cys Ala Ala
                                10
Leu Ser Ala Leu Phe Asn Gln Leu Ile Gln His Gly Trp Gly Gly Glu
        20
                           25
                                               30
Arg Lys His Leu Cys Arg Ala Val Phe Asn Ala Gly Arg Ala Leu Arg
      35
                       40
                                          45
Pro Phe Gln Ala Glu Val Ala Phe Val Arg Arg Gly Leu Tyr Ala Val
                     55
                                       60
Val Phe Gln Arg Gly Asp Gln His Val His Arg Ala Lys Arg Thr Gly
                 7.0
                                 7.5
His His Ala Gly Phe Thr Ala Asn Ala Phe Leu Leu Ile Asp Leu Tvr
                   90
Ala Val Ala Val Leu Arg Asp Gly Ser Val Arg Ala Ala Leu Arg Ala
         100 105
Gly Arg Ile Phe Thr Val Val Ala Gly His Gly Ala Phe Ser Gln Ala
       115
                         1.20
```

<210> 10084 <211> 197 <212> PRT

<213> Enterobacter cloacae

<400> 1.0084 Pro Arg Lys Gly Arg Thr Gly Leu Thr Thr Ser Ser Gln His Tyr Leu 1.0 Val Ile Thr Ala Leu Gly Ala Asp Arg Pro Gly Ile Val Asn Thr Ile 20 25 30 Thr Arg His Val Ser Ser Cys Gly Cys Asn Ile Glu Asp Ser Arg Leu 3.5 40 45 Ala Met Leu Gly Glu Glu Phe Thr Phe Ile Met Leu Leu Ser Gly Thr 50 55 60 Trp Asn Ala Ile Thr Leu Ile Glu Ser Thr Leu Pro Leu Lys Gly Ala 70 75 Glu Leu Asp Leu Leu Ile Val Met Lys Arg Thr Thr Ala Arg Pro Arg 90 85 Pro Ala Leu Pro Ala Thr Val Trp Val Gln Val Glu Val Pro Asp Ser 100 105 110 Pro His Leu Ile Glu Arg Phe Thr Ala Leu Phe Asp Ser His Gln Met 115 120 125 Asn Ile Ala Glu Leu Val Ser Arg Thr Gln Pro Gly Asp Glu Asn Ala 130 135 140 Ile Pro Thr Leu Phe Ile Gln Ile Thr Ala His Ser Pro Ala Ser Gln 150 155 145 Asp Ala Ser Asn Ile Glu Gln Ala Phe Lys Ala Leu Cys Thr Glu Leu 165 170 His Ala Gln Gly Ser Ile Ser Val Val Asp Tyr Ser Gln His Glu Gln 180 185 Asp Gly Val Glu

<210> 10085

195

<211> 154 <212> PRT

<213> Enterobacter cloacae

<400> 10085

Ser Leu Ala Ala Cys Asn Arg Pro Ala Thr Met Arg Glu Ser Thr Ser 10 Cys Ala Ala Cys Asn Asn Ala Leu Ser Arg Thr Arg Arg Cys Asn Lys 20 25 Gly Glu Val Met Thr Asp Ala Val Lys Ile Tyr His Asn Pro Arg Cys 35 40 Ser Lys Ser Arg Glu Thr Leu Asn Leu Leu Lys Ser Asn Gly Ile Asp 55 60 Pro Glu Val Val Leu Tyr Leu Glu Thr Pro Pro Asp Ala Gln Thr Ile 70 7.5 Arg Gln Leu Leu Lys Met Leu Asn Met Gly Ser Ala Arg Asp Leu Met 85 90 Arg Gln Lys Glu Asp Leu Tyr Lys Ser Leu Asn Leu Asn Asp Thr Ser 100 105 110 Leu Thr Glu Asp Arg Leu Ile Gln Ala Met Val Asp Asn Pro Lys Leu 115 120 125 Ile Glu Arg Pro Ile Val Val Ala Asn Gly Lys Ala Arg Ile Gly Arg 130 135 Pro Pro Glu Asp Val Leu Gly Ile Val

150

<210> 10086 <211> 232 <212> PRT

<213> Enterobacter cloacae

<400> 10086 Met Lys Asn Ile Val Val Leu Ile Ser Gly Asn Gly Ser Asn Leu Gln 10 Ala Ile Ile Asp Ala Cys Lys Gln Lys Lys Ile Asn Gly Thr Ile Arg 20 25 Ala Val Phe Ser Asn Lys Ala Asp Ala Phe Gly Leu Glu Arg Ala Arg 4.0 35 4.5 Glu Ala Asn Ile Pro Ala His Ala Leu Glu Ala Ser Gln Phe Ala Gly 55 Arg Glu Ala Phe Asp Arg Glu Leu Val Gln Glu Ile Asp Ala Tyr Ala 75 70 Pro Asp Val Val Leu Ala Gly Tyr Met Arg Ile Leu Ser Pro Ala 85 90 Phe Val Ala His Tyr Ala Gly Arg Leu Leu Asn Ile His Pro Ser Leu 100 105 110 Leu Pro Lys Tyr Pro Gly Leu His Thr His Arg Gln Val Leu Glu Asn 125 120 Gly Asp Glu Glu His Gly Thr Ser Val His Phe Val Thr Asp Glu Leu 130 135 140 Asp Gly Gly Pro Val Ile Leu Gln Ala Lys Val Pro Val Phe Asp Gly 150 155 Asp Asn Glu Asp Asp Val Thr Glu Arg Val Gln Ala Gln Glu His Ala 165 170 Ile Tyr Pro Leu Val Val Ser Trp Phe Val Asp Gly Arg Leu Glu Met 180 185 190 Arg Asp Gly Ala Ala Trp Leu Asp Gly Val Lys Leu Pro Pro Gln Gly 195 200 Tyr Ala Ala Glu Gly Val Val Cys Leu Asn Cys Pro Ala Ala Leu Arg 215 Leu His Gly Pro Thr Val Pro

<210> 10087 <211> 179 <212> PRT

<213> Enterobacter cloacae

```
<400> 10087
Leu Phe Thr Ser Ala Val Pro Lys Arg Thr Arg Phe Thr Ala Thr Gln
                              10
            - 5
Asp Arg Lys Met Leu Asp Tyr Arg Phe Pro Thr Ala Leu Gln Met Val
        20
                        25
                                     30
Leu Ser Val Ala Met Ala Glu Gln Ser Gly Glu Arg Ser Thr Ser Ala
                            4.5
 35
            40
Ile Leu Ala Tyr Gly Leu Glu Ala Asn Pro Ser Phe Ile Arg Lys Leu
                 55
                        60
Met Val Pro Leu Ala Arg Asp Gly Ile Ile Val Ser Thr Leu Gly Arg
                7.0
                                 7.5
Asn Gly Ser Ile His Leu Gly Arg Pro Ala Glu Glu Ile Thr Leu Arg
                              90
             85
Asp Ile Tyr Leu Ser Val Thr Glu Asp Lys Lys Leu Trp Ala Ser Arg
          100 105 110
Pro Asp Val Pro Ala Arg Cys Val Val Ser Ala Asn Ala Cys Trp Tyr
      115
                       120
                            125
Phe Lys Ser Ile Ala Asp Glu Ala Glu Gln Ala Ser Leu Ala Val Leu
 130
                 135
                                     140
Ala Arg His Thr Val Ala Ser Ala Leu Glu Glu Val Lys Lys Ala Asp
              150
                                 155
                                                   160
Thr Ser Gly Cys Asp Pro Val Pro Glu Leu Cys Thr Gln His Lys Lys
             165
                              170
                                                175
Ala Pro
<210> 10088
<211> 173
<212> PRT
<213> Enterobacter cloacae
<400> 10088
                              10
          20
                           25
                                            3.0
```

Glu Lys Ile Met Gly Leu Phe Asp Lys Leu Lys Ser Leu Val Ser Asp Asp Lys Lys Asp Ser Gly Thr Ile Glu Ile Val Ala Pro Leu Ser Gly Glu Ile Val Asn Ile Glu Asp Val Pro Asp Val Val Phe Ala Glu Lys 35 4.0 Ile Val Gly Asp Gly Ile Ala Ile Lys Pro Thr Gly Asn Lys Met Val 55 60 Ala Pro Val Asp Gly Thr Ile Gly Lys Ile Phe Glu Thr Asn His Ala 70 75 Phe Ser Ile Glu Ser Asp Ser Gly Ile Glu Leu Phe Val His Phe Gly 85 90 9.5 Ile Asp Thr Val Glu Leu Lys Gly Glu Gly Phe Lys Arg Ile Ala Glu 100 105 Glu Gly Gln Arg Val Lys Val Gly Asp Pro Val Ile Glu Phe Asp Leu 120 115 125 Pro Leu Leu Glu Glu Lys Ala Lys Ser Thr Leu Thr Pro Val Val Ile 135 140 Ser Asn Met Asp Glu Ile Lys Glu Leu Ile Lys Leu Ser Gly Ser Val 150 155 Thr Val Gly Glu Thr Pro Val Ile Arg Ile Lys Lys 165

<210> 10089 <211> 309

<211> 309 <212> PRT

<213> Enterobacter cloacae

```
<400> 10089
Ser Lys Ser Ala Leu Gln Glu Thr Leu Met Lys Pro Asn Ala Gln Leu
                           10
Val Lys Thr Phe Leu Met Gln Leu Gln Asp Ala Ile Cys Gln Lys Leu
      20
                        25
Ser Ala Ala Asp Gly Gly Glu Phe Gln Glu Asp Ala Trp Gln Arg Glu
     35
                     40
                          4.5
Ala Gly Gly Gly Arg Ser Arg Val Leu Arg Asn Gly Gly Ile Phe
 50
                55
                                  60
Glu Gln Ala Gly Val Asn Phe Ser His Val His Gly Asp Ala Met Pro
               70
                               75
Ala Ser Ala Thr Ala His Arg Pro Glu Leu Ala Gly Arg Ser Phe Glu
            85
                           90
Ala Met Gly Val Ser Leu Val Ala His Pro His Asn Pro Phe Val Pro
        100
                        105
Thr Ser His Ala Asn Val Arg Phe Phe Ile Ala Glu Lys Pro Gly Ala
      115
                      120 125
Asp Pro Val Trp Trp Phe Gly Gly Gly Phe Asp Leu Thr Pro Tyr Tyr
                      140
 130
       135
Gly Phe Glu Glu Asp Ala Val His Trp His Thr Thr Ala Arg Asp Leu
              150 155
Cys Leu Pro Phe Gly Glu Asp Val Tyr Pro Lys Tyr Lys Lys Trp Cys
           165
                           170
Asp Asp Tyr Phe Tyr Leu Lys His Arg Asp Glu Gln Arg Gly Ile Gly
                        185 190
         180
Gly Leu Phe Phe Asp Asp Leu Asn Thr Pro Asp Phe Asp Thr Ala Phe
      195
                     200
                         205
Ser Phe Met Arg Ala Val Gly Glu Gly Phe Thr Asp Ala Tyr Leu Pro
 210
                  215
                                  220
Ile Val Glu Arg Arg Lys Asn Thr Asp Tyr Gly Val Arg Glu Arg Glu
               230
                               235
Phe Gln Leu Tyr Arg Arg Gly Arg Tyr Val Glu Phe Asn Leu Val Trp
                            250 255
            245
Asp Arg Gly Thr Leu Phe Gly Leu Gln Thr Gly Gly Arg Thr Glu Ser
         260
                        265
                                        270
Ile Leu Met Ser Met Pro Pro Leu Val Arg Trp Glu Tyr Ser Tyr Ala
                     280
     275
                          285
Pro Lys Glu Gly Ser Pro Glu Ala Ala Leu Ser Glu Phe Ile Arg Val
 290
                  295
Arg Asp Trp Val
```

<210> 10090 <211> 325 <212> PRT

305

<213> Enterobacter cloacae

<400> 10090

Leu Phe Tyr Phe Gln Gly Val Ile Met Asn Gln Leu Asp Gly Ile Lys
1 5 1 0 1 5
Gln Phe Thr Thr Val Val Ala Asp Ser Gly Asp Ile Glu Ser Ile Arg
20 25
His Tyr Gln Pro Glu Asp Ala Thr Thr Asn Pro Ser Leu Leu Leu Lys
35 40
Ala Ala Gly Leu Ala His Phe Ser His Leu Ile Asp Asp Ala Leu Ala
50
Tyr Gly Lys Gln Arg Gly Gln Thr Glu Gln Gln Val Ala Glu Ala
65 70 75 80
Ser Asp Lys Leu Ala Val Asn Ile Gly Ala Glu Ile Leu Lys Ser Ile
50
Ser Asp Lys Leu Ala Val Asn Ile Gly Ala Glu Ile Leu Lys
51
52
53
54
55
56
57
58
58
58

Pro Gly Arg Val Ser Thr Glu Val Asp Ala Arg Leu Ser Phe Asp Gln 100 105 Glu Lys Ser Ile Asn Lys Ala Arg Arg Leu Val Glu Leu Tyr Gln Glu 115 120 125 Gln Gly Ile Asp Lys Ser Arg Ile Leu Ile Lys Leu Ala Ser Thr Trp 130 135 140 Glu Gly Ile Arg Ala Ala Glu Val Leu Glu Lys Asp Gly Ile His Cys 150 155 160 Asn Leu Thr Leu Leu Phe Ser Phe Ala Gln Ala Arg Ala Cys Ala Glu 165 170 175 Ala Gly Val Phe Leu Ile Ser Pro Phe Val Gly Arg Ile Tyr Asp Trp 180 185 190 Tyr Gln Ala Lys Gln Pro Met Asp Pro Tyr Val Val Glu Glu Asp Pro 195 200 205 Gly Val Lys Ser Val Arg Asn Ile Tyr Asp Tyr Tyr Lys Gln His Arg 210 215 220 Tyr Glu Thr Ile Val Met Gly Ala Ser Phe Arg Arg Thr Glu Gln Ile 230 235 225 Leu Ala Leu Ala Gly Cys Asp Arg Leu Thr Ile Ser Pro Glu Leu Leu 245 250 255 Lys Lys Leu Gln Glu Ser Glu Glu Thr Val Ile Arg Lys Leu Val Pro 265 270 260 Thr Ser Thr Val Leu Pro Lys Pro Lys Pro Met Thr Glu Ala Glu Phe 275 280 285 Arg Trp Glu His Asn Gln Asp Pro Met Ala Val Glu Lys Leu Ala Asp 295 300 290 Gly Ile Arg Gln Phe Ala Val Asp Gln Arg Lys Leu Glu Asp Leu Leu 315 305 310 Ala Ala Lys Leu

<210> 10091 <211> 128

<212> PRT

<213> Enterobacter cloacae

<400> 10091 Ile His Lys Arg Thr Lys Gly Phe Thr Met Val Val Met Tyr Gly Ile 15 10 Lys Asn Cys Asp Thr Ile Lys Lys Ala Arg Arg Trp Leu Glu Ala His Asn Ile Asp Tyr Arg Phe His Asp Tyr Arg Ala Asp Gly Leu Asp Pro 35 40 Ala Phe Leu His Ser Ala Ile Asn Glu Leu Gly Trp Glu Ala Leu Leu 55 60 Asn Thr Arg Gly Thr Thr Trp Arg Lys Leu Asp Glu Ser Leu Arg Ala 75 Thr Ile Asn Asp Ala Asp Ser Ala Ala Lys Leu Met Leu Glu Met Pro 85 90 Ala Ile Ile Lys Arg Pro Leu Leu Cys Lys Pro Gly Gln Pro Met Leu 100 105 Leu Gly Phe Ser Glu Thr Leu Tyr Ser Asp Leu Phe Val Glu Val 120

<210> 10092 <211> 377

<212> PRT

<213> Enterobacter cloacae

<400> 10092

Ser Met Ser Cvs Pro Val Ile Glu Leu Thr Gln Gln Leu Ile Arg Arg

```
10
Pro Ser Leu Ser Pro Asp Asp Ala Gly Cys Gln Ala Leu Met Ile Glu
       20
                          25
Arg Leu Arg Ala Ile Gly Phe Thr Val Glu His Met Asp Phe Gly Asp
    3.5
                       40
Thr Gln Asn Phe Trp Ala Trp Arg Gly Gln Gly Glu Thr Leu Ala Phe
 50 55
Ala Gly His Thr Asp Val Val Pro Ala Gly Asp Ala Asp Arg Trp Ile
      70
                                 75
Asn Pro Pro Phe Glu Pro Thr Ile Arg Asp Gly Met Leu Phe Gly Arg
          85 90
Gly Ala Ala Asp Met Lys Gly Ser Leu Ala Ala Met Val Val Ala Ala
                 105
         100
Glu Arg Phe Val Ala Gln His Pro Asn His Lys Asn Arg Leu Ala Phe
      115 120
                             125
Leu Ile Thr Ser Asp Glu Glu Ala Ser Ala His Asn Gly Thr Val Lys
       135 140
 130
Val Val Glu Ala Leu Met Ala Arg Asn Glu Arg Leu Asp Tyr Cys Leu
    150 155
Val Gly Glu Pro Ser Ser Thr Glu Val Val Gly Asp Val Val Lys Asn
                 170 175
            165
Gly Arg Arg Gly Ser Leu Thr Cys Asn Leu Thr Ile His Gly Val Gln
         180
                          185
Gly His Val Ala Tyr Pro His Leu Ala Asp Asn Pro Val His Arg Ala
      195
                       200
                           205
Ala Pro Met Leu Asn Glu Leu Val Ser Ile Glu Trp Asp Lys Gly Asn
                   215
                                    220
Glu Phe Phe Pro Pro Thr Ser Met Gln Ile Ala Asn Ile Lys Ala Gly
      230
                                 235
Thr Gly Ser Asn Asn Val Ile Pro Gly Asp Leu Phe Val Gln Phe Asn
             245
                              250
Phe Arg Phe Ser Thr Glu Leu Thr Asp Glu Met Ile Lys Ala Arg Val
          260
                          265
Ile Ala Leu Leu Glu Lys Tyr Gln Leu Arg Tyr Thr Leu Asp Trp Trp
                       280
Leu Ser Gly Gln Pro Phe Leu Thr Gln Arg Gly Lys Leu Val Asp Ala
                                     300
                    295
 290
Val Val Asn Ala Ile Ala His Tyr Asn Glu Ile Lys Pro Gln Leu Leu
              310
                                  315
Thr Thr Gly Gly Thr Ser Asp Gly Arg Phe Ile Ala Arg Met Gly Ala
                              330
             325
Gln Val Val Glu Leu Gly Pro Val Asn Ala Thr Ile His Lys Ile Asn
                                           350
                           345
          340
Glu Cys Val Asn Ala Ala Asp Leu Gln Leu Leu Ala Arg Met Tyr Gln
                       360
Arg Ile Met Glu Gln Leu Val Ala
   370
```

<210> 10093

<211> 67 <212> PRT

<213> Enterobacter cloacae

5.5 Lys Lys <210> 10094 <211> 476 <212> PRT <213> Enterobacter cloacae <400> 10094 Gly Val Met Met Ile Thr Tyr Gln Phe Ile Asn Ala Leu Ser Asp Ala Lys Pro Gln Ser His Leu Ile Ala Arg Ala Asp Ser Ser Leu Leu Pro 2.5 Asp Ser Ala Leu Ile Ala Glu Met Arg Gln Gln Ser Thr Val Ala Asp Ala Arg Phe Gly Cys Ala Pro Phe Ala Arg Ile Thr Leu Leu Pro Asp Ala Leu Trp His Asp Ala Leu Thr Glu Gly Leu Ile Thr Ala Leu Arg 70 75 Pro Leu Leu Thr Ala Pro Ala Ser Ala Glu Leu Val Leu Asp Val Thr Asp Ile Asp Asp Val Val Leu Ala Gln Val Leu Arg Phe Leu Phe Asn Gln Ala His Met Leu Ser Asp Leu Lys Leu Lys Lys Thr Asp Glu Ala Leu Arg Leu Thr Cys Ile Thr Ala Leu Cys Leu Pro Glu Gln Gln Ala Lys Leu Glu Thr Thr Phe Arg Gln Gln Gln Ala Ile Ala Leu Gly Met Val Ala Ala Arg Arg Leu Ala Asp Met Pro Ser Asp Arg Cys Thr Pro Gln Phe Val Val Glu Glu Ala Gln Lys Leu Cys Ala Ala Ser Pro Ala Leu Arg Cys Glu Val Leu Asp Glu Lys Gln Ile Val Glu Gln Gly Leu Gly Leu Leu His Ala Val Gly Lys Gly Ala Thr Cys Pro Pro Arg Leu Leu Ala Ile His Tyr Asn Gly Val Ser Asp Gly Pro Val Arg Cys Tyr Val Gly Lys Gly Ile Thr Phe Asp Thr Gly Gly Leu Trp Leu Lys Glu Gly Ala Gly Met Tyr Thr Met Lys Tyr Asp Met Cys Gly Ala Ala Asn Val Leu Gly Leu Met Leu Thr Val Ala Glu Gln Lys Leu Pro Val Arq Ile Met Gly Val Leu Ala Leu Ala Glu Asn Ala Ile Gly Pro Asp Ala Met Gln Pro Gly Thr Val Ala Thr Ala Cys Asn Gly Ile Thr Val Glu Ile Asn Asn Thr Asp Ala Glu Gly Arg Leu Val Leu Ala Asp Ala Ile Ala Trp Ala Ser Gln Arg His Pro Gln Ala His Tyr Ile Ile Asp Met Ala Thr Leu Thr Gly Ala Val Val Lys Ala Leu Gly Tyr Glu Leu Ser Gly Leu Met Thr Gln Asp Glu Pro Leu Arg Gln Ala Leu Thr Leu Ala Gly Lys Arg Ser Gly Asp Glu Val Trp Ser Leu Pro Leu Asp Ala Arg Leu Arg Lys Gln Thr Asp Ser Ala Ile Ala Asp Leu Cys Asn Thr Pro

405 Thr Asn Asn Ala Ala Ile Ser Ala Ser Ala Ala Trp Leu Leu His His 420 425 Phe Cys Pro Pro Thr Ile Pro Trp Ala His Leu Asp Ile Ser Gly Thr 435 440 Ala Leu Trp Arg Glu Asn Gly Arg Ser Val Ala Ser Gly Arg Pro Ile 450 455 460 Pro Leu Leu Val Glu His Leu Leu Gly Asp Leu 470

<210> 10095 <211> 347 <212> PRT

<213> Enterobacter cloacae <400> 10095 Ala Val Thr Asn Lys Thr Ser Leu Ser Tyr Lys Asp Ala Gly Val Asp 10 Ile Asp Ala Gly Asn Ala Leu Val Asp Arg Ile Lys Gly Val Val Lys 20 Lys Thr Arg Arg Pro Glu Val Met Gly Gly Leu Gly Gly Phe Gly Ala 40 3.5 Leu Cys Ala Leu Pro Gln Lys Tyr Arg Glu Pro Val Leu Val Ser Gly 60 55 Thr Asp Gly Val Gly Thr Lys Leu Arg Leu Ala Met Asp Leu Lys Arg 7.0 75 His Asp Thr Ile Gly Ile Asp Leu Val Ala Met Cys Val Asn Asp Leu 90 95 85 Val Val Gln Gly Ala Glu Pro Leu Phe Phe Leu Asp Tyr Tyr Ala Thr 105 110 100 Gly Lys Leu Asp Val Asp Thr Ala Ala Ser Val Ile Asn Gly Ile Ala 120 115 Glu Gly Cys Leu Gln Ser Gly Cys Ala Leu Val Gly Gly Glu Thr Ala 135 140 1.30 Glu Met Pro Gly Met Tyr His Gly Glu Asp Tyr Asp Val Ala Gly Phe 150 155 Cys Val Gly Val Val Glu Lys Ser Glu Ile Ile Asp Gly Ser Lys Val 165 170 175 Ala Asp Gly Asp Val Leu Val Ala Leu Ala Ser Ser Gly Pro His Ser 180 185 Asn Glv Tvr Ser Leu Val Arg Lys Ile Leu Glu Val Ser Gly Cys Asp 200 205 195 Pro Leu Thr Thr Glu Leu Asp Gly Lys Pro Leu Ala Asp His Leu Leu 215 220 Ala Pro Thr Arg Ile Tyr Val Lys Asn Val Leu Glu Leu Ile Glu Asn 235 230 Val Asp Val His Ala Ile Ala His Leu Thr Gly Gly Gly Phe Trp Glu 250 245 Asn Ile Pro Arg Val Leu Pro Asp Asn Thr Gln Ala Val Ile Asp Ala 270 265 260 Ser Ser Trp Gln Trp Pro Ser Val Phe Asn Trp Leu Gln Thr Ala Gly 280 285 275 Asn Val Ser Glu His Glu Met Tyr Arg Thr Phe Asn Cys Gly Val Gly 300 295 Met Val Ile Ala Leu Pro Ala Ser Glu Ala Asp Lys Ala Ile Lys Leu 310 315 Leu Thr Glu Lys Gly Glu Asn Ala Trp Lys Ile Gly Thr Ile Lys Ala 325 330 335

Ser Asp Ser Glu Gln Arg Val Val Ile Glu 340

<210> 10096 <211> 689 <212> PRT

<213> Enterobacter cloacae

<400> 10096 Ala Val Met Gly Gln Glu Lys Leu Tyr Ile Glu Lys Glu Leu Ser Trp - 5 10 Leu Ala Phe Asn Glu Arg Val Leu Gln Glu Ala Ala Asp Lys Thr Asn 20 25 Pro Leu Ile Glu Arg Met Arg Phe Leu Gly Ile Tyr Ser Asn Asn Leu 40 4.5 Asp Glu Phe Tyr Lys Val Arg Phe Ala Glu Leu Lys Arg Arg Ile Ile 55 60 Ile Ser Glu Glu Gln Gly Leu Asn Ser His Ser Arg His Leu Leu Gly 70 75 Lys Ile Gln Ser Arg Val Met Lys Ala Asp Gln Glu Phe Asp Gly Leu 85 90 Tyr Asn Glu Leu Leu Glu Met Ala Arg Asn Gln Ile Phe Leu Ile 100 105 110 Asn Glu Arg Gln Leu Ser Ala Asn Gln Gln Asn Trp Leu Arg His Tyr 120 125 115 Phe Lys His Tyr Leu Arg Gln His Ile Thr Pro Ile Leu Ile Asn Arg 135 140 130 Glu Thr Asp Leu Val Gln Phe Leu Lys Asp Asp Tyr Thr Tyr Leu Ala 150 155 Val Glu Ile Ile Arg Gly Glu Thr Ile Asn Tyr Ala Leu Leu Glu Ile 165 170 Pro Ser Asp Lys Val Pro Arg Phe Val Asn Leu Pro Pro Glu Thr Pro 185 190 180 Arg Arg Arg Lys Pro Met Ile Leu Leu Asp Asn Ile Leu Arg Tyr Cys 200 195 Leu Asp Asp Ile Phe Lys Gly Phe Phe Asp Tyr Asp Ala Leu Asn Ala 210 215 220 Tyr Ser Met Lys Met Thr Arg Asp Ala Glu Tyr Asp Leu Val His Glu 230 235 225 Met Glu Ala Ser Leu Met Glu Leu Met Ser Ser Ser Leu Lys Gln Arg 245 250 255 Leu Thr Ala Glu Pro Val Arg Phe Val Tyr Gln Arg Asp Met Pro Asp 265 260 Ala Met Val Glu Met Leu Arg Asp Lys Leu Thr Ile Ser Arg Tyr Asp 275 280 285 Ser Ile Ile Pro Gly Gly Arg Tyr His Asn Phe Lys Asp Phe Ile Gly 295 300 Phe Pro Asn Val Gly Lys Ala Asn Leu Val Asn Lys Pro Leu Pro Arg 310 315 Leu Arg His Ile Trp Phe Asp Lys Phe Arg Asn Gly Phe Asp Ala Ile 325 330 Arg Glu Arg Asp Val Leu Leu Tyr Tyr Pro Tyr His Thr Phe Glu His 345 340 Val Leu Glu Leu Leu Arg Gln Ala Ser Phe Asp Pro Asn Val Leu Ala 365 355 360 Ile Lys Ile Asn Ile Tyr Arg Val Ala Lys Asp Ser Arg Ile Ile Asp 375 370 380 Ala Met Ile His Ala Ala His Asn Gly Lys Lys Val Thr Val Val Val 390 395 Glu Leu Gln Ala Arg Phe Asp Glu Glu Ala Asn Ile His Trp Ala Arg 410 405 Arg Leu Thr Glu Ala Gly Val His Val Ile Phe Ser Ala Pro Gly Leu 425 420

Lys Ile His Ala Lys Leu Phe Leu Ile Ser Arg Lys Glu Gly Asp Glu

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435
                       440
Val Val Arg Tyr Ala His Ile Gly Thr Gly Asn Phe Asn Glu Lys Thr
                455
                                    460
Ala Arg Ile Tyr Thr Asp Tyr Ser Leu Leu Thr Ala Asp Ala Arg Ile
             470
                               475
Thr Asn Glu Val Arg Arg Val Phe Asn Phe Ile Glu Asn Pro Tyr Arg
           485 490
Pro Val Ser Phe Asp Tyr Leu Leu Val Ser Pro Gln Asn Ser Arg Arg
              505 510
Leu Leu Tyr Asp Met Ile Asp Lys Glu Ile Ala Asn Ala Gln Asn Gly
           520 525
     515
Leu Ser Ser Gly Ile Thr Leu Lys Leu Asn Asn Leu Val Asp Lys Gly
                   535 540
Leu Val Asp Arg Leu Tyr Ala Ala Ser Ser Ser Gly Val Pro Val Asn
             550 555
Leu Leu Ile Arg Gly Met Cys Ser Leu Ile Pro Glu Leu Glu Gly Ile
             565 570 575
Ser Asp Asn Ile Arg Val Ile Ser Ile Val Asp Arg Tyr Leu Glu His
         580
              585
Asp Arg Val Tyr Ile Phe Asp Asn Ala Gly Asp Lys Arg Val Tyr Leu
                      600
                                     605
      595
Ser Ser Ala Asp Trp Met Thr Arg Asn Ile Asp Tyr Arg Ile Glu Val
                                    620
   610
                   615
Ala Ala Pro Leu Leu Asp Pro Arg Leu Lys Gln Arg Ile Leu Asp Ile
             630
                                635
Ile Glu Ile Leu Phe Ser Asp Thr Val Lys Ala Arg Tyr Ile Asp Lys
                             650
                                              655
             645
Glu Leu Ser Asn Arg Tyr Val Pro Arg Gly Asn Arg Arg Lys Val Arg
                          665
        660
Ser Gln Leu Ala Ile Tyr Asp Tyr Ile Lys Ser Leu Glu Gln Pro Asp
                       680
      675
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<210> 10097 <211> 514 <212> PRT

<213> Enterobacter cloacae

<400> 10097 Pro Met Pro Ile Asn Asp Asn Thr Pro Arg Pro Gln Glu Phe Ala Ala 1.0 Val Asp Leu Gly Ser Asn Ser Phe His Met Val Ile Ala Arg Glu Val 20 25 Asp Gly Ala Met Gln Ile Ile Gly Arg Leu Lys Gln Arg Val His Leu 45 40 Ala Asp Gly Leu Asp Ala Arg Asn Met Leu Ser Glu Glu Ala Met Glu 55 Arg Gly Leu Asn Cys Leu Ser Leu Phe Ala Glu Arg Leu Gln Gly Phe 75 7.0 Ser Pro Ser Ser Val Cys Ile Val Gly Thr His Thr Leu Arg Gln Ala 90 Leu Asn Ala Pro Glu Phe Leu Lys Arg Ala Glu Lys Val Ile Pro Tyr 100 105 Pro Ile Glu Ile Ile Ser Gly Asn Glu Glu Ala Arg Leu Ile Phe Met 125 120 115 Gly Val Glu His Thr Gln Pro Glu Lys Gly Arg Lys Leu Val Ile Asp 130 140 135 Ile Gly Gly Gly Ser Thr Glu Leu Val Ile Gly Glu Asp Phe Glu Pro 155 150 Arg Leu Val Glu Ser Arg Arg Met Gly Cys Val Ser Phe Ala Gln Met

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165
                             170
Tyr Phe Pro Gly Gly Val Ile Thr Arg Glu Asn Phe Gln Arg Ala Arg
      180
                 185
                                         190
Met Ala Ala Val Gln Lys Leu Glu Asn Leu Ala Trp Gln Tyr Arg Ile
     195 200
                                       205
Gln Gly Trp Asn Val Ala Leu Gly Ala Ser Gly Ser Ile Lys Ala Ala
                        220
       215
His Glu Val Leu Leu Ala Met Gly Glu Lys Asp Gly Phe Ile Thr Pro
      230 235
Glu Arg Leu Val Lys Leu Thr Glu Glu Val Leu Lys His Lys Ser Phe
          245 250 255
Asp Ala Leu Ser Leu Pro Gly Leu Ser Asp Glu Arg Lys Ala Val Phe
         260
                         265
Val Pro Gly Leu Ala Ile Leu Cys Gly Val Phe Asp Ala Leu Ala Ile
      275 280 285
Lys Glu Leu Arg Leu Ser Asp Gly Ala Leu Arg Glu Gly Val Leu Tyr
      295
Glu Met Glu Gly Arg Phe Arg His Gln Asp Ile Arg Ser Arg Thr Ala
               310
                                315
Gln Ser Leu Ala Asn Gln Tyr Asn Ile Asp Arg Glu Gln Ala Lys Arg
                             330
            325
Val Leu Glu Thr Thr Val Gln Met Tyr Glu Gln Trp Glu Glu Gln Asn
         340
                          345
Pro Lys Leu Ala His Pro Gln Leu Ala Ala Leu Leu Lys Trp Ala Ala
                      360
                                      365
      355
Met Leu His Glu Val Gly Leu Asn Ile Asn His Ser Gly Met His Arg
                   375
                          380
His Ser Ala Tyr Ile Leu Gln Asn Ser Asp Leu Pro Gly Phe Asn Gln
                390
                                395
Glu Gln Gln Thr Met Met Ala Thr Leu Val Arg Tyr His Arg Lys Ala
                             410 415
            405
Ile Lys Leu Asp Asp Leu Pro Arg Phe Thr Leu Phe Lys Lys Gln
                              430
                          425
Phe Leu Pro Leu Ile Gln Leu Leu Arg Leu Gly Val Leu Leu Asn Asn
 435
                                       445
                    440
Gln Arg Gln Ala Thr Thr Thr Pro Pro Thr Leu Lys Leu Lys Thr Asp
                   455
                                    460
 450
Asp Tyr His Trp Thr Leu Ser Phe Pro His Asp Trp Phe Ser Gln Asn
                470 475
Ala Leu Val Leu Leu Asp Leu Glu Lys Glu Gln Gln Tyr Trp Glu Ala
                             490
            485
Val Thr Gly Trp Leu Leu Lys Ile Glu Glu Glu Ser Ser Glu Ala Ala
          500
                          505
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<210> 10098 <211> 75 <212> PRT

Ala

<213> Enterobacter cloacae

110 12

fl. 1 14

1.77

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14

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it of

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1.0

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<210> 10099
<211> 412
<212> PRT
<213> Enterobacter cloacae
<400> 10099
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Lys Ile Met Glu Thr Pro Ala Leu Pro Arg Arg Leu Ala Leu Thr Ala 10 Gly Cys Asn Gln Leu Ile Asn Trp Gly Ile Ser Phe Tyr Met Pro Gly 25 30 Thr Phe Ala His Ala Ile Thr Ala Asp Arg Ser Trp Ser Ser Pro Glu 40 4.5 Ile Tyr Leu Gly Leu Thr Leu Ala Met Leu Val Met Ala Ile Val Ser 50 55 Pro Phe Val Ala Pro Leu Leu Ala Arg Phe Gly Gly Gln Arg Val Val 70 75 Met Ser Gly Thr Leu Leu Ile Ala Val Ser Cys Leu Ser Met Ala Phe 85 90 Thr Pro Thr Leu Ser Gly Trp Tyr Gly Ala Trp Leu Leu Thr Gly Ile 100 105 110 Gly Met Arg Leu Ser Leu Tyr Asp Ala Leu Phe Ser Ala Leu Val Asp 120 125 115 Leu Tyr Gly Pro Gln Ala Arg Arg Thr Ile Ser Arg Val Thr Leu Ala 135 140 130 Gly Gly Leu Ala Ser Ala Val Phe Trp Pro Leu Gly Asp Ala Leu Leu 155 150 Asn Val Met Gly Trp Gln Asp Ala Leu Lys Ile Tyr Ala Leu Phe Gly 165 170 175 Leu Leu Ser Ala Leu Leu Leu Arg Arg Phe Pro Arg Gln Arg Phe Thr 180 190 185 Val Lys Pro Lys Ala Cys Thr Gln Val Ser Pro His Asp Arg Arg Asn 195 200 205 Gly Trp Leu Tyr Ala Thr Phe Ile Ala Leu Ile Thr Phe Val Ser Asn 215 220 210 Gly Thr Ser Thr His Leu Pro Glu Phe Ile Ala Ser Phe Gly Leu Pro 230 235 225 Val Ala Val Gly Met Leu Trp Gly Met Gly Gln Thr Gly Ala Arg Leu 250 255 245 Met Glu Val Leu Ala Gly Ala Arg Leu Thr Pro Leu Lys Leu Thr Leu 265 260 Phe Thr Ala Leu Ala Met Pro Leu Cys Phe Leu Ile Gly Leu Ser Ser 285 280 Asp Met Leu Ala Trp Cys Ala Ala Gly Phe Val Phe Gly Phe Gly Ala 295 300 290 Ile Asn Gly Leu Val Thr Ile Val Lys Ala Thr Leu Pro Leu Glu Leu 315 310 Phe Ser Thr Glu Arg Tyr Ala Ser Arg Thr Gly Leu Leu Leu Ile Pro 330 325 Gly Gln Leu Met Ala Ala Ala Ser Pro Phe Ala Tyr Ala Trp Leu Asn 340 345 350 Lys Ser Leu Gly Ile Thr Gly Gly Met Trp Val Ser Ala Gly Leu Thr 360 355 365 Leu Val Ile Ala Gly Phe Ala Val Ala Leu Val Arg Ser Pro Gly Lys 375 380 Gln Thr Val Ser His Cys Ile Pro Ser Ala Thr Leu Thr Asn Arg Tyr 395 390 Lys Thr Pro Ala Glu Ala Asn Ile Pro Asp Thr

405

13

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<210> 10100
<211> 469
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<212> PRT <213> Enterobacter cloacae

<400> 10100 Tyr Arg Thr Arg Ser Glu Gly Gly Arg Leu Met Arg Asn Phe Trp His 10 His Leu Arg Leu Pro Thr Leu Val Arg Arg Met Leu Val Ala Gln Met 30 20 25 Leu Leu Leu Thr Leu Leu Trp Cys Leu Phe Leu Thr Phe Ile Leu Leu 45 40 Glu Asp Leu Arg Ser Pro Pro Ile Leu Thr Gly Ser Glu Thr Tyr Glu 50 55 60 Thr Val Phe Ser Leu Val Glu Ser Met Asp Asp Arg Pro Gln Ala Arg 7.0 75 Asp Ala Val Leu Ala Ala Phe Ser Lys Ala Leu Arg Glu Gly Tyr Gly 85 90 Gly Glu Tyr Pro Glu Leu Ser Ile Asn Leu Ile Val Arg Lys Asn 100 105 110 Asn Glu Ile Ile Phe Ser Ser Asp Gly Ala Pro Thr Gly Val Lys Asn 115 120 125 Ser Arg Leu Gly Val Met Gln His Val Gln Ser Glu Asp His Thr Trp 135 140 130 Thr Ser Arg Thr Leu Lys Ser Ala His Ser Asp Val Glu Val Thr Leu 150 155 Phe Thr Pro Ala Gly Ser Trp Asn Phe Phe Ile Tyr Leu Asn Ser Arg 170 175 165 Gly Tyr Tyr Val Met Pro Leu Met Ile Cys Ile Pro Phe Leu Leu Phe 180 185 Pro Ala Trp Leu Ser Ile Arg Ile Ala Met Arg Pro Trp Asn Lys Val 195 200 205 Val Asp Glu Ile Ser Leu Arg Thr Pro Asp Asp Leu Ser Pro Leu Lys 210 215 220 Ala Val Pro Arg His Arg Glu Leu Arg Gln Thr Val Asp Ala Ile Asn 230 235 Asp Phe Leu Ala Arg Val Gln Glu Ser Ala Glu Arg Glu Lys Met Phe 245 250 255 Ile Ala Asp Ala Ala His Glu Leu Arg Thr Pro Leu Ala Ala Met Arg 265 260 Ile Asn Val Glu Ala Leu Gln Ser Trp Val Ile Ser Glu Ser Gln Gln 280 Glu Leu Leu Ala Gly Ile Val Arg Ser Asn Ser Arg Ala Ala Arg Leu 290 295 300 Ile Asn Gln Leu Leu Met Met His Ser Glu Ala His Ile Ser Pro 310 315 Val Pro Leu Thr Thr Leu Ile Gln Glu Arg Met Ala Ala Leu Glu Pro 330 335 325 Leu Ala Ser Gly Arg Arg Ile Glu Phe Glu Phe Phe Ala Asp Asp Glu 350 345 340 Ile His Val Ala Gly Ile Arg Glu Arg Leu Val Ser Leu Ile Asp Asn 365 355 360 Leu Ile Glu Asn Ala Val Lys Tyr Ser Pro Glu Gly Gly Arg Ile Glu 375 380 Val Gln Leu Gln Ser Arg Asp Lys Cys Ala Gln Leu Arg Val Ser Asp 395 390 Ala Gly Pro Gly Ile Pro Ile Glu Leu Arg Glu Arg Val Phe Asp Arg 410 405 Phe Phe Arg Asp Pro Asn Gln Thr Gln Ser Gly Ser Gly Leu Gly Leu 430 425 Ala Ile Val Lys Ala Val Thr Gln Gln His Asn Gly Arg Val Asn Leu

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435
                          440
Ser Thr Ser Ala Glu Gly Gly Leu Met Val Thr Val Asp Phe Pro Asn
 450
                      455
Pro Ala Phe Ala
465
<210> 10101
<211> 107
<212> PRT
<213> Enterobacter cloacae
<400> 10101
Lys Arg Val Thr Phe Lys Cys Asn Lys Gln Arg Cys Phe Leu Met Arg
                                 10
Gly Val Gly Gly Ser Lys Met Asn Thr Gly Ala Phe Ile His Asp Leu
                              2.5
Leu Asp Trp Ile Asp Asn Asn Leu Asp Ser Arg Leu Asp Ile Glu Thr
                         40
                                   4.5
Val Ser Arg Arg Ala Gly Tyr Ser Lys Trp His Leu Gln Arg Leu Phe
                                      60
 50
                      5.5
Lys Glu His Thr Gly Ser Pro Leu Ala Glu Tyr Ile Arg Ala Gln Lys
                  7.0
                                   7.5
65
Leu Gln Lys Ser Val Glu Arg Leu Ala His Ser His Glu Pro Ile Leu
                            90
               85
Tyr Val Asp Leu Thr Thr Gly Lys Arg Ser Ala
          100
                              105
<210> 10102
<211> 303
<212> PRT
<213> Enterobacter cloacae
<400> 10102
His Gln Asp Pro Asn Phe Tyr Asn Ser Gly Arg Met Ser Thr Phe Lys
                                 1.0
Pro Leu Lys Ala Leu Thr Ser Arg Arg Gln Val Leu Lys Ala Gly Leu
           20
Ala Ala Leu Thr Leu Thr Gly Ile Ala Lys Gln Ala Gln Ala Lys Asp
    35
                          40
Glu Ser Thr Leu Lys Thr Ser Asn Gly His Ser Lys Pro Lys Thr Lys
                       55
Lys Ala Gly Ala Lys Arg Leu Val Met Leu Asp Pro Gly His Gly Gly
                                    75
                   70
Ile Asp Thr Gly Ala Ile Gly Arg Asn Gly Ser Lys Glu Lys His Val
                                 90
               85
Val Leu Ala Ile Ala Lys Asn Val Arg Ala Ile Leu Arg Ser Asn Gly
           100
                              105
Ile Asp Ala Arg Leu Thr Arg Thr Gly Asp Thr Phe Ile Pro Leu Tyr
                                              125
       115
                           120
Asp Arg Val Glu Ile Ala His Lys His Gly Ala Asp Leu Phe Met Ser
    130
                       135
                                          140
Ile His Ala Asp Gly Phe Thr Asn Pro Ser Ala Ala Gly Ala Ser Val
                   150
                                      155
                                                          160
Phe Ala Leu Ser Asn Arg Gly Ala Ser Ser Ala Met Ala Lys Tyr Leu
               165
                                   170
                                                      175
Ser Asp Arg Glu Asn Arg Ala Asp Glu Val Ala Gly Lys Lys Ala Thr
          180
                              185
                                                  190
Asp Lys Asp His Leu Leu Gln Gln Val Leu Phe Asp Leu Val Gln Thr
      195
                           200
                                              205
Asp Thr Ile Lys Asn Ser Leu Thr Leu Gly Ser His Ile Leu Lys Arg
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215

Ile Lys Pro Val His Arg Leu His Ser Lys Ser Thr Glu Gln Ala Ala 230 235 Phe Val Val Leu Lys Ser Pro Ser Ile Pro Ser Val Leu Val Glu Thr 245 250 Ser Phe Ile Thr Asn Pro Glu Glu Glu Arg Leu Leu Gly Thr Thr Ala 260 265 270 Phe Arg Gln Lys Ile Ala Asn Ala Ile Ala Ser Gly Val Ile Ser Tyr 275 280 285 Phe Asn Trp Phe Asp Asn Gln Lys Ala His Ser Arg Lys Arg 295

<210> 10103 <211> 664 <212> PRT

325

340

<213> Enterobacter cloacae <400> 10103 Thr Met Ser Arg Lys Glu Leu Ala Asn Ala Ile Arg Ala Leu Ser Met 10 Asp Ala Val Gln Lys Ala Asn Ser Gly His Pro Gly Ala Pro Met Gly 25 Met Ala Asp Ile Ala Glu Val Leu Trp Asn Asp Phe Leu Lys His Asn 35 40 Pro Thr Asp Pro Thr Trp Tyr Asp Arg Asp Arg Phe Ile Leu Ser Asn 55 Gly His Ala Ser Met Leu Leu Tyr Ser Leu Leu His Leu Ser Gly Tyr 7.0 75 Asp Leu Pro Leu Glu Glu Leu Lys Asn Phe Arg Gln Leu His Ser Lys 90 85 Thr Pro Gly His Pro Glu Ile Gly Tyr Thr Pro Gly Val Glu Thr Thr 105 100 Thr Gly Pro Leu Gly Gln Gly Leu Ala Asn Ala Val Gly Leu Ala Ile 120 125 Ala Glu Arg Thr Leu Ala Ala Gln Phe Asn Gln Pro Asp His Glu Ile 135 140 Val Asp His Tyr Thr Tyr Val Phe Met Gly Asp Gly Cys Leu Met Glu 150 155 Gly Ile Ser His Glu Val Cys Ser Leu Ala Gly Thr Leu Gly Leu Gly 170 175 165 Lys Leu Ile Gly Phe Tyr Asp His Asn Gly Ile Ser Ile Asp Gly Glu 190 185 180 Thr Glu Gly Trp Phe Thr Asp Asp Thr Ala Lys Arg Phe Glu Ala Tyr 200 205 195 His Trp His Val Val His Glu Ile Asp Gly His Asp Pro Glu Ala Val 215 210 Lys Lys Ala Ile Gln Glu Ala Gln Ser Val Lys Asp Lys Pro Ser Leu 235 230 240 Ile Ile Cys Arg Thr Thr Ile Gly Phe Gly Ser Pro Asn Lys Ala Gly 245 250 Lys Glu Glu Ala His Gly Ala Ala Leu Gly Glu Glu Glu Val Ala Leu 260 265 270 Thr Arg Gln Lys Leu Gly Trp Lys His Pro Ala Phe Glu Ile Pro Lys 275 280 285 Glu Ile Tyr Lys Ala Trp Asp Ala Arg Glu Thr Gly Glu Lys Ala Gln 295 300 Gln Ala Trp Asn Glu Lys Phe Ala Ala Tyr Lys Lys Ala Tyr Pro Asp 310 315 Leu Ala Ala Glu Phe Thr Arg Arg Met Ser Gly Gly Leu Pro Glu Asp

330

Trp Glu Glu Lys Thr Gln Ala Leu Ile Glu Asn Leu Gln Ser Asn Pro

345

335

350

```
Ala Lys Ile Ala Thr Arg Lys Ala Ser Gln Asn Thr Leu Asn Ala Ile
                       360
    355
Gly Pro Ile Leu Pro Glu Leu Leu Gly Gly Ser Ala Asp Leu Ala Pro
                375
                                     380
Ser Asn Leu Thr Ile Trp Ser Gly Ser Lys Ser Leu Lys Glu Asp Ile
                                 395
                390
Ala Gly Asn Tyr Ile His Tyr Gly Val Arg Glu Phe Gly Met Thr Ala
             405
                              410
Ile Ala Asn Gly Ile Ala His His Gly Gly Phe Val Pro Tyr Thr Ala
                               430
         420 425
Thr Phe Leu Met Phe Val Glu Tyr Ala Arg Asn Ala Ala Arg Met Ala
      435
           440
                            445
Ala Leu Met Lys Ala Arg Gln Ile Met Val Tyr Thr His Asp Ser Ile
                    455
                                     460
  450
Gly Leu Gly Glu Asp Gly Pro Thr His Gln Ala Val Glu Gln Leu Ala
                 470
                                  475
465
Ser Leu Arg Leu Thr Pro Asn Phe Ser Thr Trp Arg Pro Cys Asp Gln
                              490
             485
Val Glu Ala Ala Val Gly Trp Lys Leu Ala Val Glu Arg His Asn Gly
                           505
          500
Pro Thr Ala Leu Ile Leu Ser Arg Gln Asn Leu Ala Gln Ile Glu Arg
                       520
                                         525
      515
Thr Pro Glu Gln Val Lys Asn Ile Ala Arg Gly Gly Tyr Ile Leu Lys
                                     540
                    535
Asp Ser Gly Gly Lys Pro Asp Val Ile Leu Ile Ala Thr Gly Ser Glu
                                  555
                 550
Val Glu Ile Thr Val Lys Ala Ala Glu Lys Leu Thr Ala Glu Gly His
                              570 575
             565
Ala Val Arg Val Val Ser Leu Pro Ser Thr Asp Ile Phe Asp Ala Gln
                           585
                               590
          580
Asp Glu Ala Tyr Arg Glu Ser Val Leu Pro Ser Asn Val Ala Ala Arg
                                         605
                        600
       595
Val Ala Val Glu Ala Gly Ile Ala Asp Tyr Trp Tyr Lys Tyr Val Gly
   610
                    615
                                      620
Leu Lys Gly Ala Ile Val Gly Met Lys Gly Tyr Gly Glu Ser Ala Pro
                 630 635
Ala Asp Lys Leu Phe Pro Tyr Phe Gly Phe Thr Val Glu Asn Val Val
             645
                              650
Glu Lys Ala Leu Ser Val Leu
```

<210> 10104 <211> 565 <212> PRT

<213> Enterobacter cloacae

660

<400> 10104 Val Thr Val Lys Arg Pro Val Ser Gly Ser Leu Ala Arg Ala Phe Phe 10 Ser Met Ile Val Leu Ser Val Leu Ile Ser Ala Ile Ala Leu Val Thr 20 25 Leu Ala Ser Ser Gln Arg Asp Ala Glu Ala Ile Asn Ile Ala Gly Ser 35 4.0 Leu Arg Met Gln Ser Tyr Arg Leu Gly Tyr Glu Met Gln Arg Ala Ser 55 Pro Ser Leu Ala Glu His Arg Ala Val Trp Gln Lys Thr Leu Ser Ala 7.0 75 Pro Ala Leu Gln Lys Leu Asn Arg Trp Tyr Val Pro Glu Asp Val Lys 8.5 90 95 Gln Arg Tyr Gln Gln Leu His Leu Gly Trp Gln Glu Met Asp Thr Arg

```
Ile Ala Ser Gly Asp Thr Gly Trp Tyr Gln Asn His Ile Glu Asp Phe
   115
                      120
Val Gly Arg Ile Asp Ala Phe Val Leu Ala Leu Gln His Tyr Thr Glu
 130
         135
                                   140
His Lys Ile Gln Leu Val Ile Cys Met Ser Leu Thr Gly Gly Leu Gly
    150 155
Ile Leu Leu Leu Ala Val Val Thr Leu Arg Arg Ile Arg Arg Gln Val
      165 170 175
Val Leu Pro Leu Asn Asn Leu Val Ala Ala Ser Glu Arg Ile Glu Gln
        180 185 190
Gly Gln Phe Asp Thr Pro Ala Pro Asp Thr Thr Leu Pro Asn Glu Leu
           200 205
Gly Gln Leu Ser Arg Ala Phe Asn His Met Ser Ala Glu Leu His Thr
 210 215 220
Leu Tyr Arg Ser Leu Glu His Ser Val Ala Glu Lys Thr Arg His Leu
               230
                               235
Asn Glu Ala His Gln Gln Leu Glu Met Leu Phe Lys Cys Ser Gln Ala 245 250 255
Leu Asn Thr Gly Gln Ile Asp Ser His Cys Phe Arg His Ile Leu Gln
         260 265
Ile Val His Asp Tyr Thr Gln Met Asn Tyr Leu Gln Leu Arg Thr Ser
                      280 285
 275
Asp Asp Trp Gln Leu Tyr Glu Gly Leu Glu Thr Pro Gly Glu Lys Met
                   295
                                    300
  290
His Asn Leu Pro Val Leu Met Gln Asp Thr Leu Tyr Gly Glu Leu Arg
                310
                                315
Trp Gln Ser Ala Thr Gly Asp Val Pro Leu Pro Leu Met Glu Ser Val
             325
                             330
Ala Thr Met Leu Gly Arg Gly Leu Tyr Phe Asn Gln Ala Gln Lys His
                         345
                                          350
         340
Tyr Gln Gln Leu Leu Met Glu Glu Arg Ala Thr Ile Ala Arg Glu
                       360
      355
Leu His Asp Ser Leu Ala Gln Val Leu Ser Tyr Leu Arg Ile Gln Leu
  370
                   375
                                    380
Thr Leu Leu Lys His Ala Val Pro Gly Asp Asn Ala Pro Ala Gln Ala
                390
                                395
Ile Ile Thr Asp Phe Ser Arg Glu Leu Asn Asn Ala Trp His Gln Leu
                            410
             405
Arg Glu Leu Leu Thr Thr Phe Arg Leu Thr Leu Asn His Ala Asn Leu
                          425
                                         430
         420
Pro Ala Ala Leu Gln Glu Ser Leu Asp Gly Leu Gln Ser Gln Thr Ser
      435
                       440
                                       445
Ala Lys Leu Val Leu Asp Cys Arg Leu Ser Ser Leu Ala Leu Asp Ala
                   455
                                    460
Gln Lys Gln Val His Leu Leu Gln Ile Val Arg Glu Ala Val Leu Asn
                470
                                 475
Ala Ile Lys His Ala Asp Ala Ser Glu Ile Val Val Ser Cys Val Thr
                             490
             485
Thr Ala Asp Gly Thr His Thr Val Thr Ile Arg Asp Asn Gly Ile Gly
                                           510
         500
                          505
Ile Gly Asp Ala Ser Glu Pro Pro Gly His Tyr Gly Leu Asn Ile Met
                                       525
      515
                       520
Arg Glu Arg Ala Gly Arg Leu Gly Gly Thr Leu His Phe Ser Gln Pro
                   535
  5.30
                                    540
Pro Gln Gly Gly Thr Gln Val Ser Val Thr Phe Arg Thr Pro Ala Ala
                                 555
                550
Gln Ala Glu Lys
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5.65

<212> PRT <213> Enterobacter cloacae

<400> 10105 Arg Ala Ala Lys Arg Gly His Thr Leu Met Ala Asn Phe Phe Ile Asp 1.0 Arg Pro Ile Phe Ala Trp Val Leu Ala Ile Leu Leu Cys Leu Thr Gly Val Leu Ala Ile Thr Ser Leu Pro Val Glu Gln Tyr Pro Asp Leu Ala 4.0 Pro Pro Asn Val Arg Ile Thr Ala Asn Tyr Pro Gly Ala Ser Ala Gln Thr Leu Glu Asn Thr Val Thr Gln Val Ile Glu Gln Asn Met Thr Gly 7.0 Leu Asp Asn Leu Met Tyr Met Ser Ser Gln Ser Ser Ala Thr Gly Gln Ala Thr Val Thr Leu Ser Phe Thr Ala Gly Thr Asp Pro Asp Glu Ala Val Gln Gln Val Gln Asn Gln Leu Gln Ser Ala Leu Arg Lys Leu Pro Gln Ala Val Gln Asn Gln Gly Val Thr Val Arg Lys Thr Gly Asp Thr Asn Ile Leu Thr Ile Ala Phe Val Ser Thr Asp Gly Ser Met Asp Lys Gln Asp Ile Ala Asp Tyr Val Ala Ser Asn Ile Gln Asp Pro Leu Ser Arg Ile Asn Gly Val Gly Asp Ile Asp Ala Tyr Gly Ser Gln Tyr Ser Met Arg Ile Trp Leu Asp Pro Asn Lys Leu Asn Ser Val Gln Met Thr Ala Lys Asp Val Thr Asp Ala Ile Glu Ser Gln Asn Ala Gln Ile Ala Val Gly Gln Leu Gly Gly Thr Pro Ser Val Asp Asn Gln Ala Leu Asn Ala Thr Ile Asn Ser Gln Ser Leu Leu Gln Thr Pro Asp Gln Phe Arg Asn Ile Thr Leu Arg Val Asn Gln Asp Gly Ser Glu Val Arg Leu Gly Asp Val Ala Thr Val Glu Met Gly Ala Glu Lys Tyr Asp Tyr Leu Ser Arg Phe Asn Gly Asn Ala Ala Ser Gly Leu Gly Val Lys Leu Ala Ser Gly Ala Asn Glu Met Ala Thr Ala Gln Arg Val Leu Glu Arg Leu Asp Glu Leu Ser His Tyr Phe Pro His Gly Leu Glu Tyr Lys Val Ala Tyr Glu Thr Thr Ser Phe Val Lys Ala Ser Ile Glu Asp Val Val Lys Thr Leu Leu Glu Ala Ile Ala Leu Val Phe Leu Val Met Tyr Leu Phe Leu Gln Asn Phe Arg Ala Thr Leu Ile Pro Thr Ile Ala Val Pro Val Val Leu Leu Gly Thr Phe Ala Val Leu Tyr Ala Phe Gly Tyr Ser Ile Asn Thr Leu Thr Met Phe Ala Met Val Leu Ala Ile Gly Leu Leu Val Asp Asp Ala Ile Val Val Val Glu Asn Val Glu Arg Ile Met Ser Glu Glu Gly Leu Ser Pro Arg Glu Ala Thr Arg Lys Ser Met Gly Gln Ile Gln Gly Ala Leu Val Gly Ile Ala Met Val Leu Ser Ala Val Phe Ile Pro

455 Met Ala Phe Phe Gly Gly Thr Thr Gly Ala Ile Tyr Arg Gln Phe Ser 470 475 Ile Thr Ile Val Ser Ala Met Val Leu Ser Val Leu Val Ala Met Ile 485 490 495 Leu Thr Pro Ala Leu Cys Ala Thr Leu Leu Lys Pro Leu His Lys Gly 500 505 510 Glu His His Gly Gln Lys Gly Phe Phe Gly Trp Phe Asn Arg Met Phe 515 520 525 Asn Arg Asn Ala Ala Arg Tyr Glu Ala Gly Val Gly Lys Val Leu His 530 535 540 Arg Ser Val Arg Trp Met Val Val Tyr Val Leu Leu Gly Gly Met 550 555 560 Val Phe Leu Phe Leu Arg Leu Pro Thr Ser Phe Leu Pro Leu Glu Asp 565 570 575 Arg Gly Met Phe Ile Thr Ser Val Gln Leu Pro Ser Gly Ser Thr Gln 585 590 580 Gln Gln Thr Leu Lys Val Val Gln Lys Val Glu Asn Tyr Phe His Thr 600 605 595 Gln Glu Lys Asp Asn Val Val Ser Val Phe Ser Thr Val Gly Ser Gly 610 615 620 Pro Gly Gly Asn Gly Gln Asn Val Ala Arg Met Phe Val Arg Leu Lys 630 635 Asp Trp Asp Gln Arg Asp Ser Asp Thr Gly Ser Ser Phe Ala Ile Ile 650 655 645 Glu Arg Ala Thr Lys Ala Phe Asn Lys Ile Lys Glu Ala Arg Val Phe 670 660 665 Ala Ser Ser Pro Pro Ala Ile Ser Gly Leu Gly Ser Ser Ala Gly Phe 680 685 Asp Met Glu Leu Gln Asp His Ala Gly Ala Gly His Asp Ala Leu Met 700 695 Ala Ala Arg Asp Lys Leu Leu Glu Leu Ala Gly Lys Asp Pro Gln Leu 715 705 710 Thr Arg Val Arg His Asn Gly Leu Asp Asp Ser Pro Gln Leu Gln Val 725 730 Asp Ile Asp Gln Arg Lys Ala Gln Ala Leu Gly Val Ser Ile Asp Asp 745 740 Ile Asn Asp Thr Leu Gln Thr Ala Trp Gly Ser Ser Tyr Val Asn Asp 760 765 Phe Met Asp Arg Gly Arg Val Lys Lys Val Tyr Val Gln Ser Ala Ala 775 780 770 Lys Tyr Arg Met Leu Pro Asp Asp Ile Asn Arg Trp Tyr Val Arg Asn 790 795 Asn Thr Gly Gly Met Val Pro Phe Ser Ala Phe Ala Thr Ser Arg Trp 810 805 Glu Thr Gly Ser Pro Arg Leu Glu Arg Tyr Asn Gly Tyr Ser Ala Leu 830 820 825 Glu Ile Val Gly Glu Ala Ala Pro Gly Val Ser Thr Gly Thr Ala Met 835 840 845 Asp Ile Met Glu Lys Leu Val Gln Gln Leu Pro Thr Gly Phe Gly Leu 850 855 860 Glu Trp Thr Ala Met Ser Tyr Gln Glu Arg Leu Ser Gly Ala Gln Ala 865 870 875 Pro Ala Leu Tyr Ala Leu Ser Leu Leu Val Val Phe Leu Cys Leu Ala 885 890 Ala Leu Tyr Glu Ser Trp Ser Val Pro Phe Ser Val Met Leu Val Val 900 905 910 Pro Leu Gly Val Ile Gly Ala Leu Leu Ala Thr Trp Met Arg Gly Leu 915 920 925 Glu Asn Asp Val Tyr Phe Gln Val Gly Leu Leu Thr Val Ile Gly Leu 935 940

```
Ser Ala Lys Asn Ala Ile Leu Ile Val Glu Phe Ala Asn Glu Met Asn
945
               950
Ala Lys Gly His Glu Leu Met Ala Ala Thr Leu His Ala Cys Arg Gln
          965
                           970
Arg Leu Arg Pro Ile Leu Met Thr Ser Leu Ala Phe Val Phe Gly Val
         980 985
                                        990
Leu Pro Met Ala Thr Ser Ser Gly Ala Gly Ser Ser Ser Gln His Ala
      995 1000 1005
Val Gly Thr Gly Val Met Gly Gly Met Ile Ser Ala Thr Ile Leu Ala
  1010 1015 1020
Ile Tyr Phe Val Pro Leu Phe Phe Val Leu Ile Arg Arg Phe Pro
1025 1030
                       1035
Leu Lys Asp Lys Pro Glu
            1045
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<210> 10106 <211> 158

<212> PRT

<213> Enterobacter cloacae

<400> 10106 Val Met Asn Pro Leu Lys Ala Gly Asp Ile Ala Pro Lys Phe Ser Leu 10 Pro Asp Gln Asp Gly Glu Gln Val Asn Leu Thr Asp Phe Gln Gly Gln 25 Arg Val Leu Val Tyr Phe Tyr Pro Lys Ala Met Thr Pro Gly Cys Thr 45 35 4.0 Val Gln Ala Cys Gly Leu Arg Asp Asn Met Asp Glu Leu Lys Lys Val 55 60 Gly Val Glu Val Leu Gly Ile Ser Thr Asp Lys Pro Glu Lys Leu Ser 7.5 70 Arg Phe Ala Glu Lys Glu Leu Leu Asn Phe Thr Leu Leu Ser Asp Glu 90 8.5 Asp His Gln Val Cys Glu Gln Phe Gly Val Trp Gly Glu Lys Ser Phe 110 105 100 Met Gly Lys Thr Tyr Asp Gly Ile His Arg Ile Ser Phe Leu Ile Gly 120 125

Ala Asp Gly Lys Val Glu His Val Phe Asp Asp Phe Lys Thr Ser Asn 140 135 His His Asp Val Val Leu Lys Trp Leu Lys Glu Asn Ala

<210> 10107 <211> 544

<212> PRT <213> Enterobacter cloacae

<400> 10107

Leu Ser Gln Lys Arg Leu Ser Phe Leu Phe His Cys Gln Val Ser Gln 1.0 Asn Pro Asp Glu Trp Asp Phe Leu His Leu Leu Thr Arg Leu His Ser 30 25 20 Gln Ser Ser Gly Asp Glu Arg Tyr Ala Gly Ser Ser Val Lys Leu Ala 35 4.0 His Pro Lys Tyr Arg Thr Val Val Met Phe Arg Gln Leu Arg Lys Thr 55 60 Leu Val Ala Thr Leu Ile Ala Ala Val Thr Val Gly Gln Val Leu Pro 8.0 7.5 70 Ala Phe Ala Asp Ser Ser Asp Ser Leu Pro Asp Met Gly Thr Thr Ala 90 8.5 Gly Ser Thr Leu Ser Ile Gly Gln Glu Met Gln Met Gly Asp Tyr Tyr

```
100
                      105
                                    110
Val Arg Gln Leu Arg Gly Ser Ala Pro Leu Ile Asn Asp Pro Leu Leu
 115 120 125
Val Gln Tyr Ile Asn Gly Leu Gly Met Arg Leu Val Ala His Ala Asp
 130 135 140
Ser Val Lys Thr Pro Phe His Phe Tyr Leu Ile Asn Asn Asp Glu Ile 145 $150$
Asn Ala Phe Ala Phe Phe Gly Gly Asn Val Val Leu His Ser Ala Leu
     165 170 175
Phe Arg Tyr Ser Asp Asn Glu Ser Gln Leu Ala Ser Val Met Ala His
      180 185 190
Glu Ile Ser His Val Thr Gln Arg His Leu Ala Arg Ala Met Glu Asp
    195 200 205
Gln Lys Arg Asn Ala Pro Leu Thr Trp Val Gly Ala Leu Gly Ser Ile
 210 215 220
Leu Leu Ala Met Ala Ser Pro Gln Ala Gly Met Ala Ala Leu Thr Gly
225 230 235 240
Thr Leu Ala Gly Thr Arg Gln Gly Met Ile Ser Phe Thr Gln Gln Asn
          245 250 255
Glu Gln Glu Ala Asp Arg Ile Gly Ile Gln Val Leu Gln Arg Ser Gly
  260 265 270
Phe Asp Pro Gln Ala Met Pro Ser Phe Leu Glu Lys Leu Leu Asp Gln
275 280 285
Ala Arg Tyr Ser Ser Arg Pro Pro Glu Ile Leu Leu Thr His Pro Leu
290 295 300
Pro Glu Ser Arg Leu Ser Asp Ala Arg Asn Arg Ala Asn Gln Met Arg
305 310 315
Pro Val Val Val Gln Ser Ser Gln Asp Phe Tyr Met Ala Lys Val Arg
           325 330 335
Thr Leu Gly Met Tyr Asn Ser Gly Arg Asn Gln Leu Thr Ser Asp Leu
            345 350
        340
Leu Asp Ala Leu Ala Lys Gly Asn Val Arg Glu Lys Asn Ala Ala Gln
355
                                  365
                   360
Tyr Gly Gln Ala Leu Gln Ala Met Glu Ala Ser Lys Tyr Asp Glu Ala
370 375 380
Arg Lys Ala Leu Gln Pro Leu Leu Ala Ser Ala Pro Asp Asn Pro Trp
   390
                            395 400
385
Tvr Leu Asp Leu Ala Thr Asp Ile Asp Leu Gly Gln Lys Lys Ala Thr
          405 410 415
Asp Ala Ile Asn Arg Leu Lys Gly Ala Lys Asp Ile Arg Asn Asn Pro
                      425 430
        420
Val Leu Gln Leu Asn Leu Ala Asn Ala Tyr Leu Gln Gly Gly Gln Pro
 435 440
                                  445
Gly Glu Ala Val Thr Ile Leu Asn Arg Tyr Thr Phe Asn Asn Lys Asp
                455
                               460
Asp Gln Asn Gly Trp Glu Leu Leu Ala Gln Ala Gln Gly Gln Leu Gly
                            475 480
              470
Asn Arg Asp Gln Glu Leu Ala Ala Arg Ala Glu Gly Leu Ala Leu Ala
       485
                         490
                                       495
Gly Arg Leu Glu Gln Ala Ile Ser Leu Leu Ser Ser Ala Ser Ser Gln
    500 505 510
Val Lys Leu Gly Ser Leu Gln Gln Ala Arg Tyr Asp Ala Arg Ile Asp
   515
                    520
                                  525
Gln Leu Arg Gly Leu Gln Gln Arg Phe Lys Pro Tyr Glu Lys Met
                 535
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<210> 10108 <211> 469

<212> PRT

<213> Enterobacter cloacae

<400> 10108 Pro Ile Ser Pro Phe Ala Arg Arg Ala Ser Leu Ile Ile His Arg His 10 Asn Ile Asn Asn Thr Ser Gln Ser Cys Thr Glu Phe Thr Met Asn Asn 20 25 Val Leu Gly Phe Leu Glu Ala Lys Leu Met Pro Leu Ala Ala Lys Thr 35 40 Ala Gln Gln Arg His Leu Gly Ala Ile Arg Gly Ala Tyr Val Ser Phe 55 60 Met Pro Phe Ile Ile Val Gly Ser Ile Leu Leu Val Ile Ser Ser Phe 70 75 Pro Asn Gln Ala Tyr Gln Gln Phe Met Ser Gln Ala Phe Gly Glu Ser 85 90 Trp Ser Ala Ile Ile Glu Ile Pro Phe Asn Ala Val Phe Ser Thr Met 100 105 110 Ser Leu Phe Ile Ser Phe Leu Val Ala Tyr Arg Leu Ala Glu His Tyr 115 120 125 Gly Glu Asp Arg Ile Ser Cys Gly Ile Leu Ala Leu Val Ala Phe Leu 135 140 Ile Leu Thr Pro Phe Ile Lys Val Ala Glu Asn Gly Gly Ile Thr Val 150 155 Met Pro Val Glu Trp Ile Gly Ser Lys Gly Leu Phe Val Ala Met Ile 165 170 Gly Ser Leu Leu Trp Thr Glu Leu Phe Cys Trp Leu Lys Arg Lys Lys 180 185 190 Leu Val Ile Lys Met Pro Asp Gly Val Pro Pro Ala Val Gln Glu Ser 195 200 205 Phe Ala Ala Leu Ile Pro Ala Leu Leu Val Met Ile Leu Val Leu Leu 215 220 Ile Arg Ile Ile Phe Glu Asn Thr His Tyr His Thr Ile His Gln Phe 225 230 235 Ile Tyr Glu Val Val Ala Thr Pro Val Arg His Tyr Gly Thr Ser Tyr 245 250 Phe Gly Ala Leu Met Thr Val Phe Ser Ile Thr Ile Leu Trp Ser Val 260 265 Gly Ile Asn Ser Gly Ser Met Ile Asn Gly Ile Ile Arg Pro Leu Trp 280 Met Glu Asn Gln Thr Asp Asn Ile Ala Ala Ile Gln Ala Gly Thr Thr 295 300 Pro Pro His Ile Ile Thr Glu Gln Phe Phe Asp Met Ile Trp Met Gly 310 315 Gly Ala Gly Ala Thr Leu Ser Leu Val Ile Ala Met Leu Ile Phe Ala 325 330 Arg Ser Lys Asn Met Arg Glu Val Ala Arg Leu Gly Ala Gly Ala Ser 340 345 350 Val Phe Asn Ile Asn Glu Pro Ile Leu Phe Gly Leu Pro Val Ile Met 355 360 365 Asn Pro Ile Met Leu Ile Pro Phe Asn Leu Val Pro Leu Val Leu Val 370 375 380 Thr Val Gln Tyr Ala Ala Met Lys Ile Gly Ala Val Ala Val Thr Thr 390 395 Gly Val Phe Ile Pro Trp Thr Leu Pro Pro Val Ile Ser Gly Phe Ile 405 410 Val Thr Gly His Leu Ser Gly Ser Val Met Gln Leu Ile Asn Leu Leu 425 Ile Gly Ala Met Leu Tyr Leu Pro Phe Met Arg Ile Leu Asp Lys Gln 440 445 Tyr Arg Ala Ala Glu Ile Ala Ser Val Thr Gln Thr Asp Thr Thr Leu 4.50 455 Ala Lys Gln Glu 465

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<210> 10109
<211> 320
<212> PRT
<213> Enterobacter cloacae
<400> 10109
Ser Met Trp Gly Ile Ile Ala Thr Trp Arg Met Ala Leu Glu Gly Val
                                  10
Thr Glu Ser Ala Ser Ala Leu Ala Ala Gly Lys Pro Val Ala Ala Ala
        20
                             25
Val Val Asp Ala Val Ala Ala Val Glu Asp Phe Pro Leu Tyr Lys Ser
       35
                          40
Val Gly Tyr Gly Gly Leu Pro Thr Glu Asn Gly Glu Val Glu Leu Asp
                      55
Ala Ala Tyr Met Asp Gly Asp Thr Leu Ala Phe Gly Ala Val Gly Asn
                  70
                                      7.5
Leu Val Asp Ile Ala Asn Pro Val Arg Val Ala His Ala Leu Ser Arg
               85
                                  90
Gln Arg Tyr Asn Ser Leu Leu Val Gly Gln Gly Ala Arg Glu Trp Ala
           100
                              105
Leu Ser Gln Gly Phe Ala Asp Lys Thr Met Leu Thr Asp Arg Ala Met
                          120
                                              125
Gln His Tyr Arg Lys Arg Cys Arg Glu Thr Leu Asp Lys Gly Leu Ser
                      135
                                       140
Pro Tyr Asp Gly His Asp Thr Val Gly Ile Ile Gly Leu Asp Lys Gln
145
                  150
                                      155
Gly Ser Met Ser Val Ala Thr Ser Thr Ser Gly Leu Phe Met Lys Lys
               165
                                  170
Arg Gly Arg Leu Gly Asp Ser Pro Ile Ile Gly Ser Gly Phe Tyr Cys
                              185
           180
Asp Ser Glu Thr Gly Ala Ala Thr Ala Thr Gly Val Gly Glu Asp Leu
       195
                           200
Met Lys Gly Cys Thr Ser Tyr Glu Ile Val Arg Arg Met Ala Gln Gly
   210
                                          220
Met Thr Pro Gln Gln Ala Ala Asp Ser Val Val Phe Glu Leu Glu Asp
225
                                      235
                   230
Lys Leu Met Ser Arg Phe Gly Arg Ala Gly Asp Leu Ser Val Val Cys
               245
                                  250
Met Asn Ser Lys Gly Glu Phe Gly Ala Ala Thr Asn Ile Lys Thr Phe
           260
                              265
                                                 270
Ser Phe Val Val Ala Thr Ala Arg Gln Pro Leu Thr Val Phe Arg Thr
                          280
                                              285
Glu Arg Leu Arg Glu Lys Thr His Tyr His Ala Val Asp Asp Glu Trp
                       295
                                          300
Met Gln Ala Tyr Ala Ala Arg Ile Arg Ala Pro Ile Glu Glu Leu
                   310
<210> 10110
<211> 243
<212> PRT
<213> Enterobacter cloacae
<400> 10110
Tyr Arg Phe Phe Phe Ser Cys Ser Ser Cys Thr Val Asp Thr Val Thr
                                  1.0
Asn Val Lys Ile Leu Leu Ile Glu Asp Asp Leu Asp Leu Gly Asn Gly
                              25
                                                 3.0
Val Arg Ile Ala Leu Ala Asp Gln Gly Phe Asp Val Ile Trp Val Arg
                          40
                                          4.5
Arg Lys Glu Asp Ala Leu His Gln Leu Gly Ile Cys Val Pro Glu Leu
```

5.5 Ile Leu Leu Asp Leu Gly Leu Pro Asp Gly Asp Gly Met Ser Leu Met 70 75 Thr Arg Leu Arg Gln Gln Leu Lys Gly Val Pro Val Ile Ile Leu Thr 85 90 95 Ala Arg Gly Thr Leu Gln Asp Arg Leu Cys Gly Leu Asp Ala Gly Ala 100 105 110 Asp Asp Tyr Leu Val Lys Pro Phe Val Leu Ala Glu Leu Leu Ala Arq 115 120 125 Val Arg Ala Leu Ala Arg Arg Ser Tyr Gly Phe Glu Asn Glu Ala Ile 130 135 140 Glu Ile Arg Gly Leu Ser Leu His Ile Pro Thr Arg Arg Val Thr Val 150 155 Ser Ala Arg His Val Glu Leu Thr Ala Ser Glu Tyr Ala Leu Leu Glu 165 170 175 Thr Leu Met Leu Arg Ala Asp Arg Val Leu Thr Arg Arg Tyr Leu Glu 180 185 190 Glu Arg Leu Phe Gly Thr Lys Glu Asn Leu Ser Asn Ala Leu Asp Val 195 200 205 His Met Gly Asn Leu Arg Arg Lys Ile Gly Asp Gly Phe Val Arg Thr 210 215 220 Val Arg Gly Val Gly Tyr Val Ile Asp Thr Val Pro Val Gln Lys Ala 235 230 Ala Glv

<210> 10111 <211> 333 <212> PRT

<213> Enterobacter cloacae

<400> 10111

Ile Ser Pro Arg Phe Ser Ala Phe Ile Ser Leu Thr Ser Leu Ile Met 1.0 Gly Ile Ser Phe Leu Asp Ser Arq Glu Gln Gly Arq Leu Ser Ser Phe 20 25 Ile Arg His Lys Asp Leu Gln Lys Met Asn Asn His Phe Arg Cys Ile 35 40 45 Gly Ile Val Gly His Pro Arg His Pro Thr Ala Leu Thr Thr His Glu 55 60 Met Leu Tyr Arg Trp Leu Cys Gly Lys Gly Tyr Glu Val Met Val Glu 7.0 7.5 Gln Gln Ile Ala Gln Glu Leu Gln Leu Lys Ser Val Arg Thr Gly Thr 85 90 Leu Ala Glu Ile Gly Gln Gln Ala Asp Leu Ala Val Val Gly Gly 100 105 Asp Gly Asn Met Leu Gly Ala Ala Arg Thr Leu Ala Arg Tyr Asp Ile 120 125 Lys Val Ile Gly Val Asn Arg Gly Asn Leu Gly Phe Leu Thr Asp Leu 130 135 140 Asp Pro Asp Asn Ala Gln Gln Gln Leu Ala Asp Val Leu Glu Glv His 150 155 Tyr Ile Ser Glu Lys Arg Phe Leu Leu Glu Ala Gln Val Cys Gln Gln 170 165 Asp Cys Gln Lys Arg Ile Ser Thr Ala Ile Asn Glu Val Val Leu His 185 190 Pro Gly Lys Val Ala His Met Ile Glu Phe Glu Val Tyr Ile Asp Glu 195 200 205 Ile Phe Ala Phe Ser Gln Arg Ser Asp Gly Leu Ile Ile Ser Thr Pro 215 220 Thr Gly Ser Thr Ala Tyr Ser Leu Ser Ala Gly Gly Pro Ile Leu Thr

<210> 10112 <211> 430 <212> PRT

<213> Enterobacter cloacae

<400> 10112 Thr Ser Ser Leu Thr Gly Tyr Asn Pro Leu Ile Leu Lys Arg Phe Lys 1.0 Thr Met Phe Gln Ala Leu Leu Arg Arg Arg Glu Ala Arg Leu Phe Phe 25 Ile Ile Ser Ile Leu Phe Phe Ile Cys Ile His Ser Ile Asp Ala Phe 40 4.5 Leu Ala Pro Met Met Ile Asn Gln Gly Ile Glu Pro Gln Ile Met Gly 55 60 Ile Ile Met Gly Ala Ser Gly Leu Ala Thr Leu Leu Ile Arg Phe Pro 75 7.0 Leu Gly Ile Ile Ser Asp Val Val Lys Ser Arg Arg Ile Phe Ile Gln 85 90 Ile Gly Leu Leu Pro Ile Ile Ala Trp Pro Ile Ala Trp Leu Glu 105 110 Pro Asn Ala Ile Thr Leu Tyr Leu Ala Lys Ala Ala Asp Gly Val Thr 120 125 Ala Ala Thr Trp Val Leu Tyr Asn Ile Leu Phe Met Arg Tyr Phe Gly 130 135 140 Arg Asn Glu Ala Pro Ala Ala Val Ala Leu Leu Ala Leu Ala Gly Pro 145 150 155 Ile Gly Val Phe Leu Gly Asn Cys Ile Gly Ala Val Leu Ile His Tyr 165 170 Phe Ala Asn Asn Ile Ala Phe Phe Val Ser Cys Ile Ser Ala Leu Val 180 185 Ala Leu Ile Leu Thr Thr Arg Ile Gln Asp Val His Asp Pro Val Gln 195 200 Ala Pro Thr Leu Lys Ala Cys Ile Thr Gly Ala Arg Gln Gln Leu Ala 215 220 Asp Arg Ser Val Trp Leu Ile Gly Ile Leu Ala Thr Val Val Ile Leu 230 235 Val Pro Phe Ala Thr Arg Asp Thr Leu Thr Pro Val Tyr Ala Glu Gln 245 250 Leu Gly Ala Arg Ala Gly Ile Leu Ala Leu Leu Gly Asn Ile His Leu 260 265 270 Leu Phe Tyr Gly Leu Ala Ile Ala Leu Cys Ser Ser Val Phe Tyr Gln 280 275 Arg Leu Gly Leu Val Lys Thr Ala Val Leu Gly Ile Val Leu Gln Val 295 300 Ile Ser Thr Phe Gly Ile Pro Phe Thr Ser Asn Met Tyr Val Ile Tyr 310 315 Leu Trp Gln Ala Leu Ala Gly Phe Ser Phe Gly Met Ala Phe Ala Ala

325 330 Phe Met Ser Leu Ser Val Val Asn Thr Ser Ser Asp Glu Gln Ser Thr 340 345 350 Arg Met Gly Leu Phe Gln Thr Ile Tyr Ser Cys Gly Met Phe Val Gly 355 360 365 Pro Val Met Met Gly Val Met Met Gln His Ile Asn Leu Ser Ser Gly 370 375 380 Tyr Ile Leu Ile Ala Ala Leu Ser Val Val Ala Ala Ile Ala Thr Pro 385 390 395 400 Leu Ser Ala Arg Trp Val Tyr Ala Arg Lys Thr Gln Thr Ser Ala Gln 405 410 Leu Leu Lys Asn Gly Ala Tyr Ala Ala Ala Pro Asp Gln <210> 10113 <211> 461

<212> PRT

<213> Enterobacter cloacae

<400> 10113 Ile Pro Phe Pro Gly Ser Pro Gly Gly Gln Leu Thr Ser Glu Lys Ser 1.0 Lys Glu Lys Arg Val Ser Trp Lys Leu Lys Thr Gly Lys Ser Thr Glu 20 25 30 Glu Arg Gln Gln Ala Asn Gln Gln Ile Arg Glu Thr Val Glu Gln Ile 40 Leu Ala Asp Ile Glu Lys Arg Gly Asn Lys Ala Ile Arg Glu Leu Ser 55 60 Ile Lys Phe Asp Arg Tyr Asp Arg Gln Asp Tyr Arg Leu Thr Ser Ala 75 Glu Ile Asp Arg Cys Ile Lys Gln Leu Ser Arg Gln Asp Ile Gln Asp 90 85 Ile Glu Phe Ala Gln Gln Gln Val Ala Asn Phe Ala Arg Ala Gln Lys 100 105 110 Glu Cys Leu Arg Asp Leu Glu Ile Glu Thr Arg Pro Gly Val Ile Leu 120 125 Gly His Lys Asn Ile Pro Ile Asn Ala Val Gly Cys Tyr Val Pro Gly 135 140 Gly Lys Tyr Pro Leu Leu Ala Ser Ala His Met Ser Ile Ile Thr Ala 150 155 160 Ser Val Ala Gly Cys Ser Arg Ile Ile Ser Cys Ala Pro Pro Phe Asn 165 170 Gly Gln Pro Ala Pro Ala Ile Val Ala Ala Gln Lys Met Ala Gly Ala 180 185 Thr Glu Ile Tyr Ala Leu Gly Gly Ile Gln Ala Ile Gly Ala Met Ala 195 200 205 Leu Gly Thr Asp Ser Leu Ala Pro Val Asp Met Leu Val Gly Pro Gly 215 220 Asn Ala Phe Val Ala Glu Ala Lys Arg Gln Leu Phe Gly Arg Val Gly 230 235 Ile Asp Leu Phe Ala Gly Pro Thr Glu Thr Leu Val Ile Ala Asp Asp 245 250 Thr Val Asp Ala Glu Met Cys Ala Thr Asp Leu Leu Gly Gln Ala Glu 260 265 His Gly Val Thr Thr Pro Ala Ile Leu Leu Thr Asn Ser Leu Gln Leu 280 285 Ala Lys Glu Thr Leu Ser Glu Val Glu Arg Leu Leu Glu Lys Leu Pro 290 295 300 Thr Ala Asp Ile Ala Arg Gln Ser Trp Gln Asp Tyr Gly Glu Ile Ile 310 315 Val Cys Asp Ser His Glu Glu Met Leu Leu Glu Ala Asp Arg Ile Ala

330 Ser Glu His Val Gln Val Met Thr Asp Arg Asp Asp Trp Phe Leu Ala 340 345 350 Asn Leu Thr Asn Tyr Gly Ala Leu Phe Leu Gly Pro Arg Thr Asn Val 355 360 365 Ala Tyr Gly Asp Lys Val Ile Gly Thr Asn His Thr Leu Pro Thr Gln 370 375 380 Lys Ala Ala Arg Tyr Thr Gly Gly Leu Trp Val Gly Lys Phe Met Lys 390 395 400 Thr Cys Thr Phe Gln Lys Val Leu Ser Asp Glu Ala Thr Ala Glu Ile 405 410 415 Gly Ser Tyr Cys Ser Arg Leu Ser Leu Leu Glu Gly Phe Ala Gly His 420 425 430 Ala Glu Gln Ala Asn Ile Arg Val Arg Arg Tyr Gly Gln Thr Glu Val 435 440 445 Pro Tyr Ala Thr Pro Ala Pro Val Arg Glu Lys Val 455 <210> 10114 <211> 256 <212> PRT <213> Enterobacter cloacae <400> 10114 Ala Met Thr Leu Leu Gln Thr Pro Ser Phe Thr Leu His Gly Lys Arg 10 Ala Leu Val Thr Gly Gly Ser Arg Gly Ile Gly Phe Ala Ala Ala Val 20 25 Ala Leu Ala Gln Ala Gly Ala Glu Val Trp Ile Ala Ala Arg Gly Arg 35 40 Glu Ala Leu Ala His Ala Ala Gly Leu Ala Ala Glu His Ser Leu Ala 55 60 Phe His Pro Leu Glu Leu Asp Ile Thr Asp Ala Gln Glu Val Glu Arg 70 75 Val Leu Ala Thr Leu Pro Thr Pro Asp Ile Leu Val Asn Ser Ala Gly 85 90 Leu Ala Arg His Gln Pro Phe Leu Glu Val Asn Glu Glu Asn Phe Asp 100 105 Ala Val Met Ala Leu Asn Leu Arg Ala Thr Phe Phe Ile Ser Gln His 120 Val Ala Arg Arg Met Arg Ala Gly Gly Lys Gly Gly Ser Ile Ile His 130 135 140 Ile Ser Ser Gln Met Gly His Val Gly Gly Pro Glu Arg Ser Val Tyr 145 150 155 Cys Ala Ser Lys Phe Ala Leu Glu Gly Leu Thr Arg Thr Met Ala Leu 165 170 Glu Leu Gly Asp Ala Gly Ile Arg Val Asn Thr Leu Cys Pro Thr Phe 180 185 Ile Glu Thr Asp Leu Thr Arg Ser Ser Leu Ala Asp Pro Ala Phe Arg 195 200 Arg Tyr Val Leu Asp Asn Ile Lys Leu Arg Arg Pro Gly Arg Leu Glu 210 215 220 Asp Ile Met Gly Pro Val Val Phe Leu Ala Ser Asp Ala Ala Gly Leu 225 230 235 Ile Thr Gly Ser Ala Leu Met Val Asp Gly Gly Trp Thr Ala Thr 245 250 <210> 10115

<210> 1011 <211> 307

<212> PRT

<213> Enterobacter cloacae

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<400> 10115
Thr Met Lys Ile Asp Leu Asn Leu Leu Pro Leu Phe Leu Ala Val Ala
                  10
Glu Glu Arg Ser Phe Ser Ala Ala Ala Gly Arg Leu Gly Ile Thr Arg
   20
                        25
Ser Ala Val Ser Gln Gly Ile Arg Arg Leu Glu Asp Gly Phe Gln Thr
 35
                     40
                                    45
Leu Leu Val Met Arg Thr Thr Arg Ser Val Arg Leu Thr Glu Ala Gly
                5.5
Glu Arg Leu His Lys Ser Leu Leu Gly Pro Ile Ala Asn Ile Glu Ala
   70 75
Ala Phe Asp Asp Val Thr Ser Asp Ser Met Pro Arg Gly Gln Leu Arg
         85
Ile Ala Val Thr Ser Ile Ala Glu Ala Phe Leu Ser Gly Pro Leu Leu
                        105 110
Ala Ser Phe Thr Ala Ala His Pro Ala Val Ser Leu Asp Val Phe Val
115
                     120
                                     125
Ser Asp Glu Glu Phe Asp Ile Val Ala Ala Gly Tyr Asp Ala Gly Val
 130
                  135
                                  140
Arg Leu Gly Glu Val Ile Glu Lys Asp Met Ile Ala Ile Pro Leu Thr
145
               150 155
Gly Gln Gln Arg Glu Arg Val Val Ala Ser Pro Ser Tyr Leu Ala Thr
            165
                           170 175
His Ser Ala Pro Ala His Pro Arg Glu Leu Val Ala His Arg Cys Ile
         180
                         185
                                        190
Gly Trp Arg Pro Ser Pro Asp Val Ala Pro Tyr Arg Trp Glu Phe Glu
     195
                     200
                                     205
Glu Ala Gly Val Pro Phe Asp Val Ala Ile Glu Pro Gln Ile Thr Thr
 210
         215
Asn Asp Leu Arg Leu Met Leu Ser Leu Ala Leu Ala Gly Gly Gly Ile
             230
                              235
Thr Phe Ala Thr Glu Asp Thr Phe Thr Pro Tyr Ile Glu Ser Gly Gln
            245
                           250
Leu Val Ser Leu Leu Asp Ala Phe Leu Pro Ser Phe Pro Gly Phe Tyr
         260
                        265
                                        270
Leu Tyr Phe Pro Gln Arg His Asn Met Ala Pro Lys Leu Arg Ala Leu
                     280 285
Ile Glu His Ile Arg Gln Trp Arg Gln Leu Pro Ala Thr Gln Pro Thr
 290
                295
                                  300
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<210> 10116 <211> 103

Gln Arg

<212> PRT <213> Enterobacter cloacae

<400> 10116

Thr Gly Ser Ile Arg Ser Pro Ser Ser Arg Ala Met Arg Pro Val Thr I 5 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 10 15 15 10 15

Leu Arg Gln Pro Arg Arg

<210> 10117 <211> 79

<212> PRT <213> Enterobacter cloacae

<400> 10117

 Pro Val Ala Pro Lys Arg Ala Ala Pro Ser Pro Ser Val Trp Arg Thr

 11e Gln Arg Ser Pro Pro Arg Gln Thr Ala Thr Asp Pro Gly Ala Thr

 20
 25

 30

 Pro Ser Ser Ile Asn Arg Arg Lys Ala Arg Arg Cys Lys Ser Pro Pro

 35
 40

 Pro Met Arg Gln Gly Thr Ser Arg Cys Pro Ala Gln Pro Leu Arg Arg

 50
 50

Trp Cys Arg Ser Leu Pro Ala Pro Thr Leu Lys Ser Trp Arg 65 70 75

<210> 10118

<211> 471 <212> PRT

<213> Enterobacter cloacae

<400> 10118

Gly Gln Asp Met Gly Lys Lys Met Pro Tyr Trp Trp Leu Ser Cys Cys 10 Leu Ile Ser Val Pro Ala Ile Ala Ala Asn Pro Ala Ala Met Ile Asn 20 30 Thr Gly Gln Leu Ser Glu Thr Gln Glu Leu Pro Ser Leu Asn Gly Arg 40 45 Val Ala Pro Val Ala Ser Lys Ala Ala Pro Gly Thr Leu Gln Leu Asn 55 60 Glu Ala Val Asn Arg Ala Val Thr Trp His Pro Ala Ile Ser Glu Ala 75 70 Val Gly Lys Leu Tyr Gln Gln Ser Glu Asn Val Asp Val Ala Lys Ser 85 90 95 Lys Tyr Tyr Pro Gln Ile Asn Ala Gly Met Asp Asn Gly Tyr Ser His 100 105 110 Asp Gly Asp Asp Asn Gly Phe Thr Pro Ser Leu Val Leu Ser Leu Ser 115 120 Gln Met Leu Tyr Asp Phe Gly Lys Val Ala Ser Gln Val Arg Ala Glu 135 140 Asn Ala Gly Val Ala Gln Gln Gln Ala Asn Val Leu Val Ser Ile Asp 155 150 Thr Ile Ala His Asp Thr Ala Ile Ala Met Val Gln Val Gln Thr Trp 165 170 Gln Gln Met Val Glu Thr Ala Lys Glu Gln Leu Asp Ala Leu Ser Ser 180 185 190 Ile Gly Thr Leu Thr Lys Gln Arg Asn Asp Glu Gly Ala Thr Ser Leu 200 Ser Asp Val Val Gln Thr Asp Ala Arg Ile Glu Gly Ala Arg Ala Gln 210 215 220 Leu Met Gln Tyr Gln Ala Ser Leu Asp Ser Ser Arg Ala Thr Leu Met 230 235 Ser Leu Leu Gly Trp Asp Ser Leu Asn Ala Val Ser Asn Asp Phe Pro 245 250 Gln Ser Leu Ala Arg Ser Cys Asp Ile Ala Glu Pro Asp Asp Arg Leu 265 Val Pro Ser Val Leu Ala Ala Trp Ala Gln Ala Asn Val Ala Gln Ala

```
280
                                       285
Asn Leu Asp Tyr Ala Asn Ala Gln Met Thr Pro Thr Val Ser Leu Glu
              295
                         300
Pro Glu Val Arg His Tyr Leu Asn Asp Arg Tyr Ala Gly Asn Glu Thr
              310 315
Arg Asp Arg Thr Gln Tyr Ser Ala Trp Val Lys Val Gln Met Pro Leu
            325 330 335
Tyr Gln Gly Gly Leu Thr Ala Arg Arg Asn Ala Ala Gly His Ala
         340 345 350
Val Glu Ser Ala Gln Ser Thr Ile Gln Arg Thr Arg Leu Glu Val Arg
      355 360 365
Gln Lys Leu Leu Glu Ala Arg Ser Gln Val Met Ser Leu Met Ser Thr
  370 375 380
Leu Gln Ile Gln Gly Arg Gln Glu Ala Leu Ser Ala Arg Thr Arg Glu
               390 395
Leu Tyr Gln Gln Gln Tyr Leu Asp Leu Gly Ser Arg Pro Leu Leu Asp
            405 410
Val Leu Asn Ala Glu Gln Glu Val Tyr Gln Ala Arg Phe Thr Gln Gln
         420
                          425
                                430
Gln Thr Ala Gly Gln Leu His Gln Leu Gln Leu Asn Cys Leu Tyr Asn
                       440
                                 445
Thr Gly Arg Leu Arg His Ala Phe Asp Leu Glu Asn Arg Thr Ile Gln
       455
                                    460
Thr Val Glu Ile Gln Pro
<210> 10119
<211> 114
<212> PRT
<213> Enterobacter cloacae
<400> 10119
Arg Arg Pro Lys Arg Gly Trp Thr Ala Leu Cys Ser Cys Arg Pro Arg
                              10
Thr Ser Ala Lys Arg His Arg Ser Ala Arg Thr Cys Cys Ala Ala Thr
          20
                          25
Ile Phe Ser Ser Arg Arg Ser Ser Ala Ile Thr Arg Lys Ile Pro Ala
 35
                       40
Trp Arg Cys Ala Leu Thr Ala Trp Arg Ser Lys Arg Ala Lys Lys Trp
                   55
                                    60
Arg Ser Ser Gly Ala Thr Ala Arg Ala Asn Gln Pro Cys Cys Arg Arg
                    75
                7.0
Trp Arg Ala Gly Trp Ile Trp Arg Ala Val Asn Cys Gly Ser Thr Thr
            85
                             90
Ser Ala Cys Arg Ile Trp Thr Trp Leu Thr Cys Gly Glu Thr Ser Ala
```

<210> 10120 <211> 417 <212> PRT <213> Enterobacter cloacae

100

<400> 10120

Leu

Thr Thr Ala Val Cys Ser Asn Ser Ser Arg Gln Pro Asp Gly Ser Gly 1 1 5 10 15 Lys Met Lys Ile Ser Gln Arg Asp Val Ala Ala Val Glu Asp Leu Asp 20 25 30 30 Asn Ala Leu Asp Ser Glu Ser Gly Tyr Thr Gly Ala Arg Arg Ile Val 35 40 45 45

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Phe Phe Ser Leu Val Met Phe Val Val Leu Gly Val Trp Ala Trp Phe
                   55
Gly Val Leu Asp Glu Val Ser Thr Gly Thr Gly Lys Val Ile Pro Ser
               70
                                7.5
Ser Arg Glu Gln Val Leu Gln Ser Leu Asp Gly Gly Ile Leu Thr Glu
           85
                            90
Leu Asn Val His Glu Gly Asp Gln Val Gln Ala Gly Gln Val Leu Ala
    100
             105
                             110
Arg Leu Asp Pro Thr Arg Ser Glu Ser Asn Val Gly Glu Ser Ala Ala
  115 120
Arg Tyr Arg Ala Ser Leu Ala Ser Ser Ala Arg Leu Tyr Ala Glu Val
  130 135 140
Asn Asp Leu Pro Leu Lys Phe Pro Pro Ser Leu Glu Lys Trp Thr Asp
145 150 155 160
Leu Thr Ala Ala Glu Thr Arg Leu Tyr Asn Ser Arg Arg Ala Gln Leu
            165 170 175
Glu Asp Thr Gln Arg Glu Leu Arg Ser Ala Leu Ala Leu Ala Asn Lys
         180 185 190
Glu Leu Ala Ile Thr Gln Arg Leu Val Lys Thr Gly Ala Ala Ser His
                     200 205
Val Glu Val Leu Arg Leu Gln Arg Gln Lys Ser Asp Leu Glu Leu Lys
210 215
                                  220
Leu Thr Asp Val Arg Ser Gln Tyr Tyr Val Gln Ala Arg Glu Ala Leu
               230 235
Ser Lys Ala Asn Ala Glu Val Asp Met Val Ser Ala Ile Leu Lys Gly
           245
                            250 255
Arg Glu Asp Ser Val Thr Arg Leu Thr Val Lys Ser Pro Val Arg Gly
        260 265
                                         270
Ile Val Lys Asn Ile Lys Val Thr Thr Ile Gly Gly Val Ile Pro Pro
   275
                      280
                                     285
Asn Gly Glu Leu Met Glu Ile Val Pro Val Asp Asp His Leu Leu Ile
 290
                  295
                                   300
Glu Thr Arg Leu Ser Pro Arg Asp Ile Ala Phe Ile His Pro Asn Gln
               310
                               315
Glu Ala Leu Val Lys Ile Thr Ala Tyr Asp Tyr Ala Ile Tyr Gly Gly
            325
                            330
                                            335
Leu His Gly Val Val Glu Thr Ile Ser Pro Asp Thr Ile Gln Asp Glu
         340
                         345
                                         350
Ala Lys Pro Glu Val Phe Tyr Tyr Arg Val Phe Ile Arg Thr Ser Gln
      355
                      360
                                      365
Asp Tyr Leu Val Asn Lys Ala Gly Arq His Phe Ser Ile Val Pro Gly
  370
                   375
                                   380
Met Ile Ala Thr Val Asp Ile Lys Thr Gly Glu Lys Thr Val Leu Asp
               390
                               395
Tyr Met Ile Lys Pro Phe Asn Arg Ala Lys Glu Ala Leu Arg Glu Arg
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<210> 10121
<211> 594
<212> PRT
<213> Enterobacter cloacae
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405

Asn Phe Ala Ile Val Arg Glu Leu Glu Ile Asp Phe His Ser Gly Met 55 Thr Ala Ile Thr Gly Glu Thr Gly Ala Gly Lys Ser Ile Ala Ile Asp 7.0 75 Ala Leu Gly Leu Cys Leu Gly Gly Arg Ala Glu Gly Asp Met Val Arg 90 Thr Gly Ala Ala Arg Ala Asp Leu Cys Ala Arg Phe Ser Leu Lys Asp 100 105 110 Thr Pro Ala Ala Leu Arg Trp Leu Glu Ala Asn Gln Leu Glu Asp Gly 115 120 125 Arg Glu Cys Leu Leu Arg Arg Val Ile Ser Ser Asp Gly Arg Ser Arg 130 135 140 Gly Phe Ile Asn Gly Thr Ala Val Pro Leu Ser Gln Leu Arg Glu Leu 145 \$150\$Gly Gln Leu Leu Ile Gln Ile His Gly Gln His Ala His Gln Gln Leu 165 170 Ile Lys Pro Glu Gln Gln Lys Ala Leu Leu Asp Gly Tyr Ala Gly Glu 180 185 Tyr Ala Leu Thr Gln Leu Met Ala Glu His Tyr Arg Gln Trp His Gln 200 205 Ser Cys Arg Glu Leu Ala Gln His Gln Gln Gln Ser Gln Glu Arg Thr 210 215 220 Ala Arg Ala Glu Leu Leu Glu Tyr Gln Leu Lys Glu Leu Asn Glu Phe 225 230 235 Asn Pro Gln Ala Gly Glu Phe Glu Gln Ile Asp Glu Glu Tyr Lys Arg 245 250 255 Leu Ala Asn Ser Gly Gln Leu Leu Ser Thr Ser Gln Asn Ala Leu Asn 260 265 Met Leu Ala Asp Gly Glu Asp Val Asn Leu Gln Ser Gln Leu Tyr Asn 275 280 Val Arg Gln Leu Val Thr Glu Leu Thr Gly Met Asp Asn Lys Leu Ser 295 300 Gly Val Leu Glu Met Leu Glu Glu Ala Ala Ile Gln Ile Ser Glu Ala 310 315 Gly Asp Glu Leu Arg His Tyr Cys Glu Arg Leu Asp Leu Asp Pro Asn 325 330 Arg Leu Phe Glu Leu Glu Gln Arg Ile Ser Arg Gln Ile Ser Leu Ala 340 345 350 Arg Lys His His Val Thr Pro Glu Glu Leu Pro Asn Tyr Tyr Gln Ser 360 355 365 Leu Leu Glu Glu Gln Gln Leu Asp Asp Gln Ala Asp Ser Leu Glu 370 375 380 Thr Leu Ser Leu Ala Val Asn Leu His His Gln Gln Ala Leu Glu Thr 390 395 Ala Lys Arg Leu His Asp Val Arg Gln His Tyr Ala Gln Glu Leu Ser 405 410 Gln His Ile Thr Asp Ser Met His Thr Leu Ala Met Pro His Gly Val 420 425 Phe Thr Ile Asp Val Arg Phe Glu Glu Asn His Leu Thr Ala Glu Gly 435 440 Ala Asp Arg Val Glu Phe Arg Val Thr Thr Asn Pro Gly Gln Pro Leu 455 460 Gln Ala Ile Ser Lys Val Ala Ser Gly Gly Glu Leu Ser Arg Ile Ala 470 475 Leu Ala Ile Gln Val Ile Thr Ala Arg Lys Met Glu Thr Pro Ala Leu 485 490 495 Ile Phe Asp Glu Val Asp Val Gly Ile Ser Gly Pro Thr Ala Ala Val 505 510 Val Gly Lys Leu Leu Arg Gln Leu Gly Glu Ser Thr Gln Val Met Cys 520 Val Thr His Leu Pro Gln Val Ala Gly Cys Gly His His His Phe Ile

<210> 10122 <211> 126 <212> PRT <213> Enterobacter cloacae

<400> 10122 Ala Ala Tyr Cys Ser Gly Pro Lys Arg Asn Gln Ile Thr Met Arg Cys 10 Lys Thr Leu Thr Ala Ala Ala Ala Val Leu Leu Met Leu Thr Ala Gly 25 30 Cys Ser Thr Leu Glu Lys Val Val Tyr Arg Pro Asp Ile Asn Gln Gly 4.0 45 Asn Tyr Leu Thr Pro Asn Asp Val Ser Lys Ile Arg Val Gly Met Thr 50 55 60 Gln Gln Gln Val Ala Tyr Ala Leu Gly Thr Pro Met Met Ser Asp Pro 75 70 80 Phe Gly Thr Asn Thr Trp Phe Tyr Val Phe Arg Gln Gln Pro Gly His 8.5 90 Glu Asp Val Thr Gln Gln Thr Leu Thr Leu Thr Phe Ser Ser Ala Gly 100 105 110

Val Leu Thr Asn Ile Asp Asn Lys Pro Ala Leu Thr Lys 115 120 125

<210> 10123 <211> 278 <212> PRT

<213> Enterobacter cloacae

<400> 10123 Asp Arg Ala Ala Ala Ser Val Asp Asn Gly Val His Thr Val Arg 1.0 Lys Asn Ser Leu Lys Thr Ala Phe Leu Glu Asn Thr Pro Ile Val Asn 20 3.0 Gly Trp Leu Ala Ile Pro Ser Gly Tyr Ser Ala Glu Ile Met Gly His 40 Gln Gly Tyr Asp Ala Val Thr Val Asp Leu Gln His Glv Met Ile Asp 5.0 55 Phe Ala Ser Ala Leu Ser Met Leu Gln Ala Leu Ser Ala Thr Pro Ala 70 65 75 Val Pro Leu Val Arg Val Ala Asp Asn Asp Pro Ala Gln Ile Met Arg 90 85 Val Leu Asp Ala Gly Ala Tyr Gly Val Ile Cys Pro Met Ile Ser Ser 100 105 Ala Glu Gln Ala Arg Arg Phe Val Ala Ala Cys Arg Tyr Pro Pro Leu 120 125 Gly Val Arg Ser Phe Gly Pro Ala Arg Gly Leu Leu Tyr Gly Gly Ser 135 Asp Tyr Pro Gln His Ala Asn Asp Glu Ile Leu Thr Leu Ala Met Ile 150 155 Glu Thr Arg Gln Gly Leu Ala Asp Leu Asp Ala Ile Leu Asp Thr Glu 165 170

Gly Leu Asp Gly Val Phe Ile Gly Pro Asn Asp Leu Ser Leu Thr Leu 180 185 Thr Gly Ser Ala Ser Ala Glu Ser Gln His Pro Glu Met Leu Ala Ala 195 200 205 Ile Glu Arg Val Ile His Cys Cys Arg Gln Gln Gln Lys Ile Ala Gly 215 220 Ile Phe Cys Thr Ser Gly Ala Ala Ala Ala Ala Arg Ile Ala Gln Gly 230 235 Phe Gln Phe Val Thr Pro Ala Asn Asp Val Met Gln Leu Gly Arg Ala 245 250 255 Ser Arg Glu Ala Ile Ala Leu Ala Arg Gly Asn Ala Ile Pro Thr Thr 260 265 Gly Ala Ser Gly Tyr

<210> 10124 <211> 650 <212> PRT

<213> Enterobacter cloacae

<400> 10124

Pro Leu Trp Asn Tyr Phe Leu Arg His Leu His Leu Leu Tyr Phe Leu 10 Phe Thr Asp Val Ile Phe Arg Phe Ala Leu Pro Val Ser Asn Gly Ser 2.0 25 30 Val Ile Asn Asn Tyr Arg Gly Asn Arg Ile Ser Phe Ser Met Asp Phe 40 45 Tyr Phe Thr Arg Phe Glu His Arg Gln Pro Pro Glu Pro Leu Lys Thr 55 6.0 Pro Arg Trp Val Met Leu Thr Trp Gln Val Leu Ala Val Ala Ser Leu 7.0 75 80 Ile Leu Gly Ala Asn Tyr Ile Tyr Trp Arg Trp Thr Ala Ser Leu Asn 8.5 90 Thr Asp Ala Leu Trp Tyr Ala Ile Pro Leu Val Leu Ala Glu Thr Leu 100 105 Ala Trp Ile Gly Thr Val Leu Phe Thr Ile Asn Leu Trp Lys Glu Asp 115 120 125 Asp Pro Pro Gln Asn Pro Pro Pro Ile Glu Ile Asn Asp Cys Leu Arg 135 140 Ser Glu Asp Ala Glu Ala Ser Arg Pro Ile Lys Val Asp Leu Phe Ile 150 155 Ala Thr Tyr Ser Glu Asp Val Glu Leu Val Arg Leu Ser Ile Arg Asp 165 170 Ala Met Lys Met Asp Tyr Pro Gly Pro Leu Asp Tyr Lys Val His Val 180 185 190 Leu Asp Asp Gly Arg Arg Pro Glu Met Lys Ala Val Cys Asp Gln Glu 195 200 205 Gly Ala Asn Tyr Ile Ser Arg Gln Thr Asn Ile Gly Phe Lys Ala Gly 215 220 Asn Leu Arg Asn Gly Leu Glu Gln Thr Asp Gly Asp Phe Leu Ile Ile 230 235 Cys Asp Ala Asp Thr Arg Val Phe Pro Thr Leu Leu Ser His Thr Leu 245 250 Gly Tyr Phe Arg Asp Pro Asp Val Ala Trp Val Gln Thr Pro Gln Trp 260 265 270 Phe Phe Asp Leu Pro Glu Gly Glu Asn Leu Ala Arg Trp Leu Gly Arg 275 280 285 Lys Ala Gly Lys Thr Gly Tyr Gly Leu Gly Trp Leu Ala Gln Lys Phe 295 300 Ile Gly Pro Val Thr Ile Gly Arg Asp Pro Phe Phe Asn Asp Pro Arg 310 315

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Met Phe Tyr Asp Val Ile Leu Arg Arg Arg Asn Trp Ala Asn Ala Ala
           325
                         330
Phe Cys Cys Gly Ala Ala Ser Ile His Arg Arg Glu Ala Val Met Gln
       340
                      345
                                      350
Ala Ala Leu Arg Ser Tyr Val Trp Thr Thr Glu Glu Glu Ile Asp Arg
     355 360
                        365
His Thr Arg Asp Ile Arg Asp Pro Val Met Arg Glu Thr Leu Gln Asp
 370 375
                               380
Ala Met Arg Pro His Val Ala Phe Asp Thr Glu Leu Thr Pro Tyr Lys
385 390 395
Phe His Val Ser Glu Asp Ile Tyr Thr Ser Ile Leu Leu His Gly Asp
        405 410 415
Ala Ala Arg Arg Trp Arg Ser Val Met His Pro Arg Ile Glu Ser Lys
        420 425 430
Met Leu Ser Pro Gln Asp Met Leu Thr Trp Met Ile Gln Arg Phe Lys
     435 440
Tyr Ala Ala Gly Ser Leu Asp Ile Leu Phe His Asp Asn Ile Phe Ser
  450 455 460
Arg Arg Arg Phe Lys Leu Ser Leu Pro Gln Thr Leu Met Tyr Ala Thr
465 470 475
Thr Phe Trp Ser Tyr Leu Ala Cys Val Trp Asn Thr Val Phe Leu Ile
           485
                          490 495
Ser Pro Ile Val Tyr Leu Phe Thr Gly Ile Pro Pro Val Ser Ala Trp
            505
        500
                                      510
Ser Glu Pro Phe Tyr Leu His Phe Leu Pro Phe Phe Ile Val Ser Glu
515
                    520
                                   525
Leu Ala Phe Met Phe Gly Thr Trp Gly Ile Ser Ala Trp Asp Gly Arg
                 535
                                540
Ala Ser Tyr Leu Ser Phe Phe Ser Met Asn Leu Arg Ala Leu Asn Thr
              550 555
545
Val Leu Arg Gly Glu Gln Ile Lys Phe His Val Thr Pro Lys Glu Arg
           565
                          570
Gln Thr Gly Arg Phe Leu Tyr Leu Val Lys Pro Gln Ile Ala Ile Val
                       585
        580
                                      590
Val Leu Thr Leu Ala Gly Leu Ile Trp Gly Gly Ile Gln Val Ala Arg
     595
                    600
                                   605
Gly Gln Val Asp Asp Pro Ser Gly Tyr Val Ile Asn Ile Phe Trp Gly
 610 615
                                620
Ala Val Asn Ile Ala Ala Met Leu Pro Leu Ile Phe Ala Ala Met Trp
            630
                             635
Thr Pro Ala Glu Glu Glu Val Ser Glu
           645
                          650
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<210> 10125 <211> 909 <212> PRT <213> Enterobacter cloacae

<400> 10125

Leu Tyr Val Gln His Gln Arg Leu Ala Asp Gly Gly Ile Leu Ser Leu 105 His Thr Asp Ile Thr Glu Leu Asp Asp Ala Gln Arg Ser Arg Gln Gln 115 120 125 Leu His Asp Asp Phe Leu Leu Thr Ala Glu Ser Ile Gln Ile Gly Ile 135 140 Trp Asn Trp Gln Val Ser His Asp Ser Leu Glu Val Asn Asp Thr Leu 150 155 Leu Ala Met Val Gly Gln Ser Arg Thr Gln Leu His Tyr Pro Leu Arg 165 170 175 Phe Leu Leu Asn Leu Val His Glu Glu Asp Arg Ala Val Leu Arg Asn 180 185 190 Ala Met Ile Ala Ser Arg Gln Glu His Met Pro Val Phe Glu Ser Glu 200 205 Ile Arg Val Gln His Ala Thr Gln Gly Trp Arg Trp Met Leu Val Ser 215 220 Gly Gln Val Val Thr Leu Ser Met Gln Gln Gln Ala Glu Arg Val Ile 230 235 Gly Thr Leu Gln Asp Ile Thr Arg Arg Lys Glu Ala Glu Leu Leu Ala 245 250 255 Ile Glu Ala Ala Lys Val Ala Arg Glu Ala Asn Glu Ala Lys Ser Ala 260 270 265 Phe Leu Ala Asn Met Ser His Glu Ile Arg Thr Pro Met Asn Gly Ile 275 280 285 Leu Gly Met Thr Gln Leu Cys Leu Asp Thr Gln Leu Thr Pro Glu Gln 295 300 Arg Glu Tyr Leu Ser Leu Val Met Ser Ser Ala Gln Ser Leu Leu His 310 315 Ile Ile Asn Asp Ile Leu Asp Phe Ser Arg Ile Glu Ser Gly Lys Met 325 330 335 Thr Val Asp Thr Glu Pro Leu Glu Ile Arg Pro Phe Val Gln Ser Leu 340 345 350 Ile Arg Pro His Met Pro Ser Ala Ser Glu Lys Gly Ile Glu Leu Leu 355 360 365 Val Asp Ile Ala Pro Gly Val Pro Glu Val Leu Ile Val Asp Gly Pro 370 375 380 Arg Leu Arg Gln Ile Leu Thr Asn Leu Leu Gly Asn Ala Leu Lys Phe 390 395 Thr His His Gly Glu Val Met Leu Ala Ile Glu Pro Thr Glu Ser Glu 405 410 Gly His Trp Arg Phe Arg Ile Arg Asp Ser Gly Ile Gly Ile Pro Met 420 425 Glu Lys Gln Lys Ala Ile Phe Glu Ala Phe Ser Gln Ala Asp Ser Ser 435 440 445 Thr Thr Arg Arg Tyr Gly Gly Thr Gly Leu Gly Leu Thr Ile Ser Ala 455 460 Arg Leu Val Ser Leu Met Gly Gly Glu Leu Thr Val Gln Ser Glu Pro 470 475 Gly Glu Gly Ser Glu Phe Ala Phe Thr Leu Pro Leu Glu Gly Gln Leu 485 490 Ala Val Ser Ala Thr Asp Ala Pro Val Ala Arg Phe Asn Gly Glu Ser 505 Val Leu Val Val Asp Asp Asn Ser Thr Asn Leu Arg Leu Leu Asp Thr 515 520 525 Met Leu Arg Gln Met Gly Leu Thr Pro Thr Cys Val Asn Asn Ala Gly 530 535 540 Glu Ala Leu Ser Leu Thr Ala Lys Arg Gly Tyr Trp Pro Leu Ile Leu 550 555 Leu Asp Ala Gln Met Pro Asp Met Asp Gly Val Ser Leu Ala Ile Glu 570 Leu Ser Val Met Pro Gln Ala Glu Gln Ser His Ile Ile Met Leu Ser

```
580
                       585
Ser Met Ser Arg His Phe Asp Ala Asn Met Leu Lys Arg Ile Gly Val
     595
                    600
                                 605
Ala His Tyr Leu His Lys Pro Val Ala Gln Arg Glu Leu Tyr Gln Thr
               615
                        620
Ile Ala Ser Val Leu Ala Pro Ala Pro Leu Ala Ser Pro Thr Ala Val
     630 635
Pro Ala Ser Ala Leu Val Thr Ala Pro Val Thr Ala Pro Val Thr Ala
        645 650 655
Gln Ala Ser Leu Arg Ile Leu Leu Ala Glu Asp Asn Leu Val Asn Gln
        660 665 670
Lys Val Ala Arg Arg Leu Leu Glu Gln Leu Gly His Arg Cys Glu Val
    675 680
                        685
Val Ser Asn Gly Arg Glu Ala Leu Glu Arg Trp Arg Glu Gln Ser Trp
 690 695 700
Asp Leu Met Leu Val Asp Leu Gln Met Pro Glu Met Asp Gly Glu Thr
    710 715
Ala Ile Arg Leu Leu Arg Glu Glu Thr Leu Thr Arg Gly Arg Ser His
           725 730
Gln Pro Ala Ile Ala Met Thr Ala His Ala Met Gln Gly Asp Lys Ala
        740 745 750
Arg Cys Leu Ala Met Gly Phe Asp Gly Tyr Ile Ala Lys Pro Val Ser
     755 760
                                   765
Gln Glu Ala Leu Arg Glu Glu Ile Ala His Val Leu Ala Gly Glu Asp
 770 775
                                780
Lys Gly Leu Pro Asp Glu Ala Gln Leu Leu Lys Gln Cys Ala Asp Asp
785 790 795
Pro Glu Leu Val Asn Glu Leu Leu Ala Leu Phe Gly Asn Gly Leu Asp
           805
               810
                                         815
Glu Ala Val Ala Ala Met Ala Leu Asn Ile Ala His Asn Asp Arg Asp
       820
                       825
Ala Leu Arg Arg Ala Ala His Lys Leu Arg Gly Glu Ala Val Thr Leu
  8.35
                    840 845
Gly Phe Ile Arg Leu Ser Glu Val Leu Gln Gln Leu Glu Ser Gln Ala
850 855
                                860
Val Ser Leu Asn Gln Thr Gly Leu Ser Val Leu His Gly Glu Leu Ile
865 870
                           875
Glu Glu Ala Arg Arg Ser Ala Ala Trp Leu Arg Arg Arg Ala Gln Glu
           885
                          890
Val Lys Asp Asp Gln Ala Ser Ser Ala Ala Gly Asn
        900
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<210> 10126 <211> 156 <212> PRT

<213> Enterobacter cloacae

<400> 10126

Ala Met Asn Ala Gly Tyr Pro Thr Met Leu Leu Ile Pro Gly Met Ser 1.0 Ala Phe Gln Arg Val Asn Glu Pro Ala Pro Gly Leu Ala Gly Arg Met 20 25 Phe Phe Gln Val His Cys Pro His Gly Lys Thr Gly Pro Asn Val Gly 40 Leu His Leu His Val Gln Arg Asn Pro Phe Ser Arg Cys Glu Ile Phe 55 50 60 Leu Asp His Trp Gln Arg His Ile Thr Pro Pro Ser Val Glu Leu Ala 75 70 Pro Gln Phe Asn Ile Arg Val Thr Ser Leu Gln Pro Gly Ala Val Glu 90 Ser Glu Leu Phe Glu His Ile Ser Asp Lys Asn Tyr Arg Ala Gln Met

5615 105 110 Glu Gln Leu Lys Glu Lys Met Thr Phe Leu Lys Ala Asp Asp Val Ala 115 120 125 Asp Ser Ile Pro Tyr Val Leu Gln Ala Pro Glu His Val Asn Val Ala 135 140 Glu Leu Phe Ile Met Pro Pro Glu Gln Pro Trp 150 <210> 10127 <211> 129 <212> PRT <213> Enterobacter cloacae <400> 10127 Tyr Tyr Ser Gln Thr Lys Arg Thr Cys Ala Gln Cys Arg Ser Ala Leu 10 Leu Ser Thr Gln Leu Gln Gly Leu Glu Leu Thr Ser Ile Met Ile Asn 25 His Phe Arg Asp Gln Trp Leu Glu Asp Phe Phe Leu Tyr Gly Arg Ser 40 4.5 Ser Asn Val Ile Pro Leu Asn Leu Glu Thr Ala Leu Ala Arg Lys Leu 5.5 60 Asp Ile Ile Asn Ala Ala Met Ser His Leu Asp Leu Arg Ser Pro Pro 70 75 Gly Asn Met Tyr Glu Ala Leu Ser Pro Pro Leu Lys Gly Tyr Ser Ser 85 90 Ile Arg Val Asn Arg Gln Tyr Arg Leu Val Phe Arg Trp Ser Glu Gly 100 105 110 Lys Ala Asp Asp Leu Tyr Leu Ser Pro His Lys Tyr Thr Gln His Lys 115 120 <210> 10128 <211> 92 <212> PRT <213> Enterobacter cloacae <400> 10128 Arg Pro Met Pro Arg Ser Ala Cys Ala Ser Ala Pro Ala Pro Cys Gln Arg Gln Cys Leu Ser Pro Ala Pro Ala Asn Arg Arg Arg Ser Pro Cys 20 25 Pro Ala Cys Arg Leu Pro Cys Arg Thr Ser Ala Gly Gly Cys Arg Pro 35 40 4.5 Arg Arg Arg Ser Pro Ala Pro Leu Gln Glu Arg Ser Pro Leu Gln Ser 50 55 60 Gly Arg Arg Asn Arg Gln Trp Arg Ser Gly Arg Glu Arg Ala Lys Asn 70 75 Gly His Ala Pro Pro Thr Pro Ala Arg Pro Ala 8.5 <210> 10129 <211> 308 <212> PRT <213> Enterobacter cloacae <400> 10129 Ala Met Ser Ala Gln Asp Arg Gln Thr Leu Ser Leu Pro Ser Leu Arg Asn Leu Gln Ala Phe Ile Ala Val Ala Asn Ala Leu Ser Ile His Gln

```
25
Ala Ala Glu Gln Leu Asn Val Thr Pro Ser Ala Val Ser His Gln Ile
                      40
Ala Ser Leu Glu Ser Trp Leu Gly Lys Lys Leu Phe Ile Arg Ser Gly
                  55
Lys Gly Val Gln Leu Thr Pro Thr Gly Glu Gln Tyr Leu Arg Glu Val
             7.0
                               7.5
Ser Ala Ala Met Ser Ala Ile Gly Arg Ala Thr Asp Gln Ile Val Lys
         8.5
                           90
                                           95
Glu Lys Asp Asn Ala Val Leu Arg Val His Ser Ser Pro Thr Phe Gly
        100
             105
Leu Ser Trp Leu Leu Arg Arg Leu Gly Arg Phe Arg Ala Glu Tyr Pro
     115 120 125
Asp Ile Thr Ile Asn Leu Thr Cys Ser Tyr Glu Asn Leu Gln Phe Ala
 130 135 140
Arg Asp Asn Ile Asp Ile Asp Ile Arg His Gly Ile Pro Asp Trp Asp
145 150 155
Ala Tyr Arg Val Met Thr Ile Lys Asn Asp Thr Leu Val Val Leu Ala
         165
                   170
Ser Pro Asp Tyr Ala Glu Glu His Pro Ile Ser Thr Pro Ala Asp Leu
      180
             185 190
Leu Gln Gln Ser Leu Ile Ser Ser Thr Ser Thr Leu Val Asn Trp Glu
         200
                                    205
Lys Trp Phe Ala Trp His Asn Ile Asp Arg Pro Trp Leu Asn Phe Ser
210 215
                                 220
Leu Ser Phe Asp Arg Ser Tyr Met Ser Phe Glu Ala Ala Arg Met Gly
             230
                   235
Leu Gly Phe Ile Leu Glu Ser Lys Met Met Ala Thr Asp His Leu Lys
            245
                250
Asp Gly Ser Leu Val Gln Val Leu Pro Asp Glu Met Gly Ile Ala Ile
         260
                        265 270
Asn Ala His His Leu Val Met Pro His Met Asn Glu Arg Ala Trp Lys
275 280 285
Ile Gln Gln Phe Val Glu Trp Ile Asp Arg Glu Leu Arg Leu Ser Gly
                  295
Tyr His Leu
305
```

<210> 10130

<211> 297 <212> PRT

<213> Enterobacter cloacae

<400> 10130

Lys Val Arg Ser Gly Ala Leu Thr Pro Ala Leu Ser His Arg Glu Arg Gly Ile Asn Arg Gly Ile Gln His Met Leu His His Lys His Pro Ala 20 25 His His Gln Val Gly Arg Asp Lys His Gln Gly Thr Ala Leu Gly Lys 40 Ala His His Arq Gly Val Asp His Ala Lys Gln Arg Gln Gln Arg Ala Ser Cys Gly Gly Asp Gly Pro Ala Gln Arg Phe Val Glu Asp Gly Glu 70 7.5 Asp Gly Asp Thr Ala Pro Glu His Ala Gly Glu Arg Arg Ala Val Ala 90 Glu Met His Gln Ala Phe Val Val Asp Thr Leu Ala Val Gln His Val 105 100 Gly Ala Asp Phe Arg Arg Ala Gly Pro Arg Gly Ala His His Ala Val 120 His His Gly Gln Arg Pro Val Gly Asp Pro Arg Glu Gln Ala Asp Glu

```
135
Asp Asn Gly His Leu His Phe Arg Gly Phe Pro His His Leu Val Gly
                150
                              155
Gly Asp Asp Ala Asp Lys His Gln Asn Arg His Asp Gly Gly His Arg
             165
                      170
Tyr Asp Gly Glu His Lys Gly Pro Gln Pro Glu Gln Arg His Asp Glu
                        185
                                            190
His Gly His Ala Gly Arg Gln Gly Val Ala Asp Ala Gly Ala His Arg
     195
          200 205
Phe Pro Ala Arg Met Ala Asp Val Asp Arg Asp Arg Glu Arg Ile Ala
                 215
                           220
 210
His Gln Ala Ala Glu His Arg Gly Gln Thr Val Arg Gln His Tyr Leu
    230 235
Ala Gly Arg Val Phe Ile Pro Cys Arg Val Gly Ala Phe Asp Val Leu
           245 250 255
Gln Val Lys Asp Val Val Arg Gln Pro Gln Arg Tyr Gly Gly Arg Gln
         260 265 270
Ile Arg Gln Arg Val Arg Gln Pro Leu His Lys Ala Val His Val His
 275 280
Phe Arg Arg Val Lys Ala Glu Gly
  290
<210> 10131
<211> 328
<212> PRT
<213> Enterobacter cloacae
<400> 10131
Cys Asn Ala Ser Val Lys Ile Cys Ser Lys Leu Met Val Thr Arg Ser
                             10
His Asn Met Asn Ser Ile Phe Thr Glu Glu Asn Leu Leu Ala Phe Thr
                           25
Thr Ala Ala Arg Phe Gly Ser Phe Ser Lys Ala Ala Ala Glu Leu Gly
                       40
                                        4.5
Val Thr Thr Ser Ala Ile Ser Tyr Thr Ile Lys Arg Met Glu Thr Gly
                    55
Leu Asp Val Val Leu Phe Val Arg Asn Thr Arg Ser Ile Glu Leu Thr
                7.0
                                 7.5
Glu Ser Gly Phe Tyr Phe Tyr Arg Lys Ala Thr Asp Leu Leu Asn Asp
             85
                              90 95
Phe His Ala Ile Lys Arg Gly Ile Asp Thr Ile Ser Gln Gly Ile Glu
         100
                          105
Thr Arg Val Arg Ile Cys Ile Asn Gln Leu Leu Tyr Thr Pro Arg His
      115
                       120
                                         125
Thr Ala Arg Leu Leu Gln Val Leu Lys Lys Gln Phe Pro Thr Cys Gln
                    135
                                     140
Ile Thr Val Thr Thr Glu Val Tyr Asn Gly Val Trp Asp Ser Ile Ile
                150
                                  155
Asn Asn Gln Ala Asn Ile Ala Ile Gly Ala Pro Asp Thr Leu Leu Asp
                              170
             165
Gly Gly Gly Ile Asp Tyr Thr Glu Ile Gly Ala Ile Arg Trp Val Phe
          180
                           185
Ala Ile Ala Pro Thr His Pro Leu Ala Phe Ala Pro Glu Pro Ile Ser
                       200
                                         205
Glu Ser Gln Leu Arg Leu Tyr Pro Asn Ile Met Val Glu Asp Thr Ala
   210
                   215
                                     220
His Thr Ile Asn Lys Lys Val Gly Trp Leu Leu His Gly Gln Glu Ala
                230
                                  2.35
```

Ile Leu Val Pro Asp Phe Asn Thr Lys Cys Gln Cys Gln Ile Leu Gly

Glu Gly Ile Gly Phe Leu Pro Glu Tyr Met Thr Arg Glu Ala Val Glu

250

```
260
                             265
Asp Gly Leu Leu Val Thr Arg Arg Ile Asn Asn Pro Arg Gln Asp Ser
                        280
                                           285
Arg Met Leu Leu Ala Thr Gln His Ala Ala Thr Gly Gln Val Thr Arg
       295
                                       300
Trp Ile Lys Gln Gln Phe Gly Pro Glu Gly Val Leu Thr Arg Ile Tyr
305
    310
                                   315
Ser Asp Leu Leu Trp Arg Thr
              325
<210> 10132
<211> 171
<212> PRT
<213> Enterobacter cloacae
<400> 10132
Asn Gln Ile Thr Asp Gly Phe Thr Thr Leu Met Thr Lys Lys Lys Ala
                              10
His Lys Pro Gly Ser Ala Thr Ile Ala Leu Asn Lys Arg Ala Arg His
 20
                            25
Glu Tyr Phe Ile Glu Glu Glu Phe Glu Ala Gly Leu Ala Leu Gln Gly
35
                        40
Trp Glu Val Lys Ser Leu Arg Ala Gly Lys Ala Asn Ile Gly Asp Ser
                     55
Tyr Val Ile Leu Lys Asp Gly Glu Ala Phe Leu Phe Gly Ala Asn Phe
                 7.0
                                   75
Thr Pro Leu Thr Val Ala Ser Ser His Tyr Val Cys Asp Pro Thr Arg
                                90
Thr Arg Lys Leu Leu Leu Asn Lys Arg Glu Leu Glu Ser Leu Tyr Gly
         100 105
                                               110
Arg Ile Asn Arg Glu Gly Phe Thr Val Val Ala Leu Ser Leu Tyr Trp
    115 120
Lys Asn Ala Trp Cys Lys Val Lys Ile Gly Val Ala Lys Gly Lys Lys
                   135 140
Gln His Asp Lys Arg Thr Asp Leu Lys Ala Arg Glu Trp Gln Leu Asp
145 150 155
Lys Ala Arg Ile Met Lys Asn Ala Gly Arg
              165
<210> 10133
<211> 196
<212> PRT
<213> Enterobacter cloacae
<400> 10133
Met Gly Pro Thr Thr Lys Gly Pro Lys Ile Glu Gly Pro Lys Met Ala
                                1.0
Lys Ile Ala Lys Lys Leu Thr Asp Thr Glu Ile Lys Ser Thr Lys Pro
                            25
Ala Asp Lys Glu Ile Asn Leu Phe Asp Gly Asp Gly Leu Ile Leu Arg
Ile Ala Pro Leu Thr Lys Gly Gly Lys Lys Asn Trp Tyr Phe Arg Tyr
                    55
Ala Val Pro Val Ser Lys Lys Arg Thr Lys Met Ser Leu Gly Thr Tyr
                  70
                                    75
Pro His Leu Thr Leu Ala Arg Ala Arg Thr Leu Arg Asp Glu Tyr Leu
                                90
Ser Leu Leu Ala Asn Gly Ile Asp Pro Gln Val His Asn Ser Asn Lys
        100
                            105
Ala Asn Ala Leu Lys Asn Ala Thr Glu His Thr Leu Gln Ala Val Ala
       115
                         120
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Arg Lys Trp Leu Asp Glu Lys Val Lys Thr Ser Gly Ile Ser Gln Asp
                    135
His Ala Glu Asp Ile Trp Arg Ser Leu Glu Arg Asn Ile Phe Pro Gly
               150
                                  155
Leu Gly Asn Val Pro Val Asn Glu Ile Arg Pro Lys Leu Leu Lys Gln
           165 170 175
His Leu Asp Pro Ile Glu Gln Arg Gly Val Leu Glu Thr Glu Ser Pro
                 185
    180
Arg Ile Ile
     195
<210> 10134
<211> 258
<212> PRT
<213> Enterobacter cloacae
<400> 10134
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Asp Asn Thr Asp Leu Pro Leu Val Leu Leu Gly Gly Thr Leu Cys Asn
                           2.5
Val Arg Leu Trp Gln Pro Val Ile Glu Arg Leu Asn Ile Ser Ala Val
                     40
Leu Cys Ile Thr Leu Thr Gly Ala Glu Ser Ala Pro Gln Ala Ser Arg
                    55
Arg Leu Leu Lys Val Leu Pro Pro Arg Phe Leu Leu Ala Gly Phe Ser
              70
                                  75
Leu Gly Ala Ile Val Ala Leu Gln Met Ala Ala Asp Ala Pro Glu Arg
             85
                               90
Val Asn Gly Leu Thr Leu Ile Ser Val Asn Pro Leu Pro Val Ala Pro
         100
                            105
Asp Thr Leu Ala Ser Arg Arg Glu Ala Val His Thr Ala Gln Ala His
                        120
                                          125
      115
Gly Leu Ala Asp Trp Leu Val Ser Ser Leu Trp Gln Ser Tyr Val Ala
 130
                  135
                                      140
Pro Ser Arg Leu Ser Asp Arg Ile Leu Gln Glu Thr Ile Cys Arg Met
    150
                     155
Ala Gln Glu Cys Gly Ile Glu Thr Phe Ala Gly Gln Thr Glu Met Ala
              165
                               170
                                                 175
Ile His Arg Gln Asp Asn Arg Thr Ala Phe Asn Ala Leu Ala Cys Pro
                           185
                                190
          180
Thr Leu Leu Leu Asn Gly Ala Gln Asp Val Ile Cys Thr Pro His His
                        200
                                          205
      195
His Gln Leu Leu Ala Ala Gly Asn Ala Asn Val Thr Arg His Thr Val
                     215
   210
Glu Ala Gly Gly His Phe Ile Pro Leu Glu Thr Pro Asp Glu Ile Ala
                 230
                                   235
Pro Leu Leu Arg Gln Trp Ile Thr Glu Cys Ile Gln Cys Ala Lys Thr
                               250
                                                 255
              245
Val
<210> 10135
<211> 102
<212> PRT
<213> Enterobacter cloacae
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<400> 10135

Arg His Val Val Gly Phe Ser Thr Ser Leu Phe Ile Ser Thr Gly Ala 1 5 10 15 Ile Trp Leu Met Gly Arg Arg Val Leu His Ala Lys Lys Phe Leu Val

25 Phe Tyr Leu Asp Ser Val Asn Lys Ser Ile Trp Gln Phe Leu Ile Thr 40 Leu Gln Ile Leu Leu Ser Val Val Asn Ser Tyr Phe Ser Ala Cys Lys 5.5 Gln Ser Ser Phe Asn Leu Ser Gly Ile Ile Ser Ser Ala Ile Tyr Thr 70 75 Tyr Phe Thr Phe Cys Leu Arg Thr Leu Phe Ser Val Leu Arg Ser Leu 85 Ser Val Thr Glv Leu

<210> 10136 <211> 759

<212> PRT

<213> Enterobacter cloacae

<400> 10136 Ala Phe Tyr Met Ala Ser Leu Ser Arg Arg Pro Asp Ala Leu Arg Pro Gly Cys Ala Ala Glu His Arg Arg Leu Lys Met Ile Arg Leu Leu 25 Leu Leu Ala Ile Ser Pro Leu Leu Ala Gln Ala Ser Gln Pro Val Thr 40 Trp Ser Leu Ala Gly Met Trp Arg Val His Asp Ala Asn Leu Ser Thr 55 Phe Asp Gly Ala Ser Ala Pro Asp Arg Asp Trp Arg Ser Ile Ala Val 7.0 7.5 Pro Ala Asn Trp Tyr Ser Ala Gly Tyr Asp His Gln Gly Ala Leu Trp 85 9.0 Tyr Arg His Glu Phe Thr Leu Pro Arg Arg Ala Pro Asp Thr Met Ala 100 105 110 Thr Leu Val Phe Asp Gly Val Asp Tyr Phe Ala Asp Val Thr Leu Asn 120 115 Gly Arg His Leu Ala His His Glu Gly Tyr Phe Gln Arg Phe Ser Val 130 135 140 Asp Ile Ser Asp Ala Leu Gln Arg His Asn Lys Leu Ala Val Arg Val 150 155 Asp Ser Pro Trp Glu Asp Pro Lys Thr Ile Trp Pro Leu His Lys Thr 165 170 175 Met Val Lys Gly Val Leu Asn Gln His Asp Thr Arg Pro Gly Gly Ala 180 185 190 Trp Ser Glu Asp Gly Gln Asp Ala Asn Ser Gly Gly Ile Trp Ser Pro 195 200 205 Val Lys Leu His Leu Ser Arg Gly Val Thr Ile Asp Glu Val Ile Leu 215 220 Arg Pro Asp Trp Arg Glu Gly Leu Ser Lys Pro Ala Leu His Ala Glu 230 235 Ile Arg Tyr Arg Ala Leu Ser Ala Gly Asp Val Thr Leu Arg Leu Ser 250 245 Ala Thr Pro Asp Asn Phe Thr Gly Pro Pro Val Lys Gln Glu Phe Pro 260 265 Val Asn Leu Ala Arg Thr Asp Gly Lys Pro Gln Ser Leu Arg Val Thr 275 280 Leu Pro Met Gln Gly Ala Arg Leu Trp Trp Pro Val Gly Tyr Gly Arg 295 300 Pro Asn Leu Tyr Arg Val Arg Ala Thr Leu Thr Asp Lys Gln Gly Val 310 315 Met Asp Thr Ala Val Ala Arg Thr Gly Leu Arg Lys Ile Val Lys Gln 330 Pro Asp Asn Lys Gly Trp Leu Phe Asn Asp Lys Arg Leu Phe Ile Lys

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340
                       345
Gly Ser Asn Tyr Ile Gly Ser Pro Trp Leu Ser Thr Met Thr Arg Lys
     355
                    360
                                  365
Lys Tyr Arg Arg Asp Phe Arg Leu Val Gln Ala Met Asn Ala Asn Ala
              375
                                380
Ile Arg Val His Ser His Val Ala Gly Arg Ala Leu Tyr Asp Val Ala
    390
                     395
Asp Glu Met Gly Leu Met Ile Trp Gln Asp Val Pro Leu Gln Trp Gly
         405 410
Tyr Asn Asn Ser Asp Ala Phe Ala Asp Asn Ala Val Arg Gln Thr Arg
      420 425 430
Glu Met Val Glu Gln Phe Gly Asn Ser Pro Ala Ile Ile Val Trp Gly
 435 440 445
Gly His Asn Glu Pro Pro Trp Asn Ser Pro Trp Met Glu Lys Arg Phe
 450 455 460
Pro Asp Trp Asn Lys Asn Leu Asn Gln Thr Leu Thr Lys Arg Val Gly
465 470 475 480
Asp Ala Leu Ser Gln Asp Thr Ser Arg Ile Val His Arg Phe Ser Ala
        485 490 495
Val Glu Glu His Tyr Trp Ala Gly Trp Tyr Phe Gly Thr Met Arg Asp
            505
                           510
Leu Leu Gly Pro Ala Lys Thr Ala Ile Ile Thr Glu Phe Gly Ala Gln
515 520 525
Ala Leu Pro Arg Leu Ser Thr Leu Lys Thr Ile Ile Pro Ala Arg Leu
530 535
Met Trp Pro Lys Ser Thr Ala Ala Asp Asp Pro Gly Trp Thr His Trp
545 550 555 560
Lys Tyr His Asn Phe Gln Pro Phe Gln Thr Phe Lys Phe Ala Asn Ile
          565 570 575
Pro Arg Gly Asn Thr Ile Gln Glu Met Ile Ala Asn Thr Gln Arg Tyr
            585 590
Gln Ala Glu Leu Val Ala Met Ala Ala Glu Ser Tyr Arg Arg Gln Arg
    595 600
Tyr Gln Pro Val Thr Ala Leu Phe His Phe Met Phe Val Glu Thr Trp
                615
                      620
Pro Ser Ile Asn Trp Gly Val Val Asp Tyr Leu Arg Lys Pro Lys Ala
625 630
                           635 640
Gly Tyr Tyr Ala Leu Gln Lys Ala Tyr Gln Pro Ile Leu Pro Ser Ile
                        650 655
           645
Glu Pro Val Thr Ala Val Trp Arg Gln Gly Ser Glu Ala Thr Val Arg
        660 665
Leu Trp Ala Ile Asn Asp Thr Trp Ser Ala Cys Glu Ala Cys Arg Leu
675 680
Lys Trp Gln Val Lys Gln Asn Gly Arg Val Leu Ala Lys Gly Asn Thr
                695
                                700
Ser Leu Thr Leu Pro Pro Asp Ser Gly Ser Arg Ile Lys Asp Ile Thr
705 710
                            715
Val Thr Pro Thr Thr Arg His Asn Val Thr Ile Glu Tyr Glu Ile Ser
           725 730
Asp Arg Ala Gly Asn Thr Val Gly Ser Asn Gln Arg Asn Glu Arg Val
        740
                       745
Glu Ser Pro Pro Glu Gln
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<210> 10137 <211> 3839

<212> PRT

<213> Enterobacter cloacae

<400> 10137

Thr Val Phe Ser Pro Gly Ala Arg Ser Ser Leu Gln Lys Arg Trp Leu

10 Cys Phe Thr Arg Arg Asn Gln Ser Leu Ser Trp Ser Asn Asn Cys Met 25 Ser Gln Ile Ser Val Ile Ser Lys Leu Thr Gly Val Glu Thr Thr Thr 40 45 35 Glu Gly Thr Gln Ile Thr Leu Asp His Ser Ser Ile Val Lys Leu Asn 50 55 60 Val Asp Arg Ala Asp Ile Ser Gly Tyr Ser Arg Ser Gly Asn Asp Leu 70 75 Val Ile Thr Leu Asn Ser Gly Glu Val Ile Thr Leu Lys Asn Phe Tyr 85 90 Val Thr Asp Ala Gln Gly Val Ser Gln Leu Val Leu Glu Glu Ser Asp 100 105 110 Gly Ala Leu Trp Trp Ile Glu Asp Pro Thr Gly Ala Ala Thr Tyr Glu 115 120 125 Ser Ile Ala Ser Thr Asp Ala Leu Leu Ala Ala Ser Gly Ser Asp Ala 130 135 140 Gly Gly Ala Ala Ala Trp Pro Trp Val Leu Gly Gly Leu Ala Ala Ala 145 150 155 Gly Gly Ile Ala Ile Ala Ala Gly Thr Gly Gly Gly Gly Gly Gly Asp 165 170 175 Asp Asp Asn Asn Ser Pro Asn Pro Gly Asn Pro Gly Asn Pro Ser Glu 180 185 190 Pro Asp Thr Thr Pro Pro Asp Ala Pro Thr Asn Leu Gln Val Ser Pro 195 200 205 Asp Gly Lys Thr Val Thr Gly Thr Ala Glu Pro Gly Ser Thr Ile Thr 210 215 220 Leu Lys Asp Ala Asp Gly Asn Thr Ile Gly Thr Gly Lys Ala Gly Ser 230 235 Asp Gly Lys Phe Thr Ile Asp Leu Gly Thr Pro Leu Thr Asn Gly Glu 245 250 255 Gln Ile Thr Ala Thr Ala Thr Asp Pro Ser Gly Asn Thr Ser Gln Gly 260 265 270 Gly Gln Val Thr Ala Pro Asp Leu Thr Ala Pro Asp Ala Pro Ala Asn 275 280 285 Leu Glu Val Ser Pro Asp Gly Lys Thr Val Thr Gly Thr Ala Glu Pro 290 295 300 Gly Ser Thr Val Thr Leu Lys Asp Ala Asp Gly Asn Thr Ile Gly Thr 305 310 315 Gly Lys Ala Gly Ser Asp Gly Lys Phe Thr Ile Asp Leu Gly Thr Pro 325 330 335 Leu Thr Asn Gly Glu Gln Ile Thr Ala Thr Ala Thr Asp Pro Ser Gly 345 350 340 Asn Thr Ser Pro Gly Val Gln Val Thr Ala Pro Asp Leu Thr Ala Pro 360 365 Asp Ala Pro Glu Ile Val Thr Val Asn Asp Asn Val Gly Ala Glu Thr 375 380 370 Gly Pro Leu Ser Asn Gly Gln Arg Thr Asp Asp Ala Arg Pro Thr Phe 390 395 Ser Gly Ile Ser Glu Ala Gly Thr Val Ile Thr Phe Tyr Asp Asn Gly 405 410 Lys Pro Ile Gly Thr Ala Thr Ala Asp Ala Thr Gly Lys Trp Ser Phe 420 425 430 Thr Pro Ser Thr Asn Leu Ser Glu Gly Asn His Ala Ile Thr Thr Thr 440 445 Ala Thr Asp Ala Ala Gly Asn Thr Ser Pro Ala Ser Thr Ala Val Ser 455 460 Phe Val Val Asp Thr Val Ala Pro Gly Ala Pro Ala Ile Val Ser Ile 470 475 Thr Asp Asp Val Ala Pro Gly Thr Gly Thr Leu Gly Ser Gly Ser Ser 485 490

Thr Asn Asp Pro Arg Pro Gln Leu Thr Gly Thr Ala Glu Ala Gly Ser 505 Thr Ile Thr Ile Tyr Asp Asn Gly Ile Ala Ile Gly Thr Ala Ile Val 520 Gly Ser Asn Gly Ser Trp Ser Phe Thr Pro Ser Val Asn Leu Ser Glu 535 540 Gly Ser His Gln Leu Thr Val Arg Ala Thr Asp Val Ala Gly Asn Thr 550 555 Gly Pro Ala Ser Pro Val Phe Thr Val Thr Val Asp Val Thr Ala Pro 565 570 Gln Thr Pro Ser Gly Phe Ile Ile Asn Asp Asp Thr Gly Val Leu Lys 580 585 590 Gly Ala Ile Gly Ala Gly Gln Phe Thr Asp Ala Ser Glu Pro Arg Leu 600 605 595 Thr Gly Arg Gly Glu Pro Gly Ser Thr Ile Thr Val Tyr Asp Asn Gly 610 615 620 Val Val Ile Gly Thr Thr Thr Val Leu Pro Asn Gly Thr Trp Ser Ile 630 635 Thr Pro Thr Ser Pro Leu Ala Glu Gly Ala His Ser Ile Thr Leu Arg 645 650 655 Glu Thr Asp Ala Ala Gly Asn Gln Ser Gly Leu Ser Gln Pro Ile Asn 660 665 670 Phe Thr Val Asp Leu Thr Pro Pro Asp Met Pro Val Ala Thr Leu Asn 680 Ser Ala Gly Thr Gln Ile Thr Gly Thr Ala Glu Pro Gly Ser Lys Ile 695 700 Val Ile Thr Asn Asn Ala Gly Leu Gln Ile Gly Thr Ala Thr Ala Asp 715 710 Ser Asn Gly Asn Tyr Val Val Asn Leu Asn Pro Ala Gln Thr Asn Gly 725 730 Glu Ile Ile Ser Val Val Ala Ser Asp Ala Ala Gly Asn Gln Ser Ser 745 Pro Ala Leu Val Asn Ala Ala Asp Ile Thr Pro Pro Ala Ala Pro Gly 760 Asn Leu Val Val Ala Glu Asp Gly Ala Ser Val Ser Gly Thr Ala Glu 775 780 Pro Asn Ser Thr Ile Ile Ile Lys Ala Pro Asp Gly Thr Ile Ile Gly 790 795 Gln Ala Thr Ala Gly Pro Asp Gly Thr Phe Thr Ile Pro Ile Ser Pro 805 810 Ala Gln Thr Asn Gly Glu Ala Leu Glu Val Thr Ala Thr Asp Gly Ser 825 Gly Asn Thr Ser Pro Ser Gly Phe Ala Asp Ala Pro Asp Ser Thr Pro 835 840 845 Pro Leu Ala Pro Glu Asn Val Val Ile Ser Ala Asp Gly Thr Thr Val 850 855 860 Thr Gly Thr Ala Glu Pro Gly Ser Thr Val Thr Ile Arg Glu Asn Gly 870 875 Val Lys Val Gly Glu Thr Val Ala Asp Asp Gln Gly Asn Phe Ser Val 885 890 Glu Leu Ile Pro Pro Lys Ala Asn Gly Glu Ala Leu Thr Ala Asp Ala 900 905 910 Thr Asp Thr Ala Gly Asn Thr Gly Pro Thr Ala Pro Phe Asp Ala Pro 915 920 Asp Ile Thr Ala Ala Gln Thr Pro Val Ile Thr Gly Val Val Asp Asp 930 935 940 Ala Pro Gly Val Thr Gly Pro Val Ser Gln Asn Gly Leu Thr Asn Asp 950 955 Asn Thr Pro Thr Ile Asn Gly Thr Gly Glu Pro Gly Thr Thr Ile Thr 970 Leu Tyr Ser Gly Thr Thr Val Leu Gly Thr Ala Leu Val Ser Ala Asn

985 980 Gly Gln Trp Ser Ile Thr Leu Gln Thr Ala Leu Pro Asp Gly Gly His 1000 1005 Val Leu Thr Ala Thr Ala Val Asp Ala Asn Asn Asn Leu Ser Gly Thr 1010 1015 1020 Ser Asn Thr Trp Ser Ile Thr Val Asp Thr Ala Ala Pro Gly Ala Pro 1025 1030 1035 1040 Ala Ile Thr Gln Val Ile Asp Asp Val Pro Gly Arg Thr Gly Ala Leu 1045 1050 1055 Asp Thr Asn Glu Thr Thr Asn Asp Thr Leu Pro Thr Leu Asn Gly Thr 1060 1065 1070 Gly Glu Pro Gly Ser Thr Val Thr Ile Arg Leu Asp Gly Gln Asp Ile 1075 1080 1085 Gly Thr Ala Val Val Asn Ser Gly Gly Ala Trp Thr Phe Thr Pro Ala 1090 1095 1100 Thr Pro Leu Val Asn Gly Gln His Thr Phe Thr Val Val Ala Ser Asp 1105 1110 1115 1120 Ala Ala Gly Asn Ala Ser Ala Pro Ser Ala Gly Phe Thr Leu Thr Val 1125 1130 1135Asp Thr Thr Pro Pro Pro Ala Ala Thr Ile Asp Thr Val Ser Asp Asn 1140 1145 1150 Val Gly Pro Val Gln Leu Pro Leu Asn Ser Gly Asp Thr Thr Asp Asp 1155 1160 1165 Thr Leu Pro Gln Leu Gln Gly Thr Ala Pro Asp Gly Thr Thr Ile Thr 1170 1175 1180 Ile Tyr Asp Gly Thr Thr Leu Leu Gly Thr Ala Val Leu Asp Gly Ser 1185 1190 1195 1200 Gly Gly Trp Ser Phe Thr Pro Thr Thr Pro Leu Thr Asp Gly Pro His 1205 1210 1215 Ser Leu Thr Val His Ala Thr Asp Glu Ala Gly Asn Thr Thr Ile Ser 1220 1225 1230 Pro Pro Phe Glu Leu Ala Ile Asn Thr Thr Ala Pro Ala Thr Pro Asp 1235 1240 1245 Ile Pro Glu Ile Thr Val Asn Pro Asp Gly Gly Thr Pro Gly Thr Ala 1250 1255 1260 Leu Asn Pro Gly Glu Thr Thr Arg Asp Thr Thr Pro Thr Leu Ser Gly 1265 1270 1275 1280 Ser Gly Thr Pro Gly Asp Ile Val Asn Ile Tyr Asp Gly Ala Thr Lys 1285 1290 1295 Ile Gly Glu Ala Glu Ile Asp Gly Asp Gly Asn Trp Ser Trp Thr Pro 1300 1305 1310 Asp Asp Pro Leu Pro Asp Gly Thr Tyr Asp Leu Ser Leu Thr Val Thr 1315 1320 1325 Asn Gln Asp Ser Ala Gly Asn Glu Ser Ala Pro Ser Thr Pro Val Thr 1330 1335 1340 Ile Thr Ile Asp Thr Asp Ala Pro Ala Gln Pro Gly Thr Pro Thr Val 1345 1350 1355 1360 Thr Asp Ser Val Ser Gln Ile Thr Gly Pro Val Leu Asp Gly Glu Ser 1365 1370 1375 Thr Asn Asp Pro Arg Pro Val Leu Ser Gly Thr Gly Thr Pro Asn Asp 1380 1385 1390 Val Ile Thr Ile Tyr Asp Gln Val Gly Thr Gly Glu Pro Gln Ala Val 1395 1400 1405 Gly Ser Val Thr Val Asp Gly Asn Gly Asn Trp Ser Trp Arg Pro Glu 1410 1415 1420 Ser Asn Ile Gly Glu Gly Thr His Glu Tyr Thr Ala Thr Ala Thr Asp 1425 1430 1435 1440 Glu Ala Gly Asn Glu Ser Val Pro Ser Ala Gly Ile Thr Ile Thr Val $1445 \hspace{1.5cm} 1450 \hspace{1.5cm} 1455$ Asp Thr Leu Ala Pro Asp Thr Pro Val Ile Ser Ala Ile Gly Gly Val 1460 1465 1470

Gln Asn Gly Glu Ser Thr Asn Asp Thr Thr Pro Gly Ile Gly Gly Thr 1475 1480 1485

Gly Thr Thr Gly Glu Thr Val Ile Ile Tyr Asn Asn Gly Val Glu Val 1490 Ala Arg Val Glu Val Val Asn Asn Glu Trp Ser Tyr Thr Leu Pro Thr

1505 1510 1515 1520 Gln Thr Asp Gly Pro Leu Asn Ile Thr Val Ala Ala Val Asp Asp Ala

1525 1530 1535 Gly Asn Val Ser Pro Val Ser Pro Val Phe Thr Val Glu Val Asp Thr

1540 1550 Gin Ala Pro Thr Val Pro Gln Ile Asp Ala Val Ser Asp Ser Gln Leu 1555 1560 1565

Thr Asn Ser Val Leu Tyr Thr Arg Asp Gly Thr Pro Thr Leu Thr Gly 1570 1580 Ile Gly Glu Pro Gly Ser Ser Val Thr Val Ser Val Asp Gly Val Ala

11e Gly Glu Pro Gly Ser Ser Val Inr Val Ser Val Asp Gly Val 1615 1585 1590 1590 1595 1600 Ser Pro Val Val Val Glu Val Gln Pro Asn Gly Thr Trp Ser Trp Thr 1605 1610 1610 1615

Ala Asp Pro Ala Leu Thr Glu Gly Pro His Thr Phe Ser Val Val Ala $1620 \hspace{1.5cm} 1625 \hspace{1.5cm} 1630$

Thr Val Asp Thr Leu Pro Pro Ala Thr Pro Thr Asn Met Thr Ile Ala 1650 1650 Ala Glu Gly Thr Pro Leu Thr Gly Thr Ala Asp Asp Gly Thr Thr Val

1665 1670 1675 1680 Thr Val Arg Asp Ala Asn Gly Asn Ile Ile Gly Thr Gly Val Ala Thr 1685 1690 1695

Gly Gly Ser Phe Tyr Ile Ala Leu Ser Pro Ala Gln Leu Asp Ala Ala 1700 1705 1710

Thr Leu Thr Leu Ile Ala Thr Asp Pro Ala Gly Asn Ala Ser Ser Ser 1715 Thr Thr Phe Asp Val Pro Asp Ser Pro Leu Glu Leu Pro Ala Val Pro

1730 1735 1740
Val Ile Thr Ala Ile Asn Asp Asp Val Asp Pro Val Thr Gly Asp Val

1745 1750 1755 1765 Lys Asp Lys Thr Thr Asn Asp Thr Thr Pro Thr Leu Thr Gly Thr Ala 1765 1770 1770

Asp Pro Gly Ser Val Ile Ala Ile Tyr Gin Asp Gly Ser Leu Leu Pro 1785 1780 1785 Val Thr Thr Val Val Ala Asp Thr Asn Gly Asn Trp Ser Tyr Thr Pro

1795 1800 1805 Leu Leu Pro Leu Thr Glu Gly Pro His Thr Phe Ala Val Thr Ala Thr 1810 1815 1820

Asn Thr Thr Thr Gly Ala Thr Ser Gly Gln Ser Pro Val Ala Thr Val 1825 1830 1835 1840 Thr Val Asp Leu Thr Ala Pro Thr Ala Pro Ala Ile Gly Ala Val Thr

1845 1850 1855 Asp Asp Val Gly Pro Ile Thr Gly Pro Ile Ala Asp Gly Gln Ser Thr

1860 1865 1870 Asn Asp Asn Arg Pro Thr Leu Thr Gly Thr Gly Thr Ala Gly Asp Thr 1875 1880 1895

Ile Thr Val Tyr Asp Asn Gly Asp Pro Leu Gly Thr Val Ile Val Gly 1890 \$1900\$

Pro Thr Gly Thr Trp Ser Tyr Thr Pro Pro Val Leu Asp Asp Gly Ser 1905 \$1910\$ \$1910\$ \$1915\$ \$1920\$ His Thr Leu Thr Val Thr Ala Thr Asp Pro Ala Gly Asn Glu Ser Thr

1925 1930 1935 Pro Ser Ala Gly Ile Thr Ile Val Val Asp Thr Val Ser Thr Thr Pro 1940 1945 1950

Val Ile Thr Ser Val Thr Asp Asn Ala Gly Asn Ala Ala Thr Pro Val

2435

2440

2445

1960 Pro Ser Gly Asp Pro Thr Asn Asp Thr Thr Pro Thr Leu Thr Gly Thr 1970 1975 1980 Ala Glu Pro Asn Ser Val Val Ala Ile Phe Asp Gly Thr Thr Gln Ile 1990 1995 2000 Gly Thr Val Ala Ala Asp Gly Thr Gly Ala Trp Thr Phe Thr Pro Glu 2005 2010 2015 Thr Ala Leu Gly Glu Gly Thr His Asp Phe Thr Val Arg Ala Thr Asp 2020 2025 2030 Pro Gln Gly Asn Val Ser Gln Pro Ser Asn Ala Trp Ser Val Glu Ile 2035 2040 2045 Asp Leu Thr Ala Pro Gln Val Pro Thr Ile Val Thr Val Ser Asp Asn 2050 2055 2060 Ala Pro Gly Gly Val Thr Gly Pro Leu Thr Ala Gly Gin Val Thr Asn 2065 2070 2075 2080 Asp Thr Thr Pro Thr Leu Ser Gly Thr Gly Gln Ala Gly Thr Thr Ile 2085 2090 2095 His Val Leu Asn Asn Gly Val Glu Ile Gly Thr Thr Thr Val Asp Gly 2100 2105 2110 Asn Gly Asn Trp Thr Phe Thr Pro Asp Pro Val Leu Thr Asp Gly Thr 2115 2120 2125 Tyr Asn Leu Arg Val Asn Ala Ser Asp Asp Val Gly Asn Val Ser Ala 2130 2135 2140 Asn Ser Pro Val Phe Ala Phe Thr Val Asp Thr Thr Gly Pro Ala Ala 2145 2150 2155 2160 Pro Val Val Thr Thr Val Ile Asp Asp Val Ser Pro Gly Thr Gly Ile 2165 2170 2175 Ile Ala Ser Asn Gly Ser Thr Asn Asp Thr Arg Pro Thr Phe Asn Gly 2180 2185 2190 Thr Gly Glu Val Gly Ala Thr Val His Val Ile Val Asp Asp Val Glu 2195 2200 2205 Ile Gly Thr Ala Val Val Asn Ala Gln Gly Asn Trp Thr Phe Thr Pro 2210 2215 2220 Thr Thr Ala Leu Gly Glu Gly Pro His Thr Ile Thr Phe Asn Ala Thr 2225 2230 2235 2240 Asp Ala Ala Gly Asn Thr Gly Val Thr Ser Pro Pro Phe Asn Leu Thr 2245 2250 2255 Val Asp Thr Ser Val Pro Asp Ala Pro Val Phe Thr Pro Ala Thr Asp 2260 2265 2270 Asn Ala Gly Pro Val Leu Gly Pro Val Ala Ser Gly Gln Ser Thr Asp 2275 2280 2285 Asp Thr Thr Pro Thr Leu Asn Gly Thr Ala Ala Ala Asn Ala Thr Ile 2290 2295 2300 Thr Ile Tyr Glu Asn Gly Gln Pro Val Gly Thr Ala Val Ala Asp Ala 2305 2310 2315 2320 Asn Gly Val Trp Ser Phe Thr Thr Gly Thr Leu Ala Asn Gly Ser His 2325 2330 2335 Thr Trp Thr Ala Thr Ala Thr Asp Ala Ala Gly Asn Ile Ser Pro Ala 2340 2345 2350 Ser Pro Gly Phe Thr Leu Val Val Asp Thr Thr Val Pro Ala Ala Pro 2355 2360 2365 Val Ile Thr Gln Ala Ile Asp Asp Val Gly Thr Ile Thr Gly Ala Ile 2370 2375 2380 Gly Ser Gly Gln Thr Thr Asn Asp Pro Leu Pro Arg Leu Val Gly Thr 2390 2395 Ser Glu Pro Leu Ala Thr Val Asn Ile Tyr Glu Gly Thr Thr Leu Val 2405 2410 Gly Thr Gly Thr Ala Asp Ala Asn Gly Asn Trp Thr Val Asp Ile Thr 2420 2425 2430 Val Pro Leu Gly Thr Gly Ser His Thr Phe Thr Ala Glu Ala Thr Asp

Gln Ala Gly Asn Thr Gly Ala Pro Ser Ala Asp Phe Ser Leu Ile Ile 2450 2460

Asp Thr Thr Pro Pro Ala Leu Pro Val Leu Thr Ser Val Thr Asp Asp 2465 2470 2475 2480 Val Glv Asn Ala Ala Thr Pro Val Ala Asn Gly Gly Leu Thr Asn Asp

2485 2490 2495

Ala Arg Pro Thr Leu Thr Gly Thr Ala Glu Ala Gly Ala Thr Val Thr 2500 2510 Ile Tyr Asp Asn Gly Val Gln Ile Gly Thr Ala Val Ala Thr Gly Gly

2515 2520 2525 Ala Trp Ser Phe Thr Pro Ser Thr Pro Leu Ala Asp Gly Pro His Asn

2530 2535 2540
Leu Thr Phe Ser Ala Thr Asp Ala Val Gly Asn Ala Ser Ala Gln Thr

2545 2550 2555 2560 Gly Gly Tyr Thr Ile Asn Val Asp Ala Thr Ala Pro Val Ala Pro Ala 2565 2570 2570

Ile Thr Ser Ile Val Asp Asp Val Gly Thr Val Thr Gly Pro Val Thr 2580 2585 2590

Gly Thr Asn Pro Thr Asn Asp Thr Arg Pro Thr Leu Asn Gly Thr Ala 2595 2600 2605

Glu Ala Asn Ala Thr Val Arg Ile Tyr Asp Gly Thr Thr Leu Val Gly 2610 2615 2620

Thr Val Thr Ala Asp Ala Asn Gly Asn Trp Thr Leu Pro Gln Thr Ser $2625 \qquad 2630 \qquad 2635 \qquad 2640$ Thr Thr Leu Ile Glu Gly Glu His Asn Phe Thr Ala Thr Ala Thr Asp

2645 2650 2655 Ala Ala Gly Asn Thr Ser Ala Pro Ser Pro Ile Ile Thr Ile Asn Val 2660 2665 2670

Gly Thr Gln Val Thr Gly Thr Ala Glu Ala Gly Ser Thr Val Thr Ile 2690 2700 Drn Ser Ser Thr Gly Thr Val Leu Gly Thr Ala Val Ala Asp Gly Ser

2705 2710 2715 2720 Gly Asn Phe Ser Ala Thr Leu Thr Pro Pro Gln Thr Gly Gly Glu Ser 2725 2730 2735

Leu Ile Val Phe Ala Thr Asp Lys Ala Gly Asn Ala Gly Ile Thr Thr 2740 2745 2750

Ser Val Ile Ala Pro Ile Thr Thr Ile Pro Asn Ala Pro Val Ile Ala 2755 Asn Ile Asp Asp Asn Val Gly Thr Val Thr Gly Asn Leu Thr Asn Gly

2770 2775 2780 Lys Thr Thr Asp Asp Thr Thr Pro Thr Leu Ser Gly Thr Ala Gln Pro 2785 2790 2795 2800

Asn Ala Thr Ile Thr Leu Tyr Asn Asn Gly Val Leu Met Gly Thr Val 2805 2810 2815

Thr Ala Asn Ala Ser Gly Asn Trp Ser Phe Thr Thr Pro Val Leu Ser 2820 2820 2825 2830 Glu Gly Pro His Ala Phe Thr Ala Thr Ala Ser Asn Gly Ser Gly Thr

2835 2840 2845

Ser Pro Ile Ser Thr Ser Thr Thr Val Ile Val Asp Leu Thr Ala Pro 2850 2855 2860

Thr Ala Pro Thr Gly Thr Phe Asn Ala Asp Gly Ser Val Leu Thr Gly 2865 2870 2875

Ser Ala Glu Ala Gly Ser Thr Val Thr Ile Arg Leu Ala Asp Asn Ser 2885 2890 2895

Thr Val Thr Ala Thr Ala Asp Ser Asn Gly Ser Trp Ser Tyr Thr Phe 2900 2905 2910 Leu Asn Lys Gln Thr Glu Gly Gln Thr Leu Gln Ile Thr Ala Thr Asp

2915 2920 2925 Ala Ala Gly Asn Val Ser Leu Pro Gly Ser Ala Leu Ala Pro Val Val

2930 2935 Pro Leu Ser Ala Ser Thr Asn Val Glu Glu Leu Ala Leu Thr Thr Thr 2950 2955 2960 Ala Thr Val Thr Asn Ser Gln Tyr Ser Asp Tyr Gly Phe Leu Leu Val 2965 2970 2975 Gly Ala Val Gly Asn Val Leu Thr Leu Leu Gly Asn Asp Thr Ala Gln 2980 2985 2990 Val Gly Phe Thr Val Gly Asn Gly Gly Ser Ala Asp Ile Ala Val Asn 2995 3000 3005 Ala Asn Ala Thr Gly Ala Val Leu Ser Leu Leu Asn Thr Leu Glu Leu 3010 3015 3020 Val Val Gln Arg Phe Asp Ala Ala Asn Asn Thr Trp Thr Thr Val Val 3025 3030 3035 3040 Asp Thr Gly Gln Pro Gln Phe Ala Asp Leu Leu Thr Leu Gly Ala Thr 3045 3050 3055 Gly Val Ser Leu Asn Leu Thr Gly Leu Ala Asp Gly Gln Tyr Arg Val 3060 3065 3070 Leu Ser Tyr Asn Thr Asn Leu Leu Ala Thr Gly Ser Tyr Thr Ser Leu 3075 3080 3085 Asp Val Ala Val Lys Glu Thr Ser Ala Gly Thr Val Ser Gly Glu Thr 3090 3095 3100 Asn Ile Val Gly Asn Val Ile Thr Asp Val Asp Pro Thr Ala Gly Ser 3105 3110 3115 3120 Asp Asn Ala Pro Ala Gly Thr Thr Val Thr Ala Val Thr Asn Ala Gln 3125 3130 3135 Gly Ser Thr Thr Ser Val Thr Ala Asp Gly Thr Val Ile Gln Gly Gln 3140 3145 3150 Tyr Gly Thr Leu Thr Ile Asn Leu Asp Gly Ser Tyr Thr Tyr Asn Leu 3155 3160 3165 Thr Asn Thr Ser Ala Ala Val Ile Gly Arg Thr Glu Asn Phe Thr Tyr 3170 3175 3180 Thr Ile Thr His Asn Gly Thr Ser Ala Ser Ala Asn Leu Val Leu Ser 3185 3190 3195 3200 Leu Gly Glu Gly Thr Ser Ser Ser Gly Ile Val Ala Val Asp Asp Thr 3205 3210 3215 Ala Ser Leu Thr Phe Asp Thr Thr Val Glu Ala Ile Asn Asn Gly Thr 3220 3225 3230 Ser Ser Gln Gly Gly Phe Thr Leu Val Gly Ile Asn Leu Gly Asn Thr 3235 3240 3245 Leu Gly Leu Asn Leu Leu Asp Asp Leu Ala Asn Pro Ile Ile Tyr Asn 3250 3255 3260 Val Glu Glu Gly Thr Thr Arg Thr Met Thr Val Gln Ala Ser Val Gly 3265 3270 3275 3280 Gly Val Ala Leu Ala Ser Val Phe Asp Leu Tyr Ile Tyr Lys Phe Asn 3285 3290 3295 Asn Ala Thr Gln Thr Phe Glu Gln Met Arg Val Glu Pro Gly Trp Leu 3300 3305 3310 Arg Ala Pro Leu Leu Gly Gly Thr Ser Pro Gln Leu Thr Leu Asn Leu 3315 3320 3325 Pro Ala Gly Glu Tyr Leu Phe Leu Leu Asn Thr Ala Ala Gly Ile Thr 3330 3335 3340 Ala Leu Thr Ala Tyr Thr Leu Asn Val Leu Gln Asp His Val Tyr Ser 3345 3350 3355 Val Ala Ser Val Ser Glu Ser Thr Thr Gly Asp Val Leu Ala Asp Asp 3365 3370 Ile Ala Pro Ala Gly Thr Val Val Ser Asp Val Asn Gly Val Ala Val 3380 3385 3390 Asn Ser Ser Gly Leu Thr Glu Ile Thr Gly Glu Tyr Gly Thr Leu Arg 3395 3400 3405 Ile Asn Ala Ala Gly Glu Tyr Thr Tyr Thr Leu Asn Ser Gly Val Gly 3415

Ala Asp His Ile Ser Thr Pro Asp Thr Phe Val Tyr Thr Ile Thr Ala 3430 3435 Pro Asp Gly Ser Lys Asp Thr Ala Ser Leu Asn Ile Thr Pro Thr Ala 3445 3450 3455 Arg Pro Met Asp Ala Val Asn Asp Val Ser Thr Ala Met Asp Val Thr 3460 3465 3470 Thr Val His His Thr Ala Ala Tyr Ser Asp Thr Thr Val Gly Ser Ala 3475 3480 3485 Ser Trp Asn Ala Ala Leu Leu Ala Ser Thr Gln Gly Ser Gly Ser Gly 3490 3495 3500 Thr Phe Val Val Asp Pro Asn Thr Ala Leu His Asn Val Val Leu Ser 3505 3510 3515 3520 Phe Asn Val Ala Ser Leu Leu Thr Leu Thr Gly Leu Thr Val Asp Trp 3525 3530 3535 Thr Leu Ser Asn Gly Ala Thr Thr Val Arg Thr Gly Ser Phe Asn Gly 3540 3545 3550 Gly Leu Leu Gly Gly Thr Ala Thr Ile Asn Leu Thr Gly Leu Asp 3555 3560 3565 Leu Glu Ala Gly Thr Tyr Thr Leu Ser Tyr Thr Gly Lys Met Gly Pro 3570 3575 3580 Leu Gly Val Gly Asn Ile Thr Ile Thr Pro Ser Val Thr Gly Thr Ser 3585 3590 3595 3600 Tyr Ser Leu Ser Gln Phe Asp Ala Thr Gly Thr His Thr Val Asp Gly 3605 3610 3615 Asn Ile Phe Asp Gly Thr Asp Ser Ala Gly Ala Met Asp Gln Leu His 3620 3625 3630 Ser Val Asp Thr Arg Val Ser Ile Thr Gly Tyr Asp Gly Val Thr Thr 3635 3640 3645 Thr Leu Asp Pro Tyr Thr Gly Ser Thr Met Ser Asn Ile Thr Gly His 3650 3655 3660 Tyr Gly Thr Leu Ala Ile Ala Ala Asp Gly Ser Tyr Thr Tyr Thr Leu 3665 3670 3675 3680 Asn Pro Gly Ile Ser Leu Ser Thr Ile Thr Ser Lys Glu Val Phe Asn 3685 3690 3695 Tyr Thr Leu Thr Asp Ala Asn Gly Val Lys Asp Thr Ala Ser Leu Thr 3700 3705 3710 Ile Asp Met Ala Pro Lys Phe Val Ser Ser Glu His Asn Asp Val Ile 3715 3720 3725 Ser Gly Thr Ala Tyr Gly Asp Thr Leu Ile Tyr Gln Val Leu Asn Asn 3735 3740 3730 Thr Ala Gly Asn Ala Thr Ala Gly Asn Ser Thr Gly Asp His Trp Thr 3750 3755 3760 Asn Phe Ser Leu Thr Gln Gly Asp Lys Ile Asp Ile Gly Asp Leu Leu 3765 3770 3775 Val Gly Trp Asn Gly Ser Ala Ser Thr Leu Gly Asn Tyr Val Ser Val 3780 3785 3790 Ser Gln Ser Gly Asn Asn Thr Val Ile Ser Ile Asp Arg Asp Gly Thr 3795 3800 3805 Gly Ala Ala Tyr Thr Lys Ser Thr Leu Val Thr Leu Asp Asn Val Gln 3810 3815 3820 Thr Thr Tyr Asp Glu Leu Val Asn Gln Gln His Ile Ile Thr 3830 3835 <210> 10138 <211> 742

<212> PRT

<213> Enterobacter cloacae

<400> 10138

Lys Pro His His Pro Asp Arg Gly Asp Pro Ala Met Lys Gln Arg Asp 1 5 10 15

Ile Pro Gln Gly Glu Asn Met Thr Asp Gln Ala Leu Glu Gln Trp Ala 25 Gln Ala Phe Gly Tyr Val Ala Thr Arg Tyr Arg Val Ala Cys Ser Pro 35 4.0 Gly Ser Leu Val Ala Gly Ala Pro Trp Leu Lys Gly Lys Pro Met Val 55 Pro Ala Leu Thr Gln Leu Ala Arg Glu Ala Gly Leu Thr Phe Gln Leu 70 7.5 Leu Thr Ala Asp Gln Gln Ser Ile Asn Ser Trp Arg Leu Pro Val Val 85 90 Val Glu Leu Asn Asp Gly Lys Ile Gly Val Ile Asp Asn Phe Asp Gly 100 105 110 Glu Asp Thr Leu Glu Val Ser Phe Phe Asp Asp Ser Thr His Thr Asn 115 120 125 Arg Leu Ser Met Ser Ala Met Leu Pro Ala Ile Arg His Val Ile Ala 135 140 Leu Arg Pro Leu Ala Ala Leu Lys Asp Ser Arg Val Asp Ala Tyr Ile 150 155 Ser Lys Tyr Arg Pro Asp Trp Leu Tyr Arg Leu Val Met Arg Asp Leu 165 170 175 Arg Pro Tyr Ser Trp Val Met Leu Ala Ala Leu Phe Ile Asn Val Leu 180 185 190 Ser Leu Ser Gly Ile Val Phe Ser Met Gln Val Tyr Asp Arg Val Ile 195 200 205 Pro Ala Gln Ser Tyr Pro Thr Leu Tyr Val Leu Thr Ile Gly Val Leu 210 215 220 Ile Ala Thr Leu Phe Gly Phe Val Leu Arg Val Ala Arg Gly His Ile 230 235 Met Asp Leu Leu Gly Lys Arg Ser Asp Leu Arg Val Ser Asp Arg Val 250 255 245 Phe Gly His Ala Leu Arg Leu Arg His Ser Ala Ile Pro Arg Ser Thr 265 270 Gly Ser Phe Ile Ser Gln Leu Arg Glu Leu Glu Gln Ile Arg Glu Met 280 Val Thr Ser Ser Thr Ile Ser Thr Ile Val Asp Leu Pro Phe Phe Ile 295 300 Leu Phe Val Ile Val Leu Ala Ile Ile Ala Pro Gln Leu Ala Trp Ile 310 315 Ala Pro Val Ala Ala Val Ile Met Val Leu Pro Gly Leu Leu Gln 325 330 Lys Lys Leu Ala Glu Leu Ala Lys Gln Ser Ala His Glu Ser Thr Leu 340 345 350 Arg Asn Ala Val Leu Val Glu Ser Val Gln Gly Leu Glu Asp Ile Lys 355 360 365 Leu Met Gln Ala Glu Asn Arg Phe Leu Gln Gln Trp Asn Ser Tyr Ile 375 380 Gln Ile Thr Ala Glu Ser Gly Leu Arg Thr Arg Glu Leu Thr Gln Asn 390 395 Leu Ile Ser Trp Gly Met Thr Ile Gln Ser Leu Val Tyr Ala Gly Val 405 410 415 Ile Val Val Gly Ala Pro Met Val Ile Asp Gly Thr Leu Thr Thr Gly 425 Ser Val Val Ala Ala Ser Met Leu Ala Ser Arg Met Ile Ala Pro Met 435 440 445 Ala Thr Leu Cys Gly Val Leu Ala Arg Trp Gln Gln Val Lys Ala Ala 455 Lys Glu Gly Leu Asp Ser Ile Met Gln Leu Pro Thr Glu Asn Gln Arg 470 475 Glu Glu Thr Pro Ile Arg Gln Asp Val Leu Arg Gly His Tyr Leu Phe 485 490 Glu Gln Ala Gln Phe Arg Tyr His Pro Glu Asp Pro Arg Met Ala Leu

500 505 Arg Ile Asn Arg Leu Glu Ile Lys Ala Gly Glu Lys Val Ala Ile Leu 515 520 525 Gly Arg Asn Gly Ala Gly Lys Ser Thr Leu Leu Gln Ala Met Ala Gly 530 535 540 Gly Met Asp Leu Ala Gly Gly Glu Leu Arg Leu Asp Asn Leu Ser Leu 550 555 Pro His Leu Asp Val Ala Asp Val Arg Arg Asn Val Gly Phe Met Thr 565 570 575 Gln Asn Ala Arg Leu Phe Tyr Gly Thr Leu Arg Glu Asn Ile Thr Leu 580 585 590 Gly Met Pro Arg Ala Thr Asp Lys Glu Ile Phe Glu Val Leu Glu Met 600 605 Cys Gly Ala Ala Ser Phe Val Gln Lys Leu Pro Lys Gly Leu Asp Tyr 610 615 620 Pro Ile Met Glu Asn Gly Val Gly Leu Ser Gly Gly Gln Arg Gln Ser 625 630 635 640 Ile Leu Leu Ala Arg Met Leu Leu Arg Asp Pro Asn Ile Val Leu Met 645 650 Asp Glu Pro Thr Ala Ser Leu Asp Glu His Thr Glu Arg Glu Phe Ile 660 665 670 Gln Arg Leu Gly Ala Trp Leu Gly Asn Arg Thr Leu Val Val Ala Thr 675 680 685 His Arg Val Pro Val Leu Glu Leu Val Glu Arg Val Val Leu Lys 690 695 700 Asp Gly Met Leu Val Met Asp Ala Pro Lys Ala Gln Ala Leu Asn Asn 705 710 715 720 Ser Arg Met Gln Gln Gln Gln Ala Thr Gly Arg Glu Trp Lys Asn 725 730 Glu Asn Gln Ser Ala

<211> 149 <212> PRT <213> Enterobacter cloacae

<210> 10139

740

<400> 10139 Thr Asp Asn Thr Gly Leu Tyr Phe Ala Gly Gln Arg Glu Lys Gln Thr 10 Ile Ser Ile Ser Leu His Thr Ser Thr Arg Asn Thr Ser Glu Ala Ser 20 25 30 Pro Met Thr Leu Gln Gln Ala Leu Arg Lys Pro Thr Thr Pro Gly Glu 35 40 4.5 Val Leu Gln Tyr Glu Tyr Leu Glu Pro Leu Asn Leu Lys Ile Asn Asp 55 Leu Ala Glu Met Leu Asn Val His Arg Asn Thr Val Ser Ala Leu Val 70 75 Asn Asn Asn Arg Lys Leu Thr Ala Asp Met Ala Ile Lys Leu Ala Lys 90 Ala Leu Asn Thr Thr Ile Glu Phe Trp Leu Asn Leu Gln Leu Asn Val 100 105 Asp Ile Trp Glu Ala Gln Ser Asn Ser Arg Thr Gln Glu Glu Leu Ser 120 125 115 Arg Ile Lys Thr Val Ala Glu Val Met Ala Lys Arg Lys Ser Gly Lys 130 135 140 Pro Asp Val Ala 145

<210> 10140 <211> 227

225

<212> PRT <213> Enterobacter cloacae

<400> 10140 Gln Ser Ser Asn Ile Asn Pro Val Tyr Leu Asn Phe Tyr Leu Leu Lys 10 Asn Glu Gly Ser Gln His Lys Glu Ser Ala Met Lys Ile Val Ile Ile 20 25 30 Gly Ala Ser Gly Thr Val Gly Arg Ala Val Thr Glu Glu Leu Ser Arg 35 4.0 4.5 Arg His Glu Val Ile Ser Val Gly Arg Thr Gln Gly Asp His Gln Val 55 60 Asp Ile Thr Ser Gln Ala Ser Val Gln Ala Leu Phe Glu Lys Ile Gly 70 75 Pro Val Asp Ala Ile Val Ser Ala Ser Gly Gly Val His Phe Gly Pro 85 90 Leu Ala Thr Met Thr Asp Gly Glu Phe Asn Arg Gly Leu Gln Asp Lys 105 110 100 Leu Leu Gly Gln Ile Arg Leu Ala Leu Thr Gly Gln His Tyr Leu Asn 120 115 Glu Gly Gly Ser Ile Thr Leu Ile Ser Gly Ile Val Ala His Glu Pro 130 135 140 Ile Ala Gln Gly Val Asn Ala Thr Thr Val Asn Ala Ala Leu Glu Gly 150 155 145 Phe Val Arg Ala Ala Ala Cys Glu Leu Pro Arg Gly Ile Arg Ile Asn 170 165 Leu Ile Ser Pro Thr Val Leu Thr Glu Ser Val Glu Ala Tyr Asp Gly 180 185 190 Phe Phe Pro Gly Phe Glu Ser Val Pro Ala Ala Thr Val Ala Gln Ala 200 205 195 Tyr Arg Arg Ser Val Glu Gly Val Gln Ser Gly Arg Val Tyr Lys Val 215 210 Gly Tyr

<210> 10141 <211> 176 <212> PRT <213> Enterobacter cloacae

<400> 10141 Gly Asn Ile Met Ser Leu Pro Leu Ile Ser Pro Gln Gln Ala Asn Ala 10 Leu Ile Ala Glu Gly Ala Lys Leu Ile Asp Ile Arg Asp Pro Asp Glu 25 20 Tyr Ala Arg Glu His Ile Pro Ala Ala His Ser Ile Pro Leu Asp Ser 40 45 Leu Pro Gly Gly Leu Asn Ala Ala Pro Gly Glu Thr Val Ile Phe His Cys Gln Ser Gly Ala Arg Thr Ser Asn Asn Ala Ala Arg Leu Ala Gln 80 70 75 Ala Ala Ser Pro Ala Asn Ala Cys Val Val Glu Gly Gly Ile Gln Gly 90 95 Trp Lys Gln Ala Gly Leu Leu Thr Val Glu Asp Arg Ser Gln Pro Leu 100 105 Pro Leu Met Arg Gln Val Gln Ile Ala Ala Gly Leu Leu Ile Leu Cys 120 115 Gly Val Val Leu Gly Tyr Ser Val Ser Ser Gly Phe Phe Leu Leu Ser 135 140 Gly Phe Val Gly Ala Gly Leu Leu Phe Ala Gly Val Thr Gly Phe Cys 155 160 150

5633 Gly Met Ala Arg Leu Leu Lys Val Met Pro Trp Asn Arg Arg Thr 170 <210> 10142 <211> 80 <212> PRT <213> Enterobacter cloacae <400> 10142 Met Ala Val Thr Leu Lys Leu Ala Thr Leu Arg Glu Val Ser Phe Ile 10 Ile Phe Asn Trp Leu Ala Cys Thr Glu Leu Phe Met Gly Phe Trp Arg 20 25 30 Val Leu Phe Thr Ile Ile Leu Pro Pro Leu Gly Val Leu Leu Gly Lys 35 40 4.5 Gly Leu Gly Trp Ala Phe Ile Leu Asn Ile Leu Leu Thr Ile Leu Gly 55 Tyr Phe Pro Gly Leu Ile His Ala Phe Trp Val Gln Thr Lys Ser 70 <210> 10143 <211> 591 <212> PRT <213> Enterobacter cloacae <400> 10143 Phe His Gln Arg Gln Ala Thr Pro Asn Asp Arg Pro Asp Gln Pro His 10 Gln Pro Pro Ala Thr Gly Gly Ala Arg Ser Ala Gly Gly Arg His Arg 25 Asp Gly Leu Arg Ala Gly Leu Trp Arg Ala Arg Arg Ser Gly Gly Gly 40 Asp Asp Arg Gly Asp Gln Arg Gly Thr Gly Asp Arg Glu Arg Arg Gln 55 Pro Ser Ala Gly Asn Ser Arg Leu Arg Ala Arg His Arg Ser Gly Ser 7.0 75 Ala Val Ala Gly Ala Ala Val Pro Ala Ala Asp Arg Arg Arg His 85 90 Leu Gly Gln Gln His Gln His Arg Ile Thr Gly Thr Arg Ile Cys 105 110 Leu Gln Arg Gly Glu Ser Ile Met Thr Thr Leu Phe Asn Gln Pro Leu 120 Asn Val Ile Asn Val Gly Ile Ala Met Phe Ser Asp Asp Leu Lys Lys 1.35 140 Gln His Val Pro Val Thr Gln Leu Asp Trp Thr Pro Pro Gly Gln Gly 150 155 160 Asn Met Gln Val Val Lys Ala Leu Asp Gln Leu Ala Glu Lys Pro Leu 165 170 175 Ala Glu Lys Ile Ala Ala Ala Asn Lys Ile Ala Leu Glu Arg Ile Ile 180 185 190 Gln Ser His Pro Val Leu Val Gly Tyr Asp Gln Ala Ile Asn Val Val 195 200 205 Pro Gly Met Thr Arg Thr Thr Ile Leu His Ala Gly Pro Pro Val Thr 215 Trp Glu Asn Met Cys Gly Ala Met Lys Gly Ala Val Thr Gly Ala Leu 225 230 235 Val Phe Glu Gly Leu Ala Thr Asp Leu Glu Asp Ala Ala Arg Leu Ala 245 250 255

Ala Ser Gly Asp Ile Thr Phe Ser Pro Cys His Glu His Asp Cys Val 265

Gly Ser Met Ala Gly Val Thr Ser Ala Ser Met Phe Met His Ile Val

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280
Glu Asn Lys Thr Tyr Gly Asn Arg Ala Phe Thr Asn Leu Ser Glu Gln
              295
                        300
Met Ala Lys Ile Leu Arg Met Gly Ala Asn Asp Gln Ser Val Ile Asp
         310
                     315
Arg Leu Asn Trp Met Arg Asp Val Leu Gly Pro Met Leu Arg Asp Ala
           325
                330 335
Met Asn Ile Ile Gly Glu Ile Asp Leu Arg Leu Met Leu Ala Gln Ala
       340
              345 350
Leu His Met Gly Asp Glu Cys His Asn Arg Asn Asn Ala Gly Thr Thr
    355 360 365
Leu Leu Ile Gln Ala Leu Thr Pro Gly Leu Ile Gln Ala Gly Tyr Ser
 370 375
                               380
Val Thr Gln Gln Arg Glu Val Phe Glu Phe Val Ala Ser Ser Asp Tvr
             390 395
Phe Ser Gly Pro Thr Trp Met Ala Met Cys Lys Ala Ala Leu Asp Ala
         405 410
Ala His Gly Ile Glu Tyr Ser Thr Val Val Thr Thr Met Ala Arg Asn
       420 425 430
Gly Tyr Glu Phe Gly Leu Arg Val Ser Gly Leu Pro Gly Gln Trp Phe
     435 440
                       445
Thr Gly Pro Ala Gln Gln Val Ile Gly Pro Met Phe Ala Gly Tyr Lys
 450
                 455
                     460
Pro Glu Asp Ser Gly Leu Asp Ile Gly Asp Ser Ala Ile Thr Glu Thr
              470
                  475
Tyr Gly Ile Gly Gly Phe Ala Met Ala Thr Ala Pro Ala Ile Ala Ala
           485 490
Leu Val Gly Gly Thr Val Glu Glu Ala Ile Asp Phe Ser Arg Gln Met
        500
            505
                                     510
Arg Glu Ile Thr Leu Gly Glu Asn Pro Asn Val Thr Ile Pro Leu Leu
515
                    520
                                   525
Ser Phe Met Gly Ile Pro Thr Ala Ile Asp Ile Thr Lys Val Ala Gly
              535
530
                                540
Ser Gly Ile Leu Pro Val Ile Asn Thr Ala Ile Ala His Lys Asp Ala
545 550
                          555
Gly Ile Gly Met Ile Gly Ala Gly Ile Val His Pro Pro Phe Ser Cys
           565
                          570
Phe Glu Lys Ala Leu Leu Thr Phe Arg Asp Arg Tyr Phe Leu
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<210> 10144 <211> 337 <212> PRT

<213> Enterobacter cloacae

580

<400> 10144

Arg Ser Ala Val Met Ser Gln Thr Thr Glu Lys Lys Pro Arg Leu Thr 1.0 Thr Ser Ala Met Ile Ala Ser Ile Ala Glu Glu Gly Gln Glu Thr Arg 20 25 30 Ala Ala Pro Phe Gly His Ala Leu Val Lys Leu Ala Glu Gln Arg Pro 4.0 Glu Val Val Gly Met Thr Ala Asp Leu Ser Lys Tyr Thr Asp Leu His 50 55 60 Ile Phe Ala Gln Ala Tyr Pro Glu Arg Phe Phe Gln Met Gly Met Ala 75 70 Glu Gln Leu Leu Met Gly Ala Ala Gly Gly Met Ala Lys Glu Gly Phe 90 Ile Pro Phe Ala Thr Thr Tyr Ala Val Phe Ala Thr Arg Arg Ala Tyr 105 Asp Phe Ile His Gln Val Ile Ala Glu Glu His Leu Asn Val Lys Ile

120 Cys Ala Ala Leu Pro Gly Leu Thr Thr Gly Tyr Gly Pro Ser His Gln 135 140 Ala Thr Glu Asp Ile Ala Ile Met Arg Gly Ile Pro Gly Met Thr Ile 150 155 Ile Asp Pro Cys Asp Ala Ile Asp Thr Glu Gln Ala Val Pro Ala Met 165 170 175 Ala Ala His Asp Gly Pro Val Tyr Met Arg Leu Leu Arg Gly Lys Val 180 185 190 Pro Val Val Leu Asp Gln Tyr Asn Tyr Gln Phe Lys Ile Gly Lys Ala 195 200 205 Ala Leu Leu Glu Glu Gly Asn Asp Val Leu Ile Val Ala Ser Gly Leu 210 215 220 Met Thr Met Arg Ala Leu Glu Ala Ala Lys Gln Leu Arg Lys Asp Asn 225 230 235 Val Ser Val Ala Val Leu His Ser Pro Thr Ile Lys Pro Leu Asp Glu 245 250 255 Glu Thr Ile Leu Ala Gln Ala Ala Lys Pro Gly Arg Leu Val Ile Val 260 265 270 Ala Glu Asn His Ser Ser Val Gly Gly Leu Cys Glu Ala Val Ala Ser 275 280 285 Leu Leu Met Arg Asn Arg Val Asn Val Asp Phe Asp Thr Val Ala Leu 290 295 300 Pro Asp Ala Phe Leu Asp Ala Gly Ala Leu Pro Thr Leu His Asp Arg 305 310 315 Tyr Gly Ile Ser Thr Thr Ala Met Val Glu Lys Ile Arg Arg Arg Leu

<210> 10145 <211> 84 <212> PRT

<213> Enterobacter cloacae

<210> 10146 <211> 114 <212> PRT <213> Enterobacter cloacae

Phe Ser Lys Ile Asp Phe Ile Asp Ser Ser Gly Leu Gly Ala Leu Val 55 Ser Leu Leu Lys Met Met Asn Gly Lys Gly Glu Met Met Leu Cys Ala 7.0 Leu Asn Pro Gly Ile Arg Asn Met Phe Thr Leu Thr Arg Met Asp Arg 85 90 Ile Phe Arg Ile Cys Pro Asp Arg Ala Thr Ala Leu Ser His Leu Asn 100 105

<210> 10147 <211> 97 <212> PRT <213> Enterobacter cloacae

<400> 10147 Arg Glu Val Pro Met Ser Gly Lys Arg Tyr Pro Glu Glu Phe Lys Ile 10 Glu Ala Val Lys Gln Val Val Asp Arg Gly His Ser Val Ser Ser Val 25 20 Ala Thr Arg Leu Asp Ile Thr Thr His Ser Leu Tyr Ala Trp Ile Lys 3.5 40 Lys Tyr Gly Pro Asp Ser Ser Thr His Asn Glu Gln Ser Asp Ala Gln 50 55 60 Ala Glu Ile Arg Arg Leu Gln Lys Glu Leu Lys Arg Val Thr Asp Glu 70 75 Arg Asp Ile Leu Lys Lys Ala Ala Ala Tyr Phe Ala Lys Leu Ser Asp

<210> 10148 <211> 137 <212> PRT <213> Enterobacter cloacae

<400> 10148 Lys Pro Phe Phe Thr Asp Ile Val Thr Phe Gln His Val Arg Gln Leu 1 Leu Leu Arg Ile Val Arg Val Glu Val Gly Lys Glu Thr Glu Ile Ala 20 25 30 Thr Val Asn Thr Asn Asn Leu Asn Ile Ile Ala Ser Gln Arg Ser Arg 40 Arg Ala Gln His Ile Ala Val Ala Thr Asp His His Gly Glu Ile Arg 50 55 Leu Leu Ala Asn Phe Arg Gln Arg Ala Gly Ser Asp Ala Phe Lys Leu 75 Gln Leu Leu Glv Asn Leu Leu Leu Asp His His Phe Ile Ala Phe Thr 90 Thr Gln Pro Ala Ile Gln His Phe Met Cys Arg Gln Cys Gly Arg Val 100 105 Thr Arg Met Ala Asp Asp Pro Asn Thr Pro Glu Met Ile Ile His Phe 115 120 Leu Glu Val Leu Val Pro Asp Glu 130 135

<210> 10149 <211> 208 <212> PRT

<213> Enterobacter cloacae

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<400> 10149
Asn Ile Gly Ser Leu Asn Met Ser Ala Thr Ala Leu Val Thr Glu Phe
Leu Leu Ala Ala Glu Glu Gly Asn Ile Asp Ala Leu Lys Ala Cys Leu
  20
                        2.5
Glu Lys Gly Val Asp Ile Asn Val Thr Asn Arg Gln Lys Arg Thr Ala
 35
                  40
                                     45
Ile Ile Ile Ala Ser Leu Lys Lys His Tyr Ala Cys Val Glu Phe Leu
                 55 60
Ile Ala Ala Gly Ala Asp Ile Asp Lys Gln Asp Gln Thr Cys Phe Asn
                   75
               70
Pro Phe Leu Ile Ser Cys Leu Thr Asn Asp Leu Thr Leu Leu Arg Ile
         85 90 95
Val Leu Pro Ala Asp Pro Asp Leu Asp Arg Leu Thr Arg Phe Gly Gly
             105 110
         100
Val Gly Ile Thr Pro Ala Ser Glu Lys Gly His Val Glu Ile Val Arg
     115 120 125
Glu Leu Leu Glu Lys Thr Asp Ile Asn Val Asn His Thr Asn Phe Val
 130 135 140
Gly Trp Thr Pro Leu Leu Glu Ala Ile Val Leu Asn Asp Gly Gly Ala
              150 155 160
Lys Gln Gln Glu Ile Val Lys Leu Leu Leu Asp His Gly Ala Asn Pro 165 \\ 170 \\ 175
His Met Thr Asp Lys Tyr Gly Lys Thr Pro Leu Glu Leu Ala Arg Glu
 180 185 190
Lys Gly Phe Asn Ala Ile Ala Asp Leu Leu Leu Ala Ala Gly Ala
                      200
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<210> 10150 <211> 550 <212> PRT

<213> Enterobacter cloacae

<400> 10150 Arg Ile Arg Ser Ala Phe Pro Trp Leu Ala Val Thr Glu Lys Thr His 10 Cys Tyr Arg Arg Ala Phe Ser Thr Thr Ala Ala Pro Phe Tyr Leu Lys 25 Gln Val Lys Ile Met Pro Thr Lys Ile Val Ile Lys Lys Asn Thr Tyr 35 40 4.5 Phe Asp Ser Val Ser Leu Met Ser Val Ser Thr Lys Ala Asn Lys Leu 55 60 Pro Gly Val Glu Gln Ala Phe Val Ala Met Ala Thr Glu Met Asn Lys 70 75 Gly Val Leu Lys Asn Leu Gly Leu Leu Thr Pro Glu Leu Ala Asp Ala 85 90 Lys Asn Gly Asp Leu Met Ile Val Ile Lys Gly Asp Ala Ala Asn Asp 100 105 Glu Thr Leu Ala Ala Ile Glu Ala Leu Phe Thr Arg Lys Glu Arg Thr 125 120 115 Gly Ser His Glu Ala Arg Tyr Ala Ser Ile Ala Ser Ala Lys Thr His 130 135 140 Arg Pro Asp Ser Asn Leu Ala Val Ile Ser Val Asn Gly Thr Phe Ala 150 155 Ala Arg Glu Ala Arg Gln Ala Leu Glu Asn Asp Leu Asn Val Met Leu 165 170 Phe Ser Asp Asn Val Ser Leu Asp Asp Glu Leu Ala Leu Lys Gln Leu 180 185 190 Ala His Glu Lys Gly Leu Leu Met Met Gly Pro Asp Cys Gly Thr Ala 200 205

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Ile Ile Asn Gly Ala Gly Leu Cys Phe Ala Asn Ala Val Arg Arg Gly
 210
                 215
Pro Ile Gly Ile Val Gly Ala Ser Gly Thr Gly Ser Gln Glu Leu Ser
               230
                               235
Val Arg Ile His Glu Phe Gly Gly Gly Val Ser Gln Leu Ile Gly Thr
            245 250 255
Gly Gly Arg Asp Leu Ser Glu Lys Ile Gly Gly Leu Met Met Leu Asp
         260 265 270
Ala Ile Asp Met Leu Glu Ala Asp Asp Ala Thr Arg Val Ile Ala Leu
     275 280 285
Ile Ser Lys Pro Pro Ala Pro Ala Val Ala Glu Lys Val Leu Ala Arg
 290 295
                                   300
Ala Arg Ala Cys Arg Lys Pro Val Val Val Cys Phe Leu Gly Arg Asn
305 310 315
Glu Pro Pro Ala Asp Glu Asp Gly Leu Gln Phe Ala Arg Gly Thr Lys
            325 330
Glu Ala Ala Leu Lys Ala Val Leu Leu Thr Gly Ile Lys Lys Asp Asp
         340
                         345
Leu Asp Leu His Pro Leu Asn Trp Pro Leu Ile Glu Glu Val Arg Thr
                      360
                                       365
Arg Leu Thr Ser Gln Gln Lys Tyr Ile Arg Gly Leu Phe Cys Gly Gly
                  375
                                   380
Thr Leu Cys Asp Glu Ala Met Phe Ala Ala Leu Glu Lys Phe Asp Asp
               390
                                395
Val Tyr Ser Asn Ile Gln Pro Asp Pro Ala Arg Arg Leu Lys Asp Ile
            405
                            410 415
Ser Val Ser Gln Ala His Thr Phe Leu Asp Phe Gly Asp Asp Asp Phe
         420
                         425
                                          430
Thr Asn Gly Lys Pro His Pro Met Ile Asp Pro Thr Asn Arg Ile Ser
                                       445
435
                     440
Arg Leu Leu Gln Glu Ala Arg Asp Pro Gln Val Gly Val Ile Val Met
 450
                   455
                                   460
Asp Phe Val Leu Gly Phe Gly Ala His Asp Asp Pro Val Gly Val Met
               470
                                475
Ile Glu Ala Ile Lys Glu Ala Gln Ala Ile Ala Asn Ala Asp Asn Arg
            485
                            490
Pro Leu Glu Ile Leu Gly Tyr Val Leu Gly Thr Asp Gln Asp Pro Gln
                         505 510
         500
Ser Leu Ala Gln Gln Cys Gln Leu Leu Thr Asp Ala Gly Val Ile Trp
                      520
                             525
Ala Ser Ser Ser Thr Asn Thr Gly Leu Leu Ala Arg Glu Phe Val Cys
 530
                  535
Lys Gly Glu Lys Ala
545
<210> 10151
<211> 330
<212> PRT
<213> Enterobacter cloacae
<400> 10151
Gly His Gln Asn Ala Pro Ser Lys Gly Asn Lys Met Lys Glu Leu Met
                             10
Val Val Ala Ile Gly Gly Asn Ser Ile Ile Lys Asp Asn Ala Ser Gln
Ser Ile Glu His Gln Ala Gln Ala Val Lys Ala Val Ala Glu Ser Val
   35
                      40
Leu Glu Met Leu Ala Ser Asp Tyr Asp Ile Val Leu Thr His Gly Asn
                   55
Gly Pro Gln Val Gly Leu Asp Leu Arg Arg Ala Glu Ile Ala His Glu
                70
                                75
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Arg Glu Gly Leu Pro Leu Thr Pro Leu Ala Asn Cys Val Ala Asp Thr 85 Gln Gly Gly Ile Gly Tyr Leu Ile Gln Gln Ala Leu Asn Asn Arg Leu 100 105 Ala Ala Arg Gly Glu Gln Lys Ala Val Thr Val Val Thr Gln Val Glu 115 120 125 Val Asp Lys Asn Asp Pro Gly Phe Thr His Pro Thr Lys Pro Ile Gly 135 140 Ala Phe Phe Ser Glu Ala Gln Arg Asp Glu Leu Gln Leu Ala His Pro 150 155 Asp Trp His Phe Val Glu Asp Ser Gly Arg Gly Tyr Arg Arg Val Val 165 170 175 Ala Ser Pro Gln Pro Leu Arg Ile Val Glu Ala Asp Ala Ile Lys Ala 180 185 Leu Thr Gln Lys Gly Phe Val Val Ile Gly Ala Gly Gly Gly Ile 195 200 205 Pro Val Val Arg Ser Glu Gln Gly Asp Tyr Gln Ser Val Asp Ala Val 215 220 Ile Asp Lys Asp Leu Ser Thr Ala Leu Leu Ala Arg Glu Ile Arg Ala 230 235 Asp Val Leu Val Ile Thr Thr Gly Val Glu Lys Val Cys Val Asn Phe 245 250 Gly Lys Pro Asn Gln Gln Ala Leu Asp Ile Val Asn Val Ala Gln Met 260 265 270 Thr Arg Tyr Met Asp Glu Gly His Phe Pro Ala Gly Ser Met Leu Pro 280 275 Lys Ile Val Ala Ser Leu Glu Phe Leu Arg His Gly Gly Arg Arg Val 295 300 Ile Ile Thr Ser Pro Asp Cys Leu Pro Ala Ala Leu Arg Gly Glu Thr 310 Gly Thr His Ile Ile Asn Glu Gly Arg 325

<210> 10152 <211> 445 <212> PRT

<213> Enterobacter cloacae

<400> 10152

Val Met Ser Arg Ile Glu Gln Ala Val Pro Tyr Ile Lys Ala Lys Lys 1.0 Thr Asn Tyr Arg Phe Val Val Leu Ala Leu Ile Phe Ile Val Tyr Ala 20 30 Ile Asn Tyr Ala Asp Arg Thr Asn Ile Gly Ala Val Leu Pro Phe Ile 35 40 45 Ile Asp Glu Phe His Ile Asn Asn Phe Glu Ala Gly Ala Ile Ala Ser 55 60 Met Phe Phe Leu Gly Tyr Ala Leu Ser Gln Ile Pro Ala Gly Phe Phe 70 75 Ile Ala Lys Lys Gly Ile Arg Gly Met Val Ala Leu Ser Ile Phe Gly 85 90 Phe Ser Ala Phe Thr Trp Leu Met Gly Thr Ala Thr Ser Val Leu Gly 105 110 Leu Lys Cys Ile Arg Leu Gly Leu Gly Leu Thr Glu Gly Pro Cys Pro 115 120 125 Val Gly Leu Ala Ser Thr Ile Asn Asn Trp Phe Pro Pro Lys Glu Lys 135 140 130 Ala Thr Ala Thr Gly Val Tyr Ile Ala Ala Thr Met Phe Ala Pro Ile 150 155 Leu Val Pro Pro Leu Ala Val Trp Ile Ala Met Thr Trp Gly Trp Arg 170 165

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Trp Val Phe Phe Ser Phe Ala Ile Pro Glv Leu Val Ile Ala Val Leu
         180
                         185
Trp Tyr Leu Leu Val Arg Thr Arg Pro Ser Glu Ser Ala Phe Val Ser
    195
                      200
                                       205
Lys Ala Glu Leu Glu Thr Ile Thr Ala Gly Gln Glu Thr Pro Asp Ala
       215
                                   220
Arg Arg Glu Asn Ile Val Ile Ser Pro Gly Phe Ala Arg Leu Asp Arg
225 230 235
Leu Ile Arg Val Arg Glu Leu Ala Pro Val Ser Thr Val Lys Gly Leu
          245 250 255
Phe Thr Ser Lys Asn Ile Leu Gly Asp Cys Leu Ala Tyr Phe Met Met
        260 265 270
Val Ser Val Leu Tyr Gly Leu Leu Thr Trp Ile Pro Leu Tyr Leu Val
      275 280 285
Lys Glu Lys Gly Phe Thr Phe Met Ser Met Gly Leu Val Ala Ser Met
                   295
                                   300
Pro Cys Ile Gly Gly Phe Ile Gly Ala Ile Phe Gly Gly Tyr Val Ser
                310
                                315
Asp Lys Leu Leu Gly Arg Arg Arg Lys Pro Thr Met Met Phe Thr Ala
            325
                             330
Ile Ser Thr Val Leu Met Met Val Ile Met Leu Asn Ile Pro Gln Ser
         340
                          345
                                          350
Thr Val Ala Val Cys Val Gly Leu Phe Phe Val Gly Leu Cys Leu Asn
      355
                      360
                                       365
Ile Gly Trp Pro Ala Phe Thr Ala Tyr Gly Met Ala Val Ala Asp Ser
       375
                                    380
Lys Thr Tyr Pro Ile Ala Ala Ser Ile Ile Asn Ser Gly Gly Asn Leu
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                                 395
Gly Gly Phe Val Ser Pro Met Leu Ala Gly Tyr Leu Leu Asp Lys Thr
            405
                             410
                                             415
Gly Ser Phe Asn Ser Val Phe Ile Tyr Phe Gly Ile Cys Ala Ala Ile
  420 425
Gly Leu Ile Met Ile Met Leu Leu Glu Glu Pro Lys
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<210> 10153
<211> 254
<212> PRT
<213> Enterobacter cloacae
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150

<210> 10154 <211> 286 <212> PRT <213> Enterobacter cloacae

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<210> 10155 <211> 395

<212> PRT <213> Enterobacter cloacae 13

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Ser Ala Ile Arg Glu Leu Leu Lys His Ser Lys Met Ala Gly Val Ile
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Ser Leu Gly Gly Gly Ile Pro Asn Pro Asp Leu Phe Asp His Glu Gly
                     40
Leu Lys Ile Ala Ala Asp Ala Val Leu Ser Gln His Phe Gly Glu Ala
             55
Phe Gln Tyr Gly Leu Thr Glu Gly Val Pro Gly Leu Arg Glu Glu Ile
            70
Gln Arg Ile Cys Glu Gly Arg Gly Ile Ala Cys Lys Ala Asp Asp Val
           85 90
Val Ile Thr Ser Gly Ser Gln Gln Ser Leu Asp Val Leu Ala Arg Ala
       100 105
Leu Ile Asn Pro Gly Asp Thr Val Val Val Glu Arg Pro Thr Tyr Leu
     115 120
Ala Ala Leu Gln Val Phe Gly Leu Ala Gln Ala Lys Phe Glu Ser Val
 130 135 140
Gly Thr Asp Gly Asp Gly Met Lys Val Asp Glu Leu Glu Ala Leu Val
      150 155
Ala Thr Lys Thr Ile Lys Ala Val Tyr Ile Val Pro Thr Phe Gly Asn
          165 170 175
Pro Gly Gly Val Thr Leu Ser Glu Ala Arg Arg Lys Gln Leu Val Glu
       180 185
Leu Ser Lys Arg Tyr Asp Phe Val Ile Ile Glu Asp Asp Pro Tyr Ser
     195 200 205
Glu Ile Asn Tyr Thr Asp Glu Ala Phe Arg Pro Leu Ile Ala His Ala
 210 215
Lys Asp Ile Gly Asn Glu Asp Asn Val Val Tyr Thr Ser Thr Phe Ser 225 230 235 240
Lys Ile Leu Ala Pro Gly Thr Arg Val Gly Trp Val Leu Val Pro Glu
           245 250
Trp Leu Lys Arg Ala Val Val Asn Leu Lys Gln Thr Thr Asp Leu His
         260 265 270
Thr Ser Thr Leu Ser Gln Leu Met Thr Tyr Glu Tyr Leu Lys Thr Gly
     275 280
Arg Leu Ala Asn Gln Ile Lys Met Ile Arg Glu Ala Tyr Arg Gln Lys
      295
                                  300
Tyr Gln Thr Phe Ala Thr Glu Leu Glu Ala Glu Leu Gly Asp Val Met
305 310
                               315
Ser Phe His Lys Pro Lys Gly Gly Met Phe Leu Trp Ala Lys Met Asn
            325
                            330 335
Asn Gly Ile Asn Thr Thr Lys Trp Leu Glu Lys Thr Leu Ser Asn Gly
                         345 350
Val Val Phe Val Pro Gly Glu Phe Phe Tyr Cys Asn Glu Pro Asp His
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                      360 365
Thr Thr Leu Arg Met Ser Phe Val Thr Pro Thr Asp Glu Gln Leu Lys
                  375
Glu Ala Val Arg Arg Leu Arg Ile Ser Leu
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<210> 10156
<211> 145
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<211> 143 <212> PRT

<213> Enterobacter cloacae

<400> 10156

Ile Ser Glu Leu Thr Val Ala Asn Asp Val Thr Phe Pro Ala Thr Leu I 5 10 15 Thr Ser Val Ser Pro Leu Ala Ala Trp Leu Glu Arg Gln Met Ala Ser

25 Leu Ser Val Ser Asp Asp Trp Arg Phe Ala Leu Asp Leu Ala Ala Cys 40 Glu Thr Ala Thr Asn Ile Ile Arg His Ala Leu His Glu Asp Pro Glu 55 60 Arg Cys Phe Thr Val Glu Phe Ile Val Thr Val Ser Asp Ala Ala Leu 70 75 Arg Phe Thr Asp Asp Gly Asp Lys Phe Pro Ala Glu Arg Leu Ala Ala 85 90 95 Val Arg Asp Asp Ala Thr Phe Asp Ala Ser Leu Leu Ala Glu Ser Gly 105 110 100 Arg Gly Leu Lys Leu Ile Phe Leu Tyr Val Asp Asn Phe Thr Val Glu 125 115 120 Asn Val Ala Gly Lys Asn Ile Thr Val Leu Glu Lys Arg Met Val Gly 145 <210> 10157 <211> 400 <212> PRT <213> Enterobacter cloacae <400> 10157 Phe Pro Leu Thr Tyr Gly Cys Gly Phe Leu Leu Ser Glu Asn Arg Ala 10 Gly Val Tyr Met Ser Ser Thr Glu Ala Thr Asn Lys Ala Pro Ala Val 20 25 3.0 Pro Glu Lys Ser Ser Val Lys Ser Leu Lys Glu Glu Pro Val Leu Gln 35 40 4.5 Val Glu Arg Arg Asp Phe Val Asp Leu Val Pro Glu Lys Arg Pro Arg 55 60 Val Gln Ser Leu Arg Gly Phe Asp Asp Cys Tyr Thr Asp Ile Val Asp 7.0 7.5 Tyr Ile Val Arg Cys Thr His Lys Ile Trp Asp Glu Arg Asp Val Gly 85 90 Leu Ile Tyr Ser His Tyr Thr His Asn Cys Val Leu Tyr Asn Ala Leu 105 100 Gly Thr Leu Tyr Asn Arg Glu Gln Val Val Gln Asp Thr Leu Gln Arg 120 125 115 Leu Ile Ala Phe Pro Glu Arg Arg Gly Met Ala Thr Gln Val Ile Trp 135 140 Asn Gly Asn Asp Val Asp Gly Phe Tyr Thr Ser His Leu Val Thr Gly 150 155 Ser Gly Arg His Thr Gln His Ser His Leu Gly Lys Pro Thr Asn Arg 170 165 Thr Phe Val Thr Arg Thr Val Ala Asp Cys Met Ile His Glu Asn Lys 185 190 180 Ile Tyr Arg Glu Trp Val Val Ser Asp Asn Met Ser Leu Met Lys Gln 195 200 205 Leu Gly Leu Asn Thr Asp Gln Ile Ala Phe Asn Met Ala Lys Glu Gln Phe Asp Lys Gly Phe Arg Val Met Asp Ile Gly Glu Asn Gly Arg Met 230 235 Leu Gly Gln Tyr Pro Pro Glu Met Glu Cys Asp Val Ser Ile Ala His 250 Thr Asp Thr Glu Glu Gln Cys Leu Arg Trp Leu His Glu Ile Tyr Asn 265 Arg Arg Met Phe Gly Lys Ile Lys Glu Val Tyr Ala Pro Asn Val Gln 280

Trp His Gly Pro Leu Met Lys Glu Leu Tyr Gly Thr Ala Ala Val Thr

295 His Gln Thr Leu Ala Leu Val Gly Met Ile Pro Asp Gly Ala Trp Leu 310 315 Pro Gln His Ile Cys Ser Asn Pro Cys Asp Glu Gly Gly Val Lys Val 325 330 Ala Val Arg Trp Ile Ile Glu Gly His His Leu Gly Tyr Gly Glu Leu 340 345 350 Gly Lys Pro Thr Gly Glu Arg Leu Phe Val Met Gly Met Ser His Tyr 355 360 365 His Ile Val Asn Gly Lys Ile Val Asp Glu Trp Val Val Tyr Asp His 370 375 380 Leu Ala Leu Leu Ala Gln Ile Lys Leu Gly Gln Met Glu Asp Ala 390

<210> 10158 <211> 432 <212> PRT

<213> Enterobacter cloacae

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325 330 Ser Leu Phe Ile Gly Gln Asn Ala Ser Val Val Phe Ser Asp Lys Cys 340 345 Cys Gly Thr Asn His Thr Leu Pro Thr Met Ala Ala Ala Arg Tyr Thr 355 360 365 Gly Gly Leu Trp Val Gly Ala Tyr Val Lys Ile Cys Thr His Gln Trp 370 375 380 Ile Asp Glu Gln Gly Ile Pro Ala Ile Ala Glu Pro Ala Ile Arg Gln 385 390 395 Ser Arg Thr Glu Gly Met Gln Gly His Arg Arg Ala Ala Glu Ile Arg 405 410 Leu Arg Pro Gln Asp Ile Asp Ala Ile Thr Thr Gly Met Arg Asp

<210> 10159 <211> 455 <212> PRT

<213> Enterobacter cloacae

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325 330 Ala Pro Phe Leu Arg Gln Met Leu Ala Ser Asn Thr Leu Lys Thr Pro 340 345 350 Leu Trp Leu Ala Gly Arg Arg Phe Gln Arg Leu Leu Arg Gln Asn Leu 355 360 365 Cys Gln Val Ala Glu Ala Gln Arg Ile Asp Gly Phe Val Tyr Pro Thr 370 375 380 Val Gln Arg Leu Pro Glu Ser Met Ala Lys Met Pro Pro Gly Cys Ala 385 390 395 Pro Glu Leu Ala Ala Ile Ser Gly Leu Pro Ala Ile Thr Leu Pro Cys 405 410 415 Gly Val Ser Arg Ile Gly Leu Pro Val Gly Met Glu Met Leu Ser Val 420 425 430 Gln Glu Asp Glu Ala Ala Leu Met Val Leu Ala Leu Ala Cys Glu Gly 435 440 Ala Leu Gly Glu Lys Gly <210> 10160 <211> 159 <212> PRT <213> Enterobacter cloacae <400> 10160 Met Leu Leu Phe Val Cys Cys Val Thr Met Glu Asn Ala Met Pro Gln 10 Ile Ser Arg Thr Ala Leu Val Pro Tyr Ser Ala Glu Gln Met Tyr Gln 20 25 3.0 Leu Val Asn Asp Val Gln Ser Tyr Pro Glu Phe Ile Pro Gly Cys Thr 35 40 45 Gly Ser Arg Val Leu Glu Ser Gly Pro Thr Gln Met Thr Ala Ala Val 50 55 60 Asp Val Ser Lys Ala Gly Ile Ser Lys Thr Phe Thr Thr Arg Asn Thr 70 7.5 Leu Thr Ser Asn Gln Ser Ile Leu Met His Leu Val Asp Gly Pro Phe 85 90 Lys Lys Leu Met Gly Gly Trp Lys Phe Thr Pro Leu Ser Ala Asp Ala 100 105 110 Cys Arg Ile Glu Phe His Leu Asp Phe Glu Phe Thr Asn Lys Leu Ile 115 120 125 Glu Leu Ala Phe Gly Arg Ile Phe Lys Glu Leu Ala Ser Asn Met Val 135 140 Gln Ala Phe Thr Thr Arg Ala Lys Glu Val Tyr Ser Val Ala 150 155 <210> 10161 <211> 127 <212> PRT <213> Enterobacter cloacae <400> 10161 Asp Pro Ser Gly Arg Leu Ala Lys Gly Ile Ile Pro Trp Asp Val Leu 15 1.0 Gly Arg Ser Gly Trp Glu Lys Phe Arg Gly Cys Ser Val Lys Lys Asn 20 25 Ala Ala Ser Gln Ala Glu Leu Glu Arg Gln Arg Ala Glu Gln Gln Asp 35 40 Lys Ile Asn Ala Leu Leu Glu Leu Met Lys Ala Asp Gly Ile Ser Pro 55 Ser Asp Leu Leu Gly Ser Asp Leu Ala Gln Ala Gly Gln Pro Thr Lys

70

75

Lys Arg Lys Ala Arg Ala Ala Lys Tyr Arg Phe Ile Asp Ala Asn Gly 90 8.5 Glu Glu Lys Thr Trp Thr Gly Gln Gly Arg Thr Pro Lys Pro Ile Ala 100 105 110 Thr Ala Leu Ala Asn Gly Lys Ser Leu Asp Asp Phe Leu Ile 120 <210> 10162 <211> 544 <212> PRT <213> Enterobacter cloacae <400> 10162 Lys Gly Ala Val Asp Leu Pro Arg Ser Leu Leu Phe Ile Arg His Ala 10 Ser Met Lys Asn Met Lys Leu Glu Trp Lys Arg Gly Asp Trp Ala Ala 25 20 Tyr Phe Gly Leu Met Thr Asn Asn Leu Thr Asn Leu Leu Thr Met Met 40 45 Gly Leu Leu Ile Phe Val Val Gly Ile Pro Lys Glu Ile Val Tyr Gly 50 55 60 Arg Ile Ala Pro Ala Phe Gly Leu Ala Val Leu Val Ala Ser Leu Cys 70 75 Tyr Thr Trp Phe Gly Leu Gln Met Ala Arg Ala Thr Gly Arg Thr Asp 90 8.5 Val Thr Ala Leu Pro Ser Gly Pro Ser Ala Pro Ser Ile Phe Thr Val 100 105 Thr Phe Leu Val Leu Met Pro Val Tyr Gln Gln Thr Gly Asp Ala Asp 115 120 125 Phe Ala Ile Gln Ile Gly Leu Val Trp Cys Phe Val Glu Ala Met Ile 130 135 140 Leu Ala Gly Gly Ser Phe Leu Gly Glu Thr Ile Arg Lys Met Ile Pro 145 150 155 Arg Thr Val Leu Leu Ser Cys Leu Ser Gly Leu Gly Leu Leu Leu Leu 165 170 175 Ala Met Asn Pro Met Leu Gln Ala Phe Glu Ala Pro Thr Val Ser Phe 180 185 190 Ile Val Leu Leu Ile Phe Ile Asn Trp Phe Gly Lys Lys Pro Ile 195 200 205 Phe Ala Arg Ile Pro Thr Gly Leu Leu Leu Ile Ala Gly Thr Leu 215 220 210 Leu Ala Trp Ile Ser Gly Leu Gln Ser Pro Asp Ala Ile Lys Ala Ser 230 235 225 Met Ser Ser Phe Gly Phe Asn Pro Pro Glu Val His Val Asp Ser Phe 245 250 Met Gln Gly Leu Pro His Ala Leu Pro Tyr Leu Ala Ser Ala Val Pro 265 260 Leu Gly Leu Ala Asn Tyr Ile Phe Asp Leu Glu Asn Ile Glu Ser Ala 280 285 275 His Ala Ala Gly Asp Glu Tyr Pro Thr Arg Lys Val Met Leu Ala Asn 300 290 295 Gly Leu Ala Ser Met Leu Gly Cys Leu Met Gly Asn Pro Phe Pro Val 310 315 Thr Val Tyr Val Gly His Pro Gly Trp Lys Ala Met Gly Ala Ser Ile 325 330 335 Gly Tyr Thr Leu Ala Ser Gly Val Thr Met Phe Ile Val Pro Leu Phe 340 345 Gly Leu Gly Ala Phe Met Leu Ala Ile Ile Pro Met Thr Ala Ile Val

360

Pro Ile Leu Val Phe Ile Gly Val Val Thr Ala Asn Gln Val Val Arg 375

365

380

Glu Thr Pro Lys Val Glu Val Pro Val Ile Phe Ile Cys Leu Phe Pro 390 395 Trp Ile Ala Asn Trp Ala Leu Thr Met Met Asn Ser Val Met Ser Ala 405 410 Ala Gly Thr Ser Ala Ala Lys Ile Gly Thr Asp Val Leu His Ser Lys 420 425 Gly Ile Tyr Tyr Glu Gly Leu Met His Leu Gly Asn Gly Ala Pro Leu 435 440 445 Ala Ser Met Leu Trp Gly Cys Ile Ala Ile Phe Ala Ile Leu Asn Lys 450 455 460 Pro Leu Arg Gly Ala Val Ala Ala Ala Gly Gly Ala Leu Leu Ala Leu 465 470 475 480 Phe Gly Val Ile His Ala Pro Val Val Gly Phe Ala Glu Gly Ser Ser 485 490 495 Leu Met Phe Val Thr Ala Tyr Leu Met Met Gly Gly Met Phe Val Val 500 505 510 Lys His Val Leu Asp Thr Ser Val Asn Pro Pro Leu Pro Val Gly Glu 515 520 525 Gly Arg Gly Glu Gly Thr Arg Thr His Leu Leu Lys Glu Thr Lys 535

<210> 10163 <211> 486 <212> PRT

<213> Enterobacter cloacae

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Pro Thr Ser Val Asp Gly Ala Met Glu Lys Ser Leu Asp Thr Met Phe 280 Gln Ile Ala Leu Asp Tyr Asp Lys Gly Val Asp Ile His Leu His Glu 290 295 300 Thr Ser Pro Ala Gly Val Ala Ala Val Asn Tyr Met Val Glu Thr Val 305 310 315 Glu Lys Thr Pro Ala Leu Lys Gly Lys Leu Thr Ile Ser His Ala Phe 325 330 335 Ala Leu Ala Thr Leu Asn Glu Gln Gln Val Asp Glu Ile Ala Thr Arg 340 345 350 Met Ala Ala Gln Gln Val Thr Ile Ala Ser Thr Val Pro Ile Gly Thr 360 365 Leu His Met Pro Leu Lys Gln Leu Arg Asp Lys Gly Val Phe Val Met 370 375 380 Thr Gly Thr Asp Ser Val Ile Asp His Trp Ser Pro Tyr Gly Leu Gly 390 395 Asp Met Leu Glu Lys Ala Asn Leu Tyr Ala Gln Leu Tyr Ile Arg Pro 405 410 415 Asn Glu Gln Thr Leu Ser Arg Ala Leu Gly Ile Ala Thr Gly Asp Val 420 425 430 Leu Pro Leu Asn Asp Lys Gly Glu Arg Val Trp Pro Lys Ala Gln Asp 440 445 435 Asp Ala Ser Phe Val Leu Val Asp Ala Ser Cys Ser Ala Glu Ala Val 450 455 460 Ala Arg Ile Ser Pro Arg Thr Ala Thr Phe His Lys Gly Asn Leu Val 470 475 465 Trp Gly Thr Val Ala

<210> 10164 <211> 287 <212> PRT <213> Enterobacter cloacae

485

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<210> 10165 <211> 301 <212> PRT <213> Enterobacter cloacae

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<210> 10166 <211> 248

<212> PRT <213> Enterobacter cloacae

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<210> 10167 <211> 423

<212> PRT <213> Enterobacter cloacae

245

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170 Leu Pro Ala His Gln Leu Arg Tyr Arg Asp Tyr Phe Ala Asp Trp Ile 190 180 185 Phe Leu Pro Ser Ala Trp Val Ser Gly Asp Ile Phe Asn Val Phe Pro 195 200 Leu Asp Asn His Leu Gly Phe Tyr Cys Val Asp Val Ser Gly His Gly 210 215 220 Val Gly Ala Ala Met Met Ser Leu Ala Val Ala Arg Gln Phe Leu His 225 230 235 Gly Arg Ala Val Glu Arg Phe Leu Phe Ala Asp Asp Ser Asp Val Ala 245 250 255 Ser Pro Ala Glu Val Val Arg Ile Leu Asn Gly Arg Phe Cys Ser Glu 260 265 270 Glu Val Glu Ile Met Ser Tyr Phe Thr Met Ile Tyr Gly Val Ile Asp 275 280 285 Leu Thr Thr Gly Glu Gly Lys Leu Cys Gln Ala Gly His Pro Thr Pro 295 300 Phe Ile Val Asn Pro Gly Gly Glu Val Arg Thr Val Gly Glu Gly Gly 305 310 315 Ala Pro Val Gly Leu Met Pro Asp Leu Ser Trp Ser Asp Val Ser Phe 325 330 335 Ser Leu Ala Pro Gly Glu Arg Leu Cys Leu Phe Ser Asp Gly Ile Thr 340 345 350 Glu Cys Glu Asn Pro Asp Asn Glu Gln Phe Gly Gln Ala Arg Leu Gln 355 360 365 Arg Arg Leu Gln Asp Asp Ala Thr Leu Ala Leu Glu Arg Leu Leu Pro 375 Gln Phe Ala Gln His Leu Ile Arg Trp Arg Ser Gly Lys Tyr Arg Glu 390 395 Gln Gln Ala Met Ala Asp Asp Val Ser Leu Leu Val Ile Glu Arg Thr 405 410 Gly Val Asn Asp Glu His 420

<210> 10168 <211> 403

<212> PRT <213> Enterobacter cloacae

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170 Thr Leu Ser Leu Glu Leu Ser Glu Glu Cys Leu Ala Ala Gly Ile Pro 180 185 190 Val Val Leu Phe Asn Arg Ser Glu Glu Ser Gly Met Ala Ser Ser Val 195 200 Asn Ser Asn Asn Glu Ala Ala Ala Arg Gln Ile Ala Glu Phe Leu Leu 210 215 220 Ala Gly Glu His Lys Arg Phe Ala Tyr Val Gly Gly Val Ala Asp Ser 225 230 235 Pro Val Asn Ile Ala Arg Gln Arg Gly Phe Ile Ser Thr Leu Glu Glu 245 250 His Gly Ile Thr Asp Val Arg Val Val His Gly Asn Tyr Asp Ala Gln 265 270 260 Gln Thr Thr Arg Ala Ala Tyr Thr Leu Phe Ser Thr Ser Pro Ala Pro 275 280 285 Asp Ala Val Phe Val Ala Asn Asp His Met Ala Val Thr Val Met Asp 290 295 300 Val Ala Arg Tyr Glu Phe Gly Leu Arg Ile Pro Glu Glu Val Ser Val 305 310 315 Val Gly Tyr Asp Asp Ile Gly Pro Ser Gly Trp Pro Ser Tyr Ala Leu 325 330 Thr Ser Ala Ser Gln Pro Val Gly Ala Met Val Asp Ala Thr Val Glu 340 345 350 Leu Leu Met Lys Gln Ile Asp Ser Gly Thr Ile Glu Pro Glu Gln Ile 355 360 365 Thr Val Pro Gly Thr Leu Val Ile Arg His Ser Ala Arg Arg Pro Arg 375 380 Ser Gly Val Ile Glu Thr Asn Gly Leu Thr Leu Phe Gln Ser Lys Glu 390 395 Arg Thr

<210> 10169 <211> 328 <212> PRT <213> Enterobacter cloacae

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180
                           185
Val Ile Gly Trp Ser Met Gln Pro Arg Met Thr Lys Glu Ile Val Leu
   195
                      200
                                       205
Asn Ala Leu Leu Met Ala Val Trp Arg Arg Asn Pro Gln Lys Gln Val
 210 215
                            220
Leu Val His Ser Asp Gln Gly Ser Gln Tyr Thr Ser His Glu Trp Gln
225 230
                               235
Ser Phe Leu Lys Ser His Gly Leu Glu Gly Ser Met Ser Arg Arg Gly
         245 250 255
Asn Cys His Asp Asn Ala Val Ala Glu Ser Phe Phe Gln Leu Leu Lys
        260 265 270
Arg Glu Arg Ile Lys Lys Arg Ile Tyr Gly Thr Arg Asp Glu Ala Arg
     275 280
                            285
Ser Asp Ile Phe Asp Tyr Ile Glu Met Phe Tyr Asn Ser Lys Arg Arg
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Tyr Gln Arg Leu Arg Ser Val
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Ile Ala Val Glu Val Val Tyr Ala Leu Pro Glu Lys Gln Tyr Leu Gln
                       40
35
Arg Val Thr Leu Glu Glu Gly Ala Thr Val Glu Ala Ala Ile Arg Ala
50
                   55
                                    60
Ser Gly Ile Leu Glu Leu Arg Arg Asp Ile Asp Leu Ala Lys Asn Lys
                70
                                 7.5
Val Gly Ile Tyr Ser Arg Pro Val Lys Leu Gly Asp Val Leu Lys Glu
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             85
Gly Asp Arg Val Glu Ile Tyr Arg Pro Leu Ile Ala Asp Pro Lys Glu
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Leu Arg Arg Gln Arg Ala Glu Lys Ser Gly Lys
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Met Val Pro Ala Gly Leu Met Val Leu Ala Ala Ala Thr Trp Pro Ala 105 Leu Arg Lys Arg Glu Gly Lys Pro Ser Cys Ala Lys Gly Ala Leu Gly 115 120 Val Cys Ala Val Leu Ile Ile Ala Met Gly Val Thr Phe Val Gln Met 130 135 140 Phe Gln Pro His Pro Thr Val Pro Phe Ser Gly Glu Lys Arg Pro Leu 145 150 155 Val Pro Val Lys Asp Asp Ala Lys Gln Gln Asn Trp Asp His Tyr Gly 165 170 175 Asn Thr Ala Gly Gly Ser Arg Phe Val Ala Leu Asp Gln Ile Thr Arg 180 185 190 Asp Asn Val Lys Asn Leu Lys Pro Val Trp Thr Tyr His Thr Gly Asp 195 200 205 Val Pro Glu Ser Pro Asp Gly Asn Gly Ala Glu Asp Gln Gln Thr Pro 210 215 220 Leu Gln Val Gly Asp Arg Val Phe Leu Cys Thr Pro His Asn Asn Val 230 235 240 Ile Ala Val Asp Ala Asp Ser Gly Lys Glu Ile Trp Lys Ala Glu Ile 245 250 255 Asn Ala Lys Ser Ala Ile Trp Met Arg Cys Arg Gly Leu Ala Tyr Phe 260 265 270 Asp Ala Thr Lys Pro Leu Ala Gln Pro Thr Val Ala Gly Ser Thr Pro 275 280 285 Val Leu Pro Ala Gln Val Ala Pro Gly Ala Ala Cys Gln Arg Arg Ile 300 295 Leu Met Asn Thr Ile Asp Gly Lys Leu Ile Ala Leu Asp Ala Asp Asn 310 315 320 305 Gly Lys Phe Cys Pro Asp Phe Gly Thr Asn Gly Ser Val Asn Leu His 325 330 335 Glu Gly Met Gly Asp Ala Ser Asp Pro Thr Tyr Val Leu Thr Ser Ala 340 345 Pro Thr Leu Ala Gly Thr Thr Val Val Val Gly Gly Arg Val Ala Asp 355 360 Asn Val Ser Thr Asp Met Pro Gly Gly Val Ile Arg Gly Tyr Asp Val 375 380 Ile Thr Gly Gln Leu Arg Trp Ala Phe Asp Pro Arg Asn Pro Asp Pro 390 395 385 Asn Tyr Val Leu Lys Pro Gly Glu His Tyr Lys Arg Ser Ser Ala Asn 410 415 405 Ser Trp Ala Pro Met Ser Trp Asp Ala Ser Met Asn Thr Val Phe Ile 425 420 430 Pro Met Gly Ser Ser Ser Val Asp Leu Trp Gly Ala Asp Arg Ile Pro 435 440 445 Glu Asp His Lys Tyr Ala Thr Ser Ile Leu Ala Leu Asp Ala Thr Thr 455 460 450 Gly Lys Glu Lys Trp Val Tyr Gln Thr Val His Asn Asp Leu Trp Asp 475 470 Phe Asp Ile Pro Met Gln Pro Ser Leu Val Asp Phe Pro Thr Lys Glu 490 485 Gly Asn Lys Pro Ala Val Val Val Gly Thr Lys Ala Gly Gln Ile Tyr 510 500 505 Val Leu Asp Arg Leu Thr Gly Lys Pro Leu Thr Glu Val Lys Glu Val 525 515 520 Pro Val Lys Pro Ala Asp Ile Pro Arg Glu Gln Tyr Pro Ala Thr Gln 540 535 Pro Arg Ser Val Gly Met Pro Gln Ile Gly Ala Glu Thr Leu Lys Glu 555 550 Ser Asp Met Trp Gly Ala Thr Pro Phe Asp Gln Leu Ala Cys Arg Ile 570 565 Ser Phe Lys Ser Met Arg Tyr Asp Gly Leu Tyr Thr Met Pro Gly Thr